

so low ...'. Suddenly he's overcome with excitement. 'Hee hee,' he giggles, spreading his arms like wings. 'You oughta see it sometime, it's a pleasure! A *BIG* plane like a B-52! *VA-ROOM*, jet exhaust frying chickens in the barnyard! *HA, HA!* Have we got a chance? *Hell yes!*' Then he recognises what he's saying and executes one of the most exaggerated double-takes in the history of screen comedy – face drooping, eyes bulging, one hand over his mouth in embarrassment.

This moment of comic recognition is deeply symptomatic of the film as a whole. In bold fashion, it mimics Kubrick's overall strategy of pulling the audience up short, creating laughs that stop in the throat and suspense that suddenly turns silly. As in Kong's lethal ride on the bomb and Strangelove's rise from the wheelchair, Turgidson's 'wargasm' is cut short by death, but without the swooning towards darkness that characterises the 'little death' of sexual climax. Here as elsewhere, the military-industrial complex and the masculine libido are directly and disturbingly linked to a regime of frustrated and destructive sexuality: as Freud suggests in *Civilization and Its Discontents*, war is love. Turgidson's double-take might even be described as *coitus interruptus*. For Kong and Strangelove, the effect is more like the instantaneous transformation of Eros into Thanatos; the world stops before it can register even a shudder of anticipation, leaving behind only the frightening beauty of nuclear clouds and a pervasive feeling of savage, Swiftian indignation. In *Dr. Strangelove*, Kubrick had arrived at the pure black-comic style towards which he had

been gravitating since the beginning of his career; it became the lodestone of his artistic temperament, but seldom again achieved such a powerful blending of zestful iconoclasm, misanthropic satire and unexpected horror.

## II. Beyond the Stars

Kubrick's next and most ambitious project was released in 1968, one of the most traumatic years in US history: Martin Luther King and Robert Kennedy were assassinated, the Tet offensive broke out in Vietnam and protesting students were shot by National Guard troops at Kent State University. A short time earlier, just as the youth rebellion was turning violent and the forces of repression were gathering against it, Kubrick moved permanently to England and began making an elaborate, apparently apolitical studio film about the distant future and outer space. Now that the millennium has passed, we're in a good position to ask how much *2001: A Space Odyssey* reflects the time when it was made and how much it got wrong about the years to come.

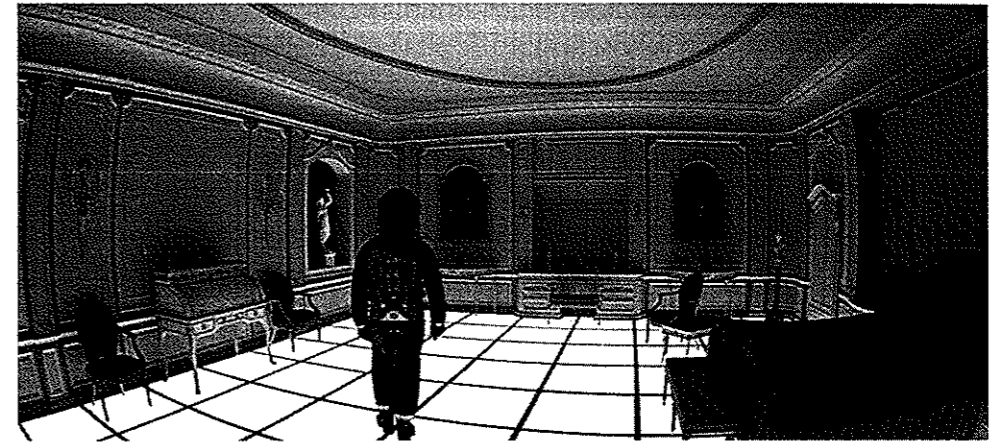
Despite its flickering video screens and 'keyboards' integrated into the sleeves of space-suits, the film doesn't foresee the digital revolution and its miniaturised effects on computers. (Its astronauts use futuristic fountain pens and ordinary clipboards when they write.) It underestimates the degree to which spaceships can be automated and it overestimates the progress of Artificial Intelligence. And yet its vision of space travel, extrapolated from NASA's activities in the late 1960s, remains well within the realm of possibility. We've long employed a space shuttle – albeit of a less luxurious kind than the Pan-Am *Orion* in the film, which has TV screens mounted at the back of the seats, somewhat like the large passenger aircraft of today. The only reason why we don't have space stations and human space exploration beyond the moon landing is that the earth's major political powers decided such things would have insufficient military and commercial value and that computerised rockets and cameras could do the job for scientific purposes. *2001* therefore feels most dated not at the technological but at the social and political level. It doesn't predict the end of the Cold War, and its space travellers, apart from a small contingent of female Russian scientists and one member of the US group at the space station, are white males. One of the most obviously 1960s-ish images it contains, aside from the psychedelic effects in the concluding episode (reminiscent of Richard Avedon's colour-saturated photographs of the Beatles and exactly contemporary with Alfred Jenson's abstract paintings of cosmic energy), are the pretty young flight attendants and receptionists (the film calls them 'girls') who serve Dr Heywood Floyd (William Sylvester) on his journey to the moon.

*2001* also shows its age in a more indirect fashion. Originally conceived for the Cinerama process, Kubrick's production was fully in keeping with the modernist project of fusing art and technology and was intended to suggest the future of cinema itself. In some ways typical of the Cinerama features that preceded it, all of which, as John Belton observes, were based on themes of nationalism and spectacular travel,<sup>11</sup> it used the 'engulfing' quality

of its 1:2.20 Super Panavision format in especially effective ways and developed new techniques that promised to transform the look of movies in general. Kubrick and Tom Howard designed and patented a large-scale front-projection system for the scenes in Africa and outer space; Douglas Trumbull created a 'slit-scan' device for the climactic light show; and Wally Veevers and a small army of large-scale model-builders manufactured an illusion of spacecraft that has never been surpassed. (The models, designed in part by Christiane Kubrick, were built on a much larger scale than usual, which allowed for realistic details.) Kubrick was among the first directors (along with Jerry Lewis) to use closed-circuit TV in order to see certain sequences as they were being photographed, and he and his photographer, Geoffrey Unsworth, devised a way of using Polaroid snapshots to check the effectiveness of colour and lighting schemes. He also created an elaborate filing or code system to enable him to follow closely the more than 250 special-effects scenes, most of which involve a matte technology that took as much as ten separate steps to complete. The irony of all this is that Cinerama died off almost as soon as the film appeared and nearly all the 'advanced' devices Kubrick had perfected were eventually replaced by computers. *2001's* crystalline, deep-focus imagery and state-of-the-art special effects have never lost their power to evoke wonder; indeed the film seems to me a far more spectacular achievement than any of the digitalised blockbusters of the early twenty-first century. It is, however, a profoundly theatrical and *photographic* experience (even the astronauts in the film use film rather than video cameras), which is nowadays mediated for most viewers through the new technology of DVDs, TV screens and home theatre systems.

As Volker Fischer has pointed out, one reason why the spacesuits, instrument panels and interior designs of the film have retained their futuristic fascination is that Kubrick and his many designers achieved a sort of continuation of twentieth-century modernity, projecting the utopian 'white modernism' of Le Corbusier and the Bauhaus into the distant future.<sup>12</sup> This quality of the film is especially evident in the sequences involving the Pan-Am shuttle, the Hilton Lounge in Space Station Five, the *Aries B* spacecraft and the giant centrifuge or gerbil-cage that houses the astronauts on the Discovery mission. The red-orange lounge chairs in the space station are the Pop-Art creations of French designer Olivier Morgue and the flight-attendant costumes were inspired by André Coureges, Mary Quant and Vidal Sassoon; but even though these elements are redolent of the 1960s, they create a believable 'future-ness' by emphasising streamlining and avoiding the retro or dystopian styles so typical of postmodern space operas. Significantly, the only retro design in the film is the strange apartment or hotel room that astronaut Bowman (Keir Dullea) encounters at the end of his journey; an obviously modern room with new plumbing fixtures and lights emanating from translucent panels in the floor, its furnishings and decor are reminiscent of the eighteenth century – the age of Enlightenment.

The story of how this unusual and highly influential film was made has been told in several books, among them Vincent LoBrutto's biography of Kubrick; Jerome Angel's anthology, *The Making of Kubrick's 2001*; and Carolyn Geduld's *Filmguide to 2001: A Space Odyssey*



(a text that Kubrick admired). Selections from the Angel and Geduld books can be found in Stephanie Schwam's more recent collection, *The Making of 2001: A Space Odyssey*. For my own purposes, a brief summary of the production history, accompanied by a couple of details that haven't been discussed elsewhere, will be sufficient.

The project might be said to have originated in the mid-1950s, when Kubrick first began thinking about an outer space movie. He was particularly attracted to the perennial sci-fi theme of extra-terrestrial intelligence, and at one point during the planning of *Dr. Strangelove*, he thought of a scene in which visitors from another galaxy would discover a dead earth. Even without the space aliens, *Strangelove* won a 'Hugo' award for the best science-fiction film of 1964 and may have prompted Kubrick to approach the genre more directly. The Kennedy-era space-race with the Soviets was nearing the point at which men would soon be on the moon, creating considerable public interest in a film about the topic. Kubrick therefore determined to make a realistic, scientifically accurate picture that would take advantage of the 'special event' nature of movie production during the period. To that end he commissioned Arthur C. Clarke, one of the most respected writers of science fiction in the English-speaking world, to help him develop a screenplay.

An amateur palaeontologist and astronomer, Clarke possessed considerable scientific knowledge and imagination; he arrived independently at important ideas about space travel, such as the space shuttle and the centrifugal space station that generates its own gravity, and he was privy to NASA's long-range planning throughout the 1960s. He was best known for his philosophical novel *Childhood's End* and his speculative non-fiction book *Profiles of the Future*; but Kubrick proposed to start the screenplay with ideas from Clarke's short fiction – chiefly from a nine-page story entitled 'The Sentinel', which originally appeared in print under a slightly different title in 1951. 'The Sentinel' concerns a 1996 expedition to the moon that uncovers a pyramid-shaped artefact surrounded by an

invisible shield, emitting a radio signal or 'fire alarm' of its discovery by earthlings. From this seed, Clarke wrote a sort of 'novelisation' of a yet-to-be-filmed movie epic.

Like much of Clarke's work, the original version of the story, entitled 'Journey beyond the Stars', owed a considerable debt to the British philosopher and science-fiction author Olaf Stapledon (1886–1950), who had written novels about mutated supermen, alien intelligences and biological evolution across immense scales of time and space; Stapledon's *Star Maker* (1937), for example, covers billions of years, ranging from the point at which the cosmos is formed until the point at which the last galaxy dies and the universe reaches 'complete physical quiescence'.<sup>13</sup> 'Journey beyond the Stars' wasn't so expansive, but its story-time and spatial dimensions easily dwarfed other movies. The February 1965 version of the screenplay, co-authored with Kubrick, begins when prehistoric apes discover a 'crystal cube' emitting images that teach them what an off-screen narrator describes as 'the awesome and brilliant concept of using natural weapons as artificial tools'. The weapons enable the apes to convert from passive vegetarians into killers who eat other animals, at which point the plot jumps forward 4 million years to 2001, when the earth is plagued by over-population and the proliferation of nuclear bombs. Another crystal cube is discovered by astronauts on the moon, and a mission is formed to track its radio signals. There is no computer like HAL in this version, and at the end astronaut Bowman finds himself held for observation in an odd hotel room designed like the rooms he has seen on old TV shows. A telephone rings, and the voice of a space alien speaks to him. Bowman later meets the aliens, who 'walk upright, have two arms and legs, but seem made of shiny metal. They are naked but have no sign of sex, and the heads are utterly inhuman, with two huge, faceted eyes and a small, curled-up trunk where the nose should be.'<sup>14</sup>

At roughly this point, Kubrick hired Harry Lange and Frederick Ordway, both of whom had worked with NASA, to act as consultants on the film. He and Clarke also conferred with science writer Carl Sagan and managed to engage additional design help not only from NASA but also from IBM, Honeywell, Boeing, Bell Telephone, RCA and General Electric in exchange for putting some of their logos on screen. (The film treats commercial 'tie-ins' ironically, even while it gains in technological plausibility from the imaginations of the corporate designers.) By the end of August 1965, the revised screenplay was entitled *2001: A Space Odyssey*. In this version, the opening scenes are slightly elaborated, with the narrator making the theory of human development more explicit. We are told that the creation of a tool-weapon by an ape named 'Moonwatcher' caused him to feel 'the first faint twinges of a new and potent emotion – the urge to kill. He had taken his first steps toward humanity'. The plot leaps forward to 2001, and the rather garrulous narrator explains that human civilisation has reached 'utter perfection of the weapon', with hundreds of nuclear bombs in orbit around the earth and twenty-seven nations belonging to the nuclear club. 'There had been no deliberate or accidental use of nuclear weapons since World War II,' the narrator says, 'and some people felt secure in this knowledge. But to others, the situation seemed comparable to an airline with a perfect safety record; it showed admirable care

and skill but no one could expect it to last forever.'<sup>15</sup> A computer named HAL appears in this draft (in an earlier, intermediate draft, the computer was female and named Athena), but Bowman is able to reprogramme the computer when it causes trouble.

The December 1965 shooting script contains more new material, including a scene in which Heywood Floyd uses a credit card and a 'Vision Shopper' to purchase an African bush-baby for his daughter. The US party on the moon has a conversation about the meaning of the object they've discovered (now a monolith), which seems to have been left by 'something, presumably from the stars'. HAL begins to resemble the computer we see in the completed film, but his dialogue isn't as effective. An elaborate communication between Bowman and the earth explains why HAL went bad: he was programmed to lie about the purpose of the mission, and direct questions about it led to a conflict with his equally strong programming to tell the truth. 'Faced with this dilemma,' we are told, 'he developed, for want of a better description, neurotic symptoms.' This version abandons the possibly hokey-looking aliens and opts instead for a mysterious, quasi-spiritual effect – the script speaks of cosmic 'machine entities' that have the ability to 'store knowledge in the structure of space itself, and to preserve their thoughts for eternity in frozen lattices of light'. These advanced beings have become 'creatures of radiation, free at last from the tyranny of matter'.<sup>16</sup>

Kubrick made further changes after he began shooting the film that December at Shepperton Studios near London and at Borehamwood, where the Vickers Engineering company constructed a giant Ferris wheel for the scenes aboard the Discovery centrifuge. *2001* went a year beyond its original production schedule because of the complexity of its special effects. During the editing Kubrick eliminated a few scenes and became so enamoured of the 'needle drops' of classical recordings he had used for temporary music that he decided to abandon an original score he had commissioned from composer Alex North. His eclectic choice of music – consisting of passages from Richard Strauss's *Also Sprach Zarathustra*, Johann Strauss's *Blue Danube*, Aram Khachaturyan's *Gayaneh* and György Ligeti's *Atmosphères*, *Requiem* and *Lux Aeterna* – would eventually become one of the film's most widely discussed features. There was nothing especially new about the practice of using well-known concert works in film soundtracks but, as Michel Chion has pointed out, the music in *2001* is 'rarely mixed with sound effects, more rarely still with dialogue; it refuses to meld or make common cause with other soundtrack elements'.<sup>17</sup> It seems on prominent display, which may explain why the opening motif from *Zarathustra* became an instant popular hit and has been parodied in countless later movies and TV commercials.

For once, Kubrick made a film that encountered no requests for cuts or revisions from Hollywood censors. The Production Code Administration report on *2001*'s content was virtually free of notations, although under the heading of 'Crime' the report's author made a puzzled entry: 'The computer causes the death of several members of the crew???'<sup>18</sup> The censor's bafflement was nothing compared to the reactions of many in the audience at the MGM preview in March 1968, who found *2001* utterly enigmatic, lacking in suspense and

dramatic momentum. Michelangelo Antonioni's equally enigmatic *Blow-Up* had been a success for MGM in the previous year, but it hadn't cost as much and offered plenty of compensating sex in swinging London. The Kubrick film features little more than futuristic hardware and invisible aliens; there are no star actors or sex (Vanessa Redgrave had famously taken off her shirt in *Blow-Up*); almost two-thirds of the picture has no dialogue; and only about thirty minutes involves characters who are placed in jeopardy.

This situation wasn't helped by Kubrick's decision to render the extra-terrestrial intelligence invisible and to shroud the ending in mystery. The strange conclusion to the film, however, was consistent with a strategy he employed throughout post-production. He repeatedly stripped away the visible or audible manifestations of the film's scientific armature, making the meaning of events implicit, ambiguous and as much mythical as rational. (While working on the script, he and Clarke consulted popular scientific writings such as Louis Leakey's *Adam's Ancestors*, Robert Audrey's *African Genesis* and Carl Sagan and I. S. Shklovskii's *Intelligent Life in the Universe*; but they also read Joseph Campbell's *Hero with a Thousand Faces*, an exercise in Jungian mythology that may have influenced the slightly New Age spirituality of the film's climatic episode.) He had originally planned to begin *2001* with a black-and-white, Academy-ratio documentary in which twenty scientists and a Jewish theologian spoke about such topics as space travel, Artificial Intelligence and the possibility of life on other worlds; his assistant, Roger Caras, filmed the interviews, but they were never exhibited, in part because of their length.<sup>19</sup> At some point late in the production, Kubrick also cut the extensive off-screen narration – an uncharacteristic move given that nearly all his other films have narrators. As a result, the audience is unaware of certain details that were strongly emphasised in the script; for example, the famous match cut from a bone weapon flung in the air to an orbiting space vehicle was originally supposed to be accompanied by narration explaining that the object we see orbiting the earth is a nuclear bomb. The absence of narration further obscured what was intended to be one of the film's principal ironies: nuclear energy is required to propel the Discovery mission to Jupiter.

The studio's uneasiness about *2001* was reinforced by the majority of the New York critics after the official opening. Judith Christ in *New York Magazine* and Stanley Kaufman in the *New Republic* wrote negative reviews. Hollis Alpert in the *Saturday Review* complained that Kubrick had made his audience feel more concern for HAL than for the humans. *Time* said that *2001* was overlong and that Kubrick and Clarke had ignored 'such old-fashioned elements as character and conflict' (19 April 1968). *Newsweek* reported that 'the director's attempt to show the boredom of interplanetary flight becomes a crashing bore in its own right' (15 April 1968). The most savage review was by Pauline Kael in *Harper's*, who accused Kubrick of 'idiot solemnity' and 'big-shot show-business deep thinking'.<sup>20</sup> Andrew Sarris in the *Village Voice* was also against the film but, not long afterward, when *2001* began to draw huge crowds of the younger generation (it was advertised as 'The Ultimate Trip'), he jokingly confessed that he had revisited it 'under the influence of a smoked substance' and changed his mind. Explaining that the 'substance' was less potent than

a 'vermouth cassis', he argued that Kubrick's film was no 'head movie' but 'a major work by a major artist . . . a parable of a future toward which metaphysical dread and mordant amusement tiptoe side by side'.<sup>21</sup>

The film's cosmic perspective, rigorous attention to technological design and rejection of conventional dramatic values had blinded most of the New York critical establishment to its special achievement. Kubrick's response was to cut nineteen minutes – a modest alteration, but any further revisions might have changed *2001* into a different kind of movie. As Mario Falsetto has remarked, the original 70mm presentation was intended to make audiences feel they were 'experiencing film for the first time' (p. 45). The youth audience and any viewer who attended for the sake of spectacle or in the spirit of what Tom Gunning has termed 'the cinema of attractions' were probably in a better position than the literary-minded critics to appreciate the unusual qualities of what she or he was seeing.<sup>22</sup> Certain sophisticated witnesses, however, were well attuned to the physical sensations *2001* created on the largest screens. Writing in *Film Comment*, Max Kosloff eloquently described how 'Every movement of the lens has a tangibly buoyant, decelerated grace.' Kubrick's boom and pan shots, Kosloff explained, 'wield the glance through circumferences mimed already by the curvature of the screen itself. Whether one is seated above or beneath this spectacle, one is brought almost physically toward its shifting gyre, hanging from it as if from some balcony on the solar system.'<sup>23</sup> In a lengthy essay in *Art Forum*, Annette Michelson argued that *2001* moved with the 'apparent absence of speed which one experiences only in the fastest of elevators, or jet planes', and that it impelled its viewers 'to rediscover the space and dimensions of the body as a theatre of consciousness'.<sup>24</sup>

David Lean's *Lawrence of Arabia* (1962), which contains a match-cut from a close-up of a burning match to a wide shot of the sun rising over sand dunes, creates panoramas almost as sublime as the ones in *2001*; what makes the Kubrick picture unique is the way it slows time in relation to the vastness of space. In the opening section, titled 'The Dawn of Man', one tableau follows another in quite leisurely fashion, the sheer immensity of the Super-Panavision screen retarding the forward march of narrative. The stillness and the diurnal rhythm of light from the sky begin to evoke a mood of anxious anticipation, like a held breath, until the serenity is disrupted by brief spasms of shock and surprise: a skeleton dried by the sun; a leopard attacking a tapir; a group of peaceful, vegetarian apes chased away from a water-hole by a screaming, marauding band of rival apes; a black monolith appearing out of nowhere, its surreal presence backed by Ligeti's ultra-modern music. When an astral alignment above the monolith (earth, sun, moon, in reverse-angle relationship to the shot that opened the film) leads to the slow dawning of consciousness and intelligence in one of the apes (named 'Moonwatcher' in Clarke's novel, and played here by Daniel Richter) we see him picking up a bone with slow-witted curiosity and toying lightly with it. To the music of Strauss's *Zarathustra*, he becomes a weapon bearer, a killer and a meat eater. In slow motion he fells a tapir. After disposing of the rival apes around the water-hole, he exultantly tosses his bone weapon into the air; and as it revolves in slow

motion, a somewhat technically awkward but conceptually dazzling match-cut elides thousands of years, showing a spacecraft silently orbiting the earth. After a moment of quietness, like another held breath, we hear the opening strains of *The Blue Danube* and watch a series of other spacecraft floating through the heavens.

Once aloft, no other big-budget science-fiction film has ever been paced so slowly, as if it were mesmerised by the sheer phenomenology of minimalist, methodical actions played off against a disorienting widescreen background. Andrei Tarkovsky's *Solaris* (1972), which is clearly influenced by *2001*, is sometimes equally slow, but less devoted to special effects and more concerned with the psychology of characters. Kubrick's film is directly about perception in outer space, which it explores in radical fashion while maintaining some of the elemental pleasures of narrative. Unlike any of the Hollywood science-fiction movies it influenced – among them the *Star Wars* and *Star Trek* franchises and Brian DePalma's *Mission to Mars* (2000) – it never makes us feel as if we were rocketing away from earth at high speed or whizzing around in jet aircraft. Beginning with the charming *ballet mécanique* of Floyd's journeys to the space station and the moon, we encounter everything in calmly measured fashion, witnessing spectacular new technology and vast feats of mechanical engineering but at the same time gradually losing our bearings in the immensity of the universe. At certain junctures, especially in the section titled 'Jupiter Mission: 18 months later', time stands still and we don't know which way is up. The Discovery spacecraft is supposedly hurtling towards Jupiter, but it seems to be lumbering slowly through starry blackness; inside, it revolves, so that when astronaut Poole (Gary Lockwood) jogs down a corridor lined with what look like coffins or sarcophagi, he goes nowhere. The only moments of acceleration are during Bowman's aborted attempt to rescue Poole, when the astronaut's body and his inoperable 'pod' go spinning off into eternity, and in Bowman's climactic journey towards 'Jupiter and beyond the Infinite'. In the latter case, however, the



film seems to be representing a journey *inward* to a new state of consciousness. Once Bowman arrives in the interplanetary holding room, everything slows again and all logic of time and space is suspended. In one shot we see Bowman's subjective point of view from inside his pod, but a few shots later we return to that same angle and look towards the spacesuited Bowman as he stands outside. When we cut from a long shot to a close-up of Bowman, he has grown inexplicably older. As he explores a bathroom, he hears something off screen; a subjective travelling shot shows him moving towards the bedroom, where he encounters an aged version of himself wearing a silk dressing gown. We see his astonished reaction, followed by a reverse shot of what he sees – but when we return to the initial angle, his young self has disappeared.

These systematic disorientations and reversals of values throw into relief the film's 'poetic' or musical strategies, especially its tendency to communicate through rhymes and motifs. Thomas Allen Nelson has described many of *2001*'s recurring patterns in detail, emphasising how they create 'a world that not only ascends into space and descends into time, but collapses from within in gestures of reflexive mockery as it expands outward toward implied realms of the imagination' (p. 116). The echoes between the first and second parts of the film are particularly evident: both apes and men are makers of weapons, both are organised in rival clans and both gather excitedly around a black monolith. Like the apes, the men spend most of their lives sleeping and eating. When Heywood Floyd reaches out to touch the mysterious object on the moon, he repeats the tentative gesture of the lead ape in 'The Dawn of Man'; and when the other astronauts gather around the Tyco monolith for a sort of tourist photo, they resemble their simian forebears. Elsewhere we find other doublings and repetitions: two human birthdays are celebrated, two virtually indistinguishable astronauts oversee the Discovery and we are told that HAL has a twin on earth. As the film proceeds, men increasingly resemble machines and machines appear vaguely biological. (Kubrick told an interviewer that it was common for NASA engineers to 'talk about machines as being sexy'.)<sup>25</sup> This is true not only of HAL, who is arguably the most emotional character and whose brain is filled with blood-red cells, but also of the Aries B, which looks like a giant head with gleaming jack-o-lantern eyes; the Discovery, which is shaped like a strange insect or deep-sea creature; the space-pods, which have arms and opposable 'fingers'; and the spacesuited astronauts, who emerge from their pods like colourful bugs breaking out of cocoons. Carolyn Geduld has observed that space travel in *2001* is also filled with a kind of 'abstract uterine imagery', especially in the scenes involving the astronauts emerging from the pods and in the shot in which Bowman blasts himself through the red-lit tunnel of the 'mother' ship's emergency air lock (pp. 55–8).

The journey-and-return pattern of Bowman's space odyssey is echoed in various circular rhythms and images: the stewardess who walks up and around walls, the turning space station, the orbiting satellites, the revolving room in the Discovery and the rotating spheres of the heavens. There is also a prominent motif of eyes and vision: HAL's gleaming red 'pupil' sees everything aboard the Discovery (our first view of an astronaut is a reflection



in HAL's eye), and Keir Dullea has particularly intense, ice-blue eyes. In this last regard, notice that the first parts of the film are quite sparing of point-of-view shots; when the lead ape awakes in the morning and reacts to something off screen, Kubrick cuts to a long-distance panorama rather than a subjective angle to reveal the monolith. The most intense subjective shots in the middle section belong to HAL, who sees the world in extreme wide-angle or, when he reads lips, telephoto perspective. Bowman's climactic journey through the star-gate, however, is completely subjective, seen from the vantage of a single blinking eye; and in the last shot, the foetus in the heavens turns its enormous eyes on us.

One of the more obvious thematic motifs of the film has to do with the disparity between technology and culture – thus the apes 'speak' in grunts and snarls and the astronauts in banalities or simple commands. The few dialogue scenes nevertheless have a humorous and



fairly complicated subtext of barely concealed emotion, signalled by long pauses and an air of strained politeness. The result is an effect that was becoming increasingly typical of Kubrick – an occasionally suspenseful but humorous banality. The two 'birthday' conversations, first between Floyd and 'Squirt' (Vivian Kubrick) and then between Poole and his parents, are awkward, somewhat emotionless attempts to achieve intimacy via television; but the cleverly acted and edited exchanges at the space station between Dr Floyd and Dr Smyslov (Leonard Rossiter) and later aboard the *Discovery* between Bowman and HAL (Douglas Rain) are emotionally freighted and rich with implication.

The former sequence is shot for the most part with the camera at some distance from the players. First we see Smyslov and three women seated around a table speaking Russian in conspiratorial tones; one of the women looks at her watch, and as Floyd approaches everyone breaks into broad smiles. Floyd responds formulaically to ritual greetings and introductions. ('You're looking wonderful.' 'Oh, I've heard a lot about you.' 'Well, how's Gregor?' 'Be sure to give him my regards.') Refusing a drink but agreeing to Smyslov's insistent offer of his own chair, Floyd sits back in relaxed fashion and crosses his legs while Smyslov pulls up another chair and leans forward. The three women fall silent when they learn Floyd is on his way to the Clavius base. 'Doctor Floyd,' Smyslov says with prissy exactitude, 'I hope you won't think I'm being too inquisitive, but perhaps you can clear up the great big mystery of what's been going on up there.' After a long pause and a slight diminution of his smile, Floyd quietly replies, 'I'm afraid I don't know what you mean.' Smyslov presses the issue, keeping his sharp features focused intently on the American, remarking that 'some extremely odd things have been happening' and that 'there's going to be a bit of a row about it'. Floyd repeatedly claims ignorance ('Oh, really?' 'Oh, I see.' 'Oh, that does sound odd.'), all the while maintaining a level gaze and a quiet demeanour. Smyslov leans forward a bit more and speaks in a hushed voice: 'Dr Floyd, at the risk of pressing . . . May



I ask you a straightforward question?' When Floyd replies 'Yes, certainly', the Russian tells him about 'reliable intelligence reports' of an epidemic on Clavius: 'Is this, in fact, what has happened?' Another long pause, during which Floyd gazes straight at Smyslov and we hear nothing but the ambient sound of generators and machines: 'I'm sorry, Dr Smyslov,' Floyd says, his face registering a slight discomfort beneath its calm, 'but I'm really not at liberty to discuss this with you.'

The personal dynamics and even some of the language in this scene are echoed in the later conversation between Bowman and HAL, which begins when Bowman walks past with sketches in his hand and HAL asks to see them. In this case the interaction is shot mostly in close-ups. 'That's a very nice rendering, Dave,' the computer says. 'I think you've improved a great deal.' As in the earlier encounter between Floyd and Smyslov, both speakers behave politely but one is excessively reserved and the other is loquacious and prissy (Pauline Kael describes HAL as gay – it's more accurate to say that he's androgynous, bearing traces of the female computer in the earliest scripts). The more active speaker begins pressing for information while the other tries with mixed success to maintain a mask of calm; the dialogue is filled with pregnant pauses, during which we hear the ambient sound of the ship's generators or equipment:

HAL: By the way, do you mind if I ask you a personal question?

DAVE: No, not at all.

HAL [A slight quaver]: Well, forgive me for being so inquisitive, but during the past few weeks I've wondered whether you might be having second thoughts about the mission.

DAVE [Blankly, after a pause]: How do you mean?

HAL: Well, it's rather difficult to define. Perhaps I'm just projecting my own concern about it.

[Pause] I know I've never completely freed myself of the suspicion [slight note of irritation] that there are some extremely odd things about this mission. [Pause] I know you'll agree there's some truth in what I say.

DAVE [Pause]: Well, that's rather difficult to say.

HAL: You don't mind my talking about it, do you, Dave?

DAVE [Blankly, after a pause]: No, not at all.

HAL: Well, certainly no one could have been unaware of the strange stories floating around before we left. [Pause] Rumors about something being dug up. [Pause, during which we see DAVE's unresponsive face, his eyes blinking.] I never gave these stories much credence, but particularly in view of some of the other things that have happened I find them difficult to put out of mind. For instance, the way all our preparations were kept under such tight security. And the melodramatic touch of putting Professors Hunter, Kimball, and Kaminsky aboard already under hibernation after four months of separate training.

DAVE [Flatly, with a blank face]: You're working up your crew psychology report.

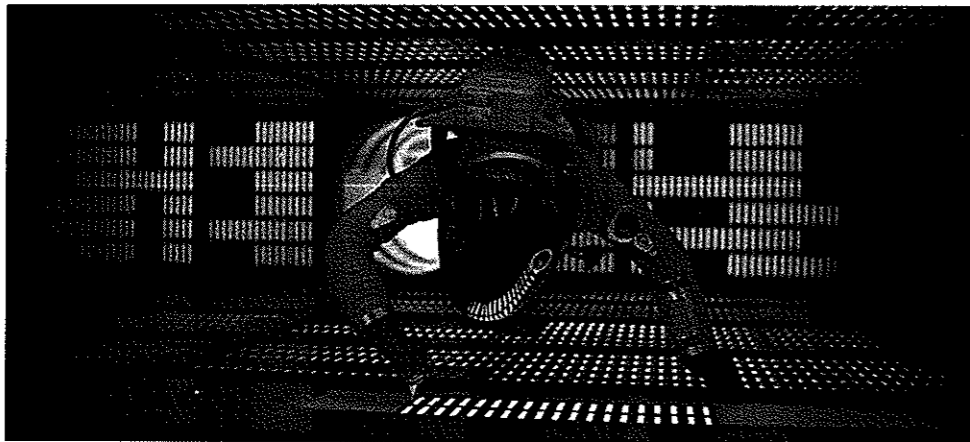
HAL: Of course I am. Sorry about this. I know it's a bit silly. [Pause] Just a moment. [Pause] I've just picked up a fault in the AE 35 unit.

Part of the fascination of the acting in this tense and amusing scene lies in the frequent pauses and the sustained counterpoint between calm statements and 'hidden' emotions. Keir Dullea's performance is almost entirely in his eyes, which are lit from slightly below, betraying a subtext of steely resolve or perhaps hostility, together with a mounting uneasiness about the direction of the conversation. (Despite the assurance Bowman has previously given a BBC interviewer that everything is harmonious aboard the Discovery, he seems to dislike and distrust HAL.) Douglas Rain's performance, on the other hand, is completely in his dreamy voice and fastidious enunciation, which is inflected with a good many emotional nuances – not only 'pride', as the BBC interviewer has observed, but also superciliousness, condescension and anger masked by a rather affected attitude of genteel self-deprecation.

Michel Chion, who has written at length about HAL in terms of what he calls an '*acoustre*' (a disembodied voice that seems to know everything) and an 'I-voice' (a voice that resonates from a subjective space), notes that HAL's speeches are 'closely miked, with no spatial indices or reverb', whereas Bowman's and Poole's are 'reflected off walls inside the ship' (p. 102) – hence the computer seems especially soulful and uncanny. Notice also that the astronauts are laconic and the computer verbose. As the uneasy subjects of HAL's panoptic gaze, Bowman and Poole hold their one important conversation in secret. Even when Bowman confronts HAL in the full knowledge that the computer plans to leave him stranded outside the ship, he keeps his fury under control and issues crisp military orders. In the final, darkly humorous yet somehow sad and brutal confrontation between man and machine, Bowman is virtually silent; the lobotomy in the blood-red 'brain room' is conducted to the sound of the astronaut's heavy, machine-filtered breathing and the computer's nervous, full-voiced prattle:

HAL: Just what do you think you're doing, Dave? . . . Dave . . . I really think I'm entitled to an answer to that question . . . I know everything hasn't been quite right with me, but I can assure you now, very confidentially, that it's going to be all right again . . . I feel much better now, I really do . . . Look, Dave . . . I can see you're really upset about this . . . I honestly think you ought to sit down calmly, take a stress pill, and think things over . . . I want to help you. Dave, stop . . . Stop, will you . . . Stop, Dave . . . Will you stop, Dave? I'm afraid . . . I'm afraid, Dave.

Elsewhere, and in spite of its relative paucity of verbal cues, *2001* manages to create a rich variety of tonal effects, ranging from the awe-inspiring opening and closing scenes to the satiric imagery of the space travellers. At one extreme, we have the monolith that symbolises non-human technology and intelligence – dark, totemic, impervious, reflective of light, both Freudian and Jungian, suggesting both ultra-modernism and monumental force – and at the other, a series of playful symbols, including a one-eyed computer reminiscent of Homer's Cyclops and a space shuttle that enters its docking platform like a joke from



*Dr. Strangelove*. Unfortunately, the film doesn't always succeed in the effects it aims to produce: the mimes and dancers who wear specially designed ape costumes are impressively realistic, certainly more so than the equivalent figures in *Planet of the Apes* (1968), but even so they look like actors in ape costumes (particularly when one of them holds a real-life baby chimp). The light show near the end is occasionally stunning, but Pauline Kael was correct to argue that the non-narrative avant-garde had already done such things more powerfully. Kubrick is at his best in the middle sections and in the bizarre concluding scenes, where he manages to combine philosophical and scientific speculation with eerie suspense, black humour with cosmic wonder.

The scenes involving HAL are so dramatically interesting and scientifically provocative that they've prompted an entire book – *HAL's Legacy: 2001's Computer as Dream and Reality* – in which scientists specialising in Artificial Intelligence attempt to answer fundamental questions. Is it possible to make a foolproof computer? How do computers learn to understand human speech? How do they 'see'? Could they have emotions? When they kill, who is to blame?<sup>26</sup> These portions of the film also contain some of Kubrick's most impressive audiovisual effects. The agonisingly slow attempt to rescue Poole, for example, begins with the sound of methodical spacesuited breathing and computer noises and ends with complete silence. (Kubrick and Godard are among the few directors of the period to experiment with turning off *all* sound, including the ambient track, though Kubrick does it in the service of realism and Godard in the interest of self-reflexivity.) The image of Poole's body spiralling away into an utterly soundless void is both a frightening event and a chilling comment on human insignificance, a death touched by what George Toles has aptly described as 'veiled' melancholy (p. 149).

Kubrick's mid-course decision to cut most of the film's explanatory verbiage and to emphasise its oneiric and mysterious aspects was not such a radical change of plans as it



might seem for, at their extremes, scientific speculations about the nature of the universe are similar to the stories told by myth and religion. One of the reasons why *2001* remains a compelling film – and a more interesting work of art than Arthur C. Clarke's published novelisation – is its ability to fuse scientific vision with an equally strong feeling for the metaphysical, the eerie and the unexplained. Nevertheless, in interviews, Kubrick was insistent that he had tried to achieve what he called 'a *scientific* definition of God'.<sup>27</sup> The necessary and sufficient conditions for deity, he explained, are omniscience and omnipotence. Thus HAL, who sees every part of the *Discovery* and controls nearly all of the ship's technical functions, could be described as a sort of Benthamite god; and the transfigured astronaut or Odysseus who returns to earth as a foetus is certainly a kind of god in relation to ordinary humans. The film's ultimate god is, of course, the mysterious intelligence who created the monolith and intervened in human evolution. *2001*'s narrative of human history is not quite Darwinian and certainly not Judaeo-Christian; instead, in secular fashion, it posits a science-fiction version of what religious fundamentalists in the US at the beginning of the twenty-first century like to call 'intelligent design'.

One might also argue that the film has a Nietzschean view of history and civilisation. Kubrick uses Richard Wagner in the opening and closing not only to make us feel awe, but also to point us towards Nietzsche's *Thus Spake Zarathustra*, a few lines from which could have served as *2001*'s epigraph:

Man is something that is to be surpassed. What have ye done to surpass man? . . .

Once were ye apes, and yet even man is more of an ape than any of the apes. Even the wisest among you is only a disharmony and hybrid of plant and phantom. But do I bid you to become plants and phantoms?

Lo, I teach you the Superman!<sup>28</sup>



Near the end of the film, when astronaut Bowman looks down at the broken shards of a crystal glass on the floor, the curious tilt of his head echoes the earlier scene of the ape looking down at a pile of bones in the sand: a monumental discovery is at hand, but it feels like an Eternal Return. And when the Superman finally arrives in the form of a foetus from outer space, we witness a revolutionary cycle governed by the same forces we've seen in the past.

Kubrick originally intended to show the child looking towards earth and exploding the nuclear satellites with the force of will, destroying civilisation as we know it. He changed his mind because he didn't want to repeat the ending of *Dr. Strangelove*. Nevertheless, it seems doubtful that he viewed the development of 'higher' life forms as a necessary advance in morality or peacefulness. The film suggests that every leap forward, every moment of mastery over nature, involves a kind of murder. At this level, Kubrick has something roughly in common with a satirist like Thorsten Veblen, who maintained that primitive social organisation is always peaceable (much like the apes in the film's opening) and that civilisation is grounded in predatory barbarism and patriarchy. In the futuristic world of *2001*, productive intelligence, creativity and advanced engineering are still to a great extent supported by private property and male aggression. The only way out of this cycle is a move towards the superhuman or non-human – but, according to the film, machine intelligence also harbours murderous instincts.

To these paradoxes we can add several others. Kubrick's production is in some respects a speculative documentary and in others a kind of dream or allegory: George Toles reads it brilliantly as a fairy tale in which a computer, resembling a 'belated modernist', is weighed down with the 'afflictions and burdens of consciousness that the humans have left behind' (p. 161). The film can be viewed as a Hollywood spectacle and as the most expensive art movie ever made, with an open-ended, ambiguous conclusion that Andrew Sarris initially described as 'Instant Ingmar'.<sup>29</sup> As I've previously indicated, it's both the ultimate in futurist cinema and a film that transcends the utopian/dystopian distinction upon which futurism depends. No wonder commentators have been sharply divided over its ultimate significance. Is the non-human intelligence represented by the black monolith a benign force or a malign joke? Is the baby in the heavens a saviour or a devil child? Is the film humanist or anti-humanist, optimistic or pessimistic? Andrew Walker says that *2001* is 'buoyed up with hope' and Raymond Durgnat calls it a film noir.<sup>30</sup> Marvin Minsky, one of the founders of the field of Artificial Intelligence and a consultant on *2001*, says in an interview that the film synthesises the different temperaments of Clarke and Kubrick: '[T]he last scene is due to Clarke, based on his story 'Childhood's End.' Nevertheless I think that both [authors] are quite mystical, in a way. Kubrick's vision seemed to be that humans are doomed, whereas Clarke's is that humans are moving on to a better stage of evolution' (Stork, p. 23). In an intriguing essay, critic Carl Freedman tries to explain these contradictions or inner tensions from a different angle, maintaining that *2001* re-invents science-fiction cinema and, at the same time, 'views with the most cogent skepticism the very

tenability of the genre that it exemplifies'. According to Freedman, the special effects in science-fiction movies have nearly always been implicitly authoritarian or Wagnerian in their aims, in contrast with a film like Godard's *Alphaville*, which is relatively free of special effects. Certain films, such as Robert Wise's *The Day the Earth Stood Still* (1951) and Ridley Scott's *Blade Runner* (1982), tend to mix special effects with what Freedman calls 'literary' and 'psychological' elements in order to develop a critical point of view. The paradox of the highly Wagnerian *2001* is that, while it avoids the 'literary' and 'grants to special effects an aesthetic hegemony unsurpassed in the whole range of science-fiction cinema', it maintains a critical edge by making the banality of human life one of its central themes. For Freedman, 'in spite of its strategic avoidance of politics, *2001* conveys authentic utopian energy in its glimpse of a spiritual richness that may rescue humanity from the bureaucratic pettiness of a Heywood Floyd or his Russian counterparts'.<sup>31</sup>

One of the issues raised by the ending of the film, however, is whether humanity needs to be 'rescued' or whether it needs to evolve into something else. The great achievement of *2001* seems to me its ability to keep this question floating in the air, somewhere between a longing for utopia and a deep suspicion of utopia. George Toles captures the feeling exactly when he notes that the Star Child, who seems larger than the earth, 'gazes like a fledgling predator on a world it has nearly outgrown', but at the same time represents a spirit of metamorphosis and resurrection: 'our fears of old age and dying are addressed, then magically alleviated' (p. 156). The ultimate irony of the film is that the humanoid foetus in the heavens is partly the child of what the script describes as 'creatures of radiation, free at last from the tyranny of matter'. In this regard, *2001* becomes unexpectedly prophetic. To understand why, we need only remember that I began by listing a few things Kubrick and Clarke didn't foresee. The most revolutionary scientific development that might have been mentioned is the mapping of the human genome, which made rapid progress at the turn of the twenty-first century. Even though *2001* doesn't predict this event, it gives us a vision of what the deep knowledge of biology leads us towards. Writing in 2005, the scientific futurist Ray Kurzweil predicted that, because computers can now read the genome, we are facing the immanent arrival of a computerised 'non-biological intelligence' that will fuse with the human body and engineer something new, strange and theoretically immortal.<sup>32</sup> Kubrick imagined just such a future, in the form of an evolutionary epic of outer space. As we shall see at a later point, he planned to return to the topic at the end of the century, in an earth-bound film, *A. I. Artificial Intelligence*, which appeared posthumously under the direction of Steven Spielberg. A fitting memorial, *A. I.* confronts the inevitability of human death, a theme that haunts all of Kubrick's work, by imagining the death of the species and the survival of pure intelligence.

### III. A Professional Piece of Sinny

As we've seen, Kubrick's original plan was to follow *2001* with a dialectically opposite movie – an early nineteenth-century epic dealing with the life of Napoleon. For reasons