

2001: a space odyssey

(Text from the original 1968 program)

Behind every man alive, stands thirty ghosts, for that is the ratio by which the dead outnumber the living. Since the dawn of time, a hundred billion human beings have walked the planet Earth.

Now, this is an interesting number, for by a curious coincidence there are approximately a hundred billion stars in our local Universe, the Milky Way. So for every man and woman who has ever lived, in this Universe there shines a star.

But every one of those stars is a sun, often far more brilliant and glorious than the small, nearby star we call *the* Sun. And many - perhaps most - of those alien suns have planets circling them. So almost certainly there is enough land in the sky to give every member of the human species, back to the first apeman, his own private world-sized heaven - or hell.

How many of those potential heavens and hells are inhabited, and by what manner of creatures, we have no way of guessing; the very nearest of them is a million times further away than Mars and Venus, those still remote goals of the next generation. But the barriers of distance are crumbling - one day we shall meet our equals, or our masters, among the stars. Men have been slow to face this prospect. Increasing numbers, however, are asking: "Why have such meetings not occurred already, since we ourselves are about to venture into space?" Why not, indeed? *2001: A SPACE ODYSSEY* offers one possible answer to this very reasonable question. But please remember: this is only a work of fiction. The truth, as always, will be far stranger.

2001: A SPACE ODYSSEY tells of an adventure that has not yet happened, but which many people - scientists, philosophers, writers and engineers - think will happen, and perhaps very soon. The adventure is the first contact that the human race - we on the planet Earth - will have with life elsewhere in the Universe. This limitless void, with its uncountable numbers of suns and planets, is like a gigantic theatre filled with stages on which the drama of life can be acted out, and on which, very probably, it has been acted out over the past eons. What are the beings that inhabit these worlds? Will we be able to recognize them or will they appear so alien that if we were to see them we would hardly know them as intelligent life at all? Will they be biological life forms, machines or even disembodied creatures of pure energy? Will they be hostile toward us, or will they think that we are so primitive that they will pass us by and look elsewhere for other beings more nearly equal to them. If we get a signal from outer space, what should we do about it? Should we answer it and invite visitors, or should we ignore it and continue to live in the Universe as if we are alone? Or have we already been visited? Has some extraterrestrial civilization left artifacts for us to find when we get to the

moon or the planet Mars? If we find life in the Universe – perhaps beings more intelligent than ourselves – what will we come to think of ourselves, our problems, our quarrels and our struggles, all of which take place on an obscure rocky planet not far from one of billions of average stars?

For nearly five years, ever since he finished making *Dr. Strangelove*, Stanley Kubrick has been fascinated by the theme of extraterrestrial life and how the challenges it poses could be translated into a film that was both exciting to see, scrupulously accurate from the scientific point of view, and as beautiful as modern cinematic art could make it. Science fiction and science fiction films are now commonplace, but most of them deal with impossible worlds in a far-off future, filled with death rays and weird monsters. In MGM's presentation of *2001: A SPACE ODYSSEY*, Kubrick has tried to imagine how things are really going to be a few decades from now. If computers talk in the film it is because the leading experts in the computer field in the United States and England, where the film was made, assured Kubrick that by the year 2001 computers will talk! If in *2001* the surface of the Moon looks like what you would expect it to look like, from the latest rocket pictures, this is no accident, since Kubrick has been studying these pictures for the last three years to make sure that the Moon looks like the Moon. The real world of science is now so fantastic that old-fashioned science fiction movies – with space ships on strings – look tame and out of date, especially to the modern generation of movie goers who have grown up with Sputnik, Cape Kennedy and manned space flight.

2001: A SPACE ODYSSEY is probably the most technically complex movie ever made. Each scene involving space flight or activity on the Moon took weeks of preparation. First Kubrick and Arthur C. Clarke, who co-authored the film and who is regarded as the world's most distinguished and exciting contemporary science fiction writer, studied technical reports, NASA photographs, or consulted with professionals in the field, to find out what was really known about futuristic communications or about what the Earth will look like when seen from the Moon, or how space-suits will be designed thirty years from now. While these preparations were going on, Kubrick's office in the MGM studios, looked something like an engineer's design room. Kubrick has a chess-player's instinct for organization. (In his salad days he was a professional chess player and played for quarters in Washington Square in Manhattan. He estimated that he used to earn as much as three dollars a day playing chess, which, as he once said, "goes a long way if all that you are buying with it is food.") He is very fond of charts and bulletin boards and while the technical studies were taking place the office walls were crowded with photographs, drawings of space ships and various pieces of material suggested for space suits. In neighbouring buildings there were crews at work constructing the Orbiter Hilton, hotel for visitors in transit to the Moon, or a pre-historic landscape for the scenes involving the dawn of man. The space ships of the future, in which men will live for months, and maybe years, will have artificial gravity, which will keep things from flying around, and which also seems necessary for the health of the astronauts. One way of supplying gravity is with a centrifuge – a room that spins so that things are stuck to the edges just as gravity holds things to the ground. Kubrick wanted his space ships to have "centrifugal gravity" so he had the Vickers-Armstrong Engineering Group build, at the cost of seven-hundred and fifty thousand dollars, an actual centrifuge, thirty-eight feet in diameter, which spins on its axis at a maximum speed of three miles an hour. The centrifuge is big enough so that the astronauts in the film, played by Keir Dullea and Gary Lockwood, have plenty of room to move around inside of it. In order to direct them while they were inside, Kubrick installed a closed circuit

television system which enabled him to monitor the activities in the space ship from the floor of the studio. During the shooting of these sequences the MGM studio, with the whirling centrifuge, cameras, television sets, flashing lights and microphones looked a little like a launch pad at Cape Kennedy. Production activities were so complex that a special four man operations room was set up to co-ordinate the activities of the 106-man production unit.

Although Stanley is only thirty-nine, the techniques used in *2001* represent his experience of nearly twenty years of movie making. He was born in New York City on July 26, 1928, the son of a doctor still in practice. As a high school student his main professional interest was becoming a jazz drummer, and in the house near London where he lives now, there is a set of drums which he plays from time to time. The normal high school curriculum didn't much appeal to Kubrick – he believes that schools should concentrate on the teaching of “problem solving” and not on rote memorization of the characters in books and plays – and after high school at the age of seventeen, he immediately went to work for *Look* magazine as a photographer. For the next four years he worked for *Look* and the experience he gained in the techniques of photography have been useful ever since. Probably no director in films involves himself more deeply in photographic techniques than Kubrick and the new ideas in photography used in *2001* could probably fill a text book. While still at *Look* he started making documentary films and then experimental feature films such as *Fear and Desire* and *Killer's Kiss*. In making these films Kubrick attended to the whole production himself, renting and running the cameras, selecting and directing the actors, writing the script and raising the money, mainly from relatives. While the early films were praised, movie companies remained aloof and again during this period Kubrick helped to support himself by playing chess for quarters. He met James Harris, who was, like Kubrick, twenty-six at the time, and together they produced *The Killing*, about a race-track robbery, *Paths of Glory*, an anti-war picture set in the First World War, and *Lolita* which is about Lolita. Then Harris began a career as a director, and Kubrick began working on *Dr. Strangelove*.

Dr. Strangelove is one of the most unconventional films ever made – a comedy about thermo-nuclear warfare. Like most great comedies it is profoundly serious and very sad – the film ends with the destruction of the world. Kubrick tends to be somewhat pessimistic and skeptical by nature – he will not fly although he is a licensed pilot – and he is rather dubious about the ability of the human race to survive, in the long run, its capacity for inventing weapons of mass destruction.

He came to the conclusion that space exploration might be the only thing that the human race could learn to do which would keep it from blowing itself up. Once he becomes interested in a general theme, Kubrick absorbs information about it from all sides like a sponge and while he was working with Arthur C. Clarke on *2001* - he once estimated that they spent 2,400 hours writing a script that has become an MGM movie with a running time of two hours and forty minutes – he read every book on science and science fiction that he felt might help him in creating a movie about space. He talked to innumerable scientists and even hired consultants from the national space program to be sure that the film was completely authentic.

2001 is a craftsman's mixture of science and fantasy – fantasy that is all the more intriguing since it might very well become reality sooner than we think. After seeing some of the rushes of *2001* in London, Kubrick's old friend and partner James Harris remarked, “It will be the only

picture ever made after which people who've seen it will say that they have never seen anything like it – and they will be right.”

Arthur C. Clarke

Co-author, with Stanley Kubrick, of the screenplay.

Arthur C. Clarke's talent for combining science fact with literary fancy dates back to a March, 1930 copy of *Astounding Stories*, an American pulp magazine he came across while growing up on his father's farm near Minehead, Somerset, England. *Astounding Stories* was the Alice in Wonderland of science fiction, in which the writer's description of life on other worlds was limited only by their imagination, completely unhampered by their need for plausibility or concern for mundane fact. Since *Astounding's* writers were paid by the word, their conceptions of extraterrestrial life tended to be very detailed, always wondrous and usually terrifying. Before long, young Clarke's lone copy of *Astounding* became a complete collection of *Astounding*, *Wonder* and *Amazing*, all of the same genre.

The scene shifts to the post World War II years when Clarke, ex-farm boy, now ex-RAF radar officer, is attending King's College in London. In two years, instead of the usual four, Clarke is graduated with a first-class honors degree in physics and mathematics, followed by graduate work in advanced mathematics and applied astronomy. The blending of these two influences produce stories and articles that are lively and highly readable – the *Astounding* influence – but always firmly rooted projections based on Clarke's up-to-the-minute knowledge of current developments of our exploding technology. The resulting predictions are not only possible but probable.

Few living writers reach as many people of differing literary tastes and ages as does Clarke. His name is familiar to readers of *Playboy*, *Reader's Digest* and *Life*, and he is generally considered the dean of science fiction writers. Yet this is the same man who in a technical paper written in 1945, originated the concept of communications satellites and, more importantly, described precisely how they would function – all a dozen years before the first Sputnik startled the world with its beeps.

Readers of Clarkian glimpses into the future sometimes suspect he has a crystal ball that works. His logic, plausibility and avoidance of technical terms that would drive most laymen to the nearest television set have resulted in his books being printed in some thirty languages – a total of about five million copies. His recent “Man and Space” was published by Time-Life and in 1965 a *Life* article on communications satellites won him the Aviation-Space writers' prize for the best aerospace reporting in any medium.

For the past twelve years Clarke's hobby has been underwater exploration of the Great Barrier Reef of Australia and off the coast of Ceylon, where he has resided since 1956. This doesn't mean, however, that he has lost interest in outer space. Clarke's personal timetable for the future includes a trip to the Moon in 1980. He also predicts landings on other planets by 1980, and colonization of planets in 2000 – or 2001.

KEIR DULLEA

With his portrayal of Bowman, an astronaut of the future, Keir Dullea achieves two goals – to work under the direction of Stanley Kubrick and to star in a role completely different than

anything he has done before. On the heels of widespread praise for his performance as the neurotic, tortured youth in *David and Lisa*, Dullea found himself inundated with film offers – all to play neurotic, tortured youths. Consequently, he hesitated not a moment when Stanley Kubrick offered him the opportunity to enact the exact opposite of a disturbed David. As Bowman, Dullea is “tall, stolid in a way – square on his two feet, holder of two Phd’s; an astronaut, a scientist and a pilot” – in sum, the new breed of man that the space age of 2001 will undoubtedly produce.

Born in Cleveland, Ohio, Dullea considers himself the nearest thing to a native New Yorker, his family having moved there when he was three. His screen credits, in addition to *David and Lisa*, include *The Fox*, *The Thin Red Line*, *The Naked Hours* and *Madame X*.

GARY LOCKWOOD

Before he began production as the star of his recent television series, “The Lieutenant,” Gary Lockwood spent three and a half weeks at the Quantico U.S. Marine base, watching real-life Marine lieutenants. He wanted to know how they walked, talked and conducted themselves. This kind of authentic on-the-spot research wasn’t possible for his role of Poole in *2001: A SPACE ODYSSEY*. A real-life Poole, a kind of super-astronaut, with an education equivalent to that of two college professors and the physical stamina of a professional football linebacker, just doesn’t exist yet.

For the acting requirements of the role, Lockwood drew on his experience as a television veteran, on the Broadway stage (“There Was a Little Girl”) and in motion pictures (*Splendour in The Grass*, *Wild In The Countryside* and *It Happened At The World’s Fair*). For the considerable physical demands of his role in *2001*, Lockwood also was well-equipped. A rugged six-footer, he played football at UCLA and later began his film career as a stuntman.

MGM presents
A Stanley Kubrick Production
2001: A SPACE ODYSSEY
in Cinerama®
Super Panavision® and Metrocolor

The Cast

Keir Dullea	Bowman
Gary Lockwood	Poole
William Sylvester	Dr. Heywood Floyd
Daniel Richter	Moonwatcher
Douglas Rain	Hal 9000
Leonard Rossiter	Smyslov
Margaret Tyzack	Elena
Robert Beatty	Halvorsen
Sean Sullivan	Michaels
Frank Miller	Mission Controller

The Production

Directed and produced by	Stanley Kubrick
Screenplay by	Stanley Kubrick, Arthur C. Clarke
Director of Photography	Geoffrey Unsworth
Additional Photography	John Alcott
Production Design	Tony Masters, Harry Lange, Ernie Archer
Editor	Ray Lovejoy

All Special Photographic Effects Designed and Directed by
MR. KUBRICK

Special effects supervisors	Wally Veevers, Douglas Turnbull, Con Pederson, Tom Howard
Wardrobe	Hardy Amies