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Chapter 3

Evolution of Space Fiction in Film¹

Frederick I. Ordway, III²

More than eight decades have now passed since the appearance in France of the first film dealing with space travel: Georges Méliès' 1902 production, *Un voyage dans la lune* (A Trip to the Moon). Incorporating elements from H. G. Well's novel, *The First Men on the Moon* (1901) and the earlier Jules Verne classic, *De la terre à la lune* (From the Earth to the Moon) (1866), it became a classic almost immediately. So great was the interest in this film production that even Jules Verne, by this time elderly and ill, visited the set during filming on at least one occasion.

Nothing of distinction followed the Méliès film for more than 25 years. Then, in 1929, Germany's Fritz Lang released his *Frau im Mond* (*The Girl in the Moon*), a full-length silent feature. In quite different ways, both Méliès and Lang dealt with the potential of an age-old dream of landing on, and exploring, our neighboring world in space. The same theme formed a subplot to the H. G. Wells-scripted, Alexander Korda-released 1936 classic *Things to Come*.

These pre-World War II pictures gave rise, during the post-war years, to a seemingly unending array of mostly grade B films about flying saucers, creatures from outer space, and other nonsense. Fortunately, they were punctuated from time to time by such landmark productions as *Destination Moon* (1950) and *2001: A Space Odyssey* (1968). Both films broke ground for their genre, were commercial and artistic successes, boasted magnificent visual displays and special effects, and offered interesting, though probably not brilliant, storylines.

¹ Presented at the Sixteenth History Symposium of the International Academy of Astronautics, Paris, France, 1982.

² Alabama Space and Rocket Center, Tranquility Base, Huntsville, Alabama, U.S.A.

Nine years after 2001, another cinematographic milestone was reached with the appearance of George Lucas' *Star Wars*. Splendid and full of vitality, it capitalized on incredible post-2001 advances in special effects wizardry and a thoroughly entertaining good-guys versus bad-guys screenplay. In the summer of 1980 it was followed by its companion episode *The Empire Strikes Back*. By mid-1981, ticket sales for the two pictures had grossed an estimated \$800 million, and *Fortune* magazine estimated that as of October 1980 Lucas' personal fortune derived from his twin efforts had already exceeded \$100 million.³

The phenomenal success of *Star Wars* inspired other such big-budget, impressive special effects space operas as *Moonraker* (1979); *Alien* (1980); *The Black Hole* (1979); *Close Encounters of the Third Kind* (1977); *Star Trek* (1981) (the motion picture version of the television series); *Outland* (1984); four *Superman* dazzlers; and, more recently, *Star Trek: The Wrath of Khan*, and *Return of the Jedi*.⁴

Films of the 1920s and 1930s

Voyage dans la lune

The Georges Méliès silent production was short, 13 minutes long, and contained elements from the Jules Verne novel *De la terre à la lune* and H. G. Wells' *First Men in the Moon*.⁵ From the former came the space cannon; from the latter, the landing on the Moon. Rather incomprehensible to us today was the use of Folies Bergère dancers to insert the spaceship into its launch cannon. However, Méliès apparently looked upon *Le voyage dans la lune* more as a filmed theatrical presentation than as a movie in the sense we understand the medium (Figure 1).

³ Stratford P. Sherman, "The Empire Pays Off," *Fortune*, October 1980, p. 52.

⁴ General studies of science fiction films can be found in Brian Ash, ed., *The Visual Encyclopedia of science Fiction* (New York: Harmony Books, 1977); John Brosnan, *Future Tense: The Cinema of Science Fiction* (New York: St. Martin's, 1969); Edward Edelson, *Visions of Tomorrow: Great Science Fiction from the Movies* (Garden City: NY: Doubleday, 1975); James Gunn, *Alternate Worlds: The Illustrated History of Science Fiction* (Englewood Cliffs, NJ: Prentice-Hall, 1975); Walt Lee, *Reference Guide to Fantastic Films: Science Fiction, Fantasy, and Horror* (Los Angeles, CA: Chelsea Lee Books, 1972-1974), three volumes; Douglas Manville and R. Reginald, *Things to Come: An Illustrated History of the Science Fiction Film* (New York: Times Books, 1977); Richard Mezer, *The World of Fantasy Films* (New York: A. S. Barnes, 1980); Ed Naha, *The Science Fictionary* (New York: Wideview Books, 1980); Frederick Pohl and Frederick Pohl IV, *Science Fiction Studies in Film* (New York: Ace Books, 1981); Franz Rottensteiner, *The Science Fiction Book: An Illustrated History* (New York: Seabury Press, 1975); John Baxter, *Science Fiction in the Cinema* (New York: A. S. Barnes, 1970); Jeff Rovin, *A Pictorial History of Science Fiction Films* (Secaucus, NJ: Citadel Press, 1975); Chris Steinbrunner and Burt Goldblatt, *Cinema of the Fantastic* (New York: Saturday Review Press, 1972); Philip Strick, *Science Fiction Movies* (London: Octopus, 1976); Jean-Claude Suares, Richard Siegel, and David Owen, *Fantastic Planets* (Danbury, NH: Addison House, 1979).

⁵ Jules Verne, *De la terre à la lune* (Paris: J. Hetzel, 1866); H. G. Wells, *The First Men in the Moon* (London: George Newness, 1901).

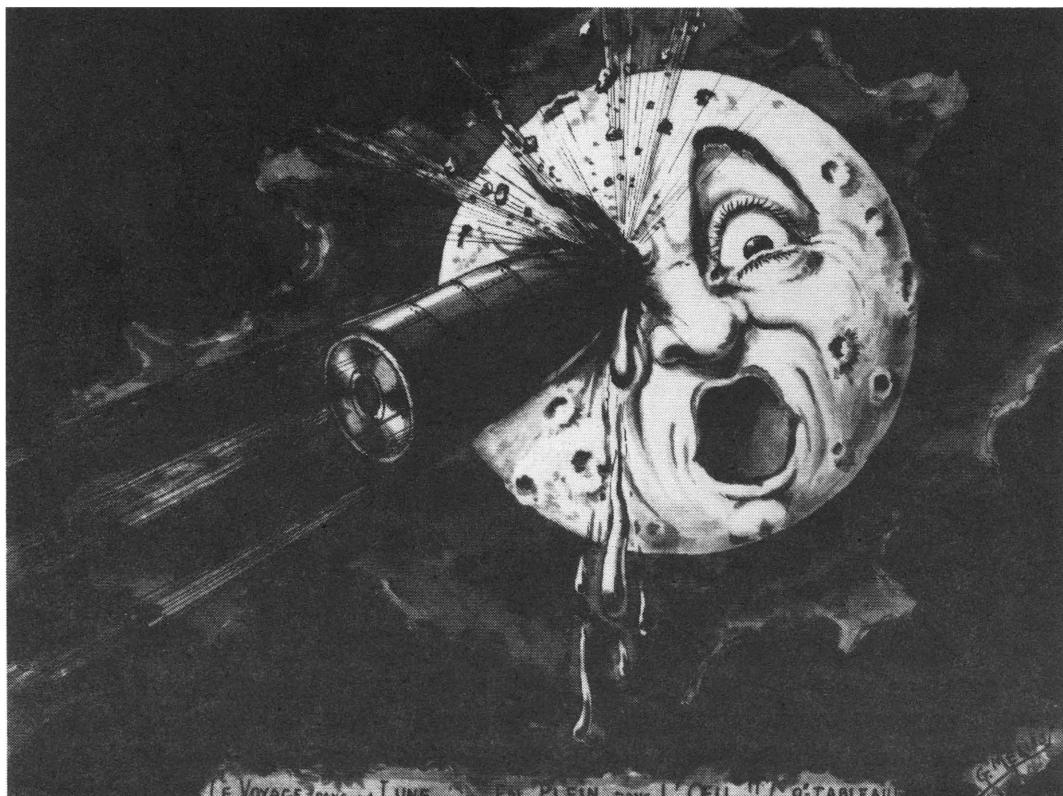


Figure 1 George Méliès' spacecraft impacts on a protesting Moon in *Le voyage dans la lune* (1902). Courtesy of author.

Born on 8 December 1861, Méliès occupied himself in Paris first as a magician and then in the theater. Later, the emerging art of cinematography caught his attention, and it was not long before he had pioneered the technique of special effects. By 1896, he was making short films based to a considerable extent on them. Six years later he produced *Le voyage dans la lune*, in which he humorously depicted the flight of five explorers to the lunar surface, their encounters with aliens, and subsequent return to Earth. Georges Méliès died in Paris in 1938, forgotten in his time, but most certainly not in ours.⁶

Frau im Mond

The Fritz Lang 1929 classic, *Frau im Mond*, was based on the 1928 novel of the same name by his wife Thea von Harbou.⁷ Released in the English-speaking world as

⁶ On Méliès see, Georges Sadoul, *Georges Méliès* (Paris: Seghers, 1961), and Pierre Versins, *Encyclopedie de l'Utopie des Voyages Extraordinaires et de la Science-Fiction* (Lausanne: L'Age d'Homme, 1972); Paul Hammond, *Marvelous Méliès* (London: Gordon Fraser, 1971).

⁷ Thea von Harbou, *Frau im Mond* (Berlin: A. Scherl, 1928).

The Girl in the Moon and as *By Rocket to the Moon*, Frau was the first space fiction motion picture to make an effort to assure technical accuracy. It employed as source material Hermann Oberth's treatise *Die Rakete zu den Planetenräumen* (The Rocket into Planetary Space),⁸ as well as the works of popular science writer and amateur rocket experimenter, Willy Ley.⁹

Lang hired Oberth as a special consultant to help assure accuracy and realism for his film—within reason, of course. To Oberth's chagrin, his advice was not always taken. The prominent film director would from time to time hide behind what he called "poetic license" and allow, for example, his lunar explorers to walk around the airless world without protective spacesuits. Anyway, Lang argued, H. G. Wells had written in *First Men in the Moon* that there was a thin, Earth-like atmosphere in the deep lunar valleys and other low areas, and he could justify his decision with that evidence¹⁰ (see Figures 2 and 3).

What Lang really wanted from Oberth was a publicity rocket, one that would be fired on 15 October 1929, the day planned for the film's premiere. That proposition suited the retiring Transylvanian scholar who was anxious to experiment physically with some of the ideas he had advanced in his book. Lang managed to get modest financial support from a reluctant UFA (Universum-Film-Aktiengesellschaft) film studio and then added a bit of his own. Despite many efforts, Oberth the theoretician was no engineer; he failed to deliver a rocket for the premiere. Disappointed, he returned home.¹¹

Frau im Mond's storyline is engaging. A spaceship is built to travel to the Moon in search of the gold that professor-inventor George Mansfeldt feels certain is there. Lacking funds, his wealthy young assistant Wolf Helius secures help from a group of businessmen represented in the film by the character of Walt Turner. Helius had already carried out considerable research in rocketry, even sending an unmanned spacecraft around the Moon to take photographs.

⁸ Hermann Oberth, *Die Rakete zu den Planetenräumen* (Munich: R. Oldenbourg, 1923). This book was reprinted in 1925. Both editions were the same, with 92 pages of text.

⁹ Willy Ley, *Die Fahrt ins Weltall* (Leipzig: Hachmeister & Thal, 1926), and his edited work, *Die Möglichkeit der Weltraumfahrt* (Leipzig: Hachmeister & Thal, 1928).

¹⁰ Wells wrote, "at the touch of dawn a reek of grey vapour poured upward from the crater floor, whirls and puffs and drifting wraiths of grey; thicker and broader and denser, until at last the whole westward plain was steaming like a wet handkerchief held before the fire; and the westward cliffs were no more than a refracted glare beyond."

"It is air . . . It must be air—or it would not rise like this—at the mere touch of a sunbeam" (Wells, *First Men on the Moon*, pp. 78-79). Wells continued his tale of the lunar dawn: "Imagine it! Imagine that dawn! The resurrection of the soil, and then this silent uprising of vegetation, this unearthly ascent of freshness and spikes" (*Ibid.*, pp. 90-91). No wonder Lang allowed his travelers to wander around unprotected on the lunar surface, Oberth's objections notwithstanding.

¹¹ The travails of Oberth at UFA are described by Willy Ley in his history, *Rockets, Missiles, and Men in Space* (New York: Viking, 1968), pp. 114-120, and by H. B. Walters, *Hermann Oberth: Father of Space Travel* (New York: Macmillan, 1962), Chapter 9. See also *The Girl in the Moon* (1927-1929) pp. 63-69.

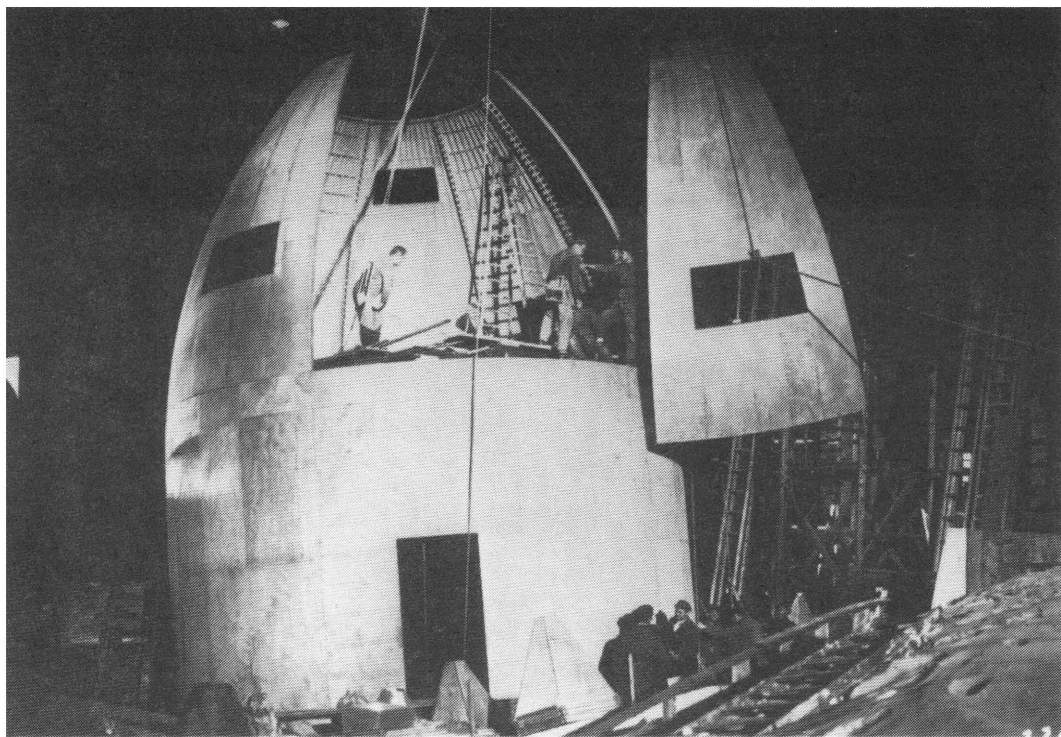


Figure 2 Construction of the rocket set for *Frau im Mond* (1929). Courtesy of Author.

As the film progresses the spaceship is readied for flight and it blasts off impressively. Aboard are Mansfeldt, Helius, engineer and ship's designer Hans Windegger, his fiancée astronomy student Friede Welten, Turner, and a boy stowaway named Gustav.

Once on the Moon, a greedy Turner tries to take over the spaceship and return to Earth alone, but he is killed in an ensuing struggle. In the fight, however, a stray bullet pierces the oxygen tank, leading to the loss of some of the precious gas. Meanwhile, old Professor Mansfeldt has wandered off and dies falling into a cave-like depression.

Since there is not enough oxygen aboard the spaceship for the return of all the passengers to Earth—even though two are already dead—Helius volunteers to stay on the Moon. As he watches the ship depart for home, he discovers that Friede—with whom he has fallen in love and she with him—has remained behind too.

The visual effects, developed by Konstantin Tschetwerikoff, are quite good as far as the spaceship, the launch and the crowds surrounding it during takeoff are concerned. The Moon's surface fares less well. And we can only grin as the lunar explorers walk normally under 1/6 gravity, clad in rather plain clothes, with no suggestion whatsoever that the Moon lacks an atmosphere. Lang insisted on air. "I cannot have whole scenes played in diving suits," he is reported to have complained.¹²

¹² On Lang see, Paul M. Jensen, *The Cinema of Fritz Lang* (New York: A. S. Barnes, 1969).



Figure 3 An interior scene of the spaceship on route to the Moon, showing the effect of weightlessness, in *Frau im Mond*. Courtesy Cinematheque Francaise.

Just Imagine

What does one do to top *Frau im Mond*, spacesuits or no spacesuits? Well, you might try a musical. That is what director David Butler did in 1930 with *Just Imagine*. People have numbers, not names, in the New York setting of 1980. Butler did not quite hit the mark, though he would have nodded knowingly at our Social Security numbers, postal zip codes, credit card numbers, and telephone area codes (Figure 4).

Anyway, scientist Z-4 built an interplanetary rocket and was bent on flying to the planet Mars. Pilot J-21 signed on to make the voyage to prove himself worthy of mar-

riage to LN-18. On Mars, he and his companions find a primitive human society governed by one Queen Loo-loo. After a series of adventures on the red planet, the crew managed to escape back to Earth, where a court concluded that J-21 and LN-18 can marry. A live-happily-ever-after ending left the audience contented and paved the way for a much more significant endeavor several years later.

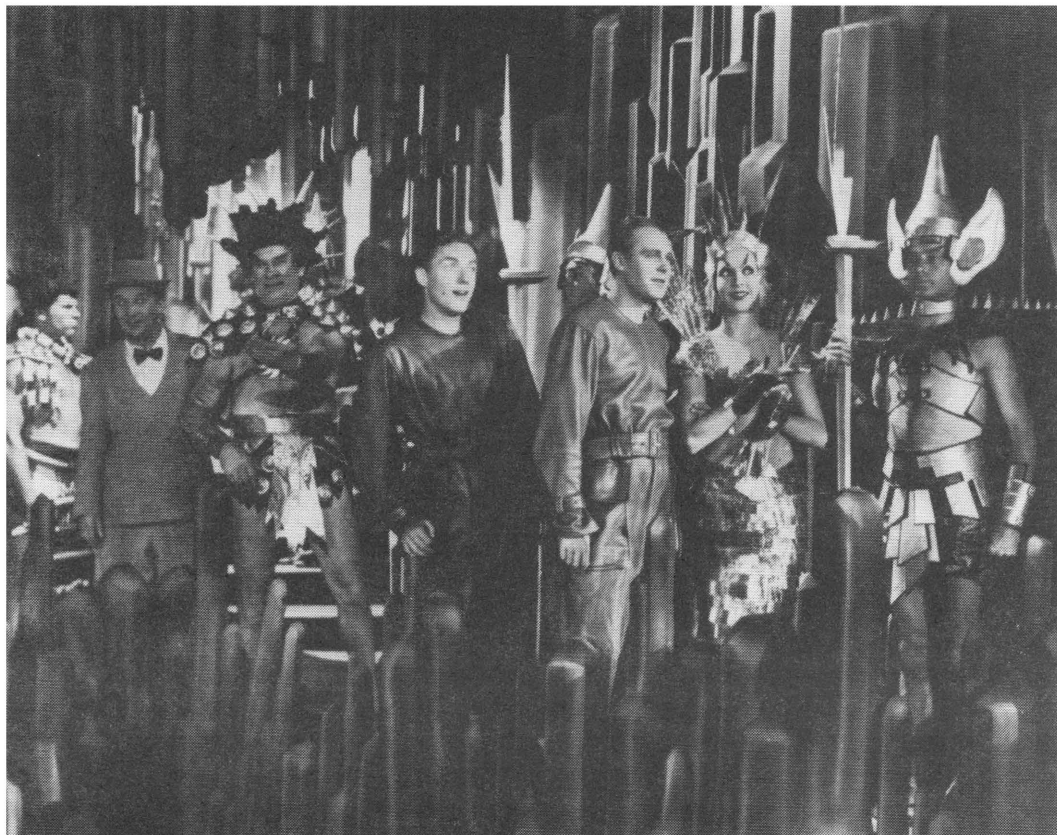


Figure 4 A scene from *Just Imagine* (1930) with John Garrick and Maureen O'Sullivan. The film was set in New York City in 1980 but included a flight to the Moon. Courtesy Arfor Picture Archives.

Things to Come

Alexander Korda's film version of H. G. Wells' novel, *The Shape of Things to Come*—the author himself wrote the script—was first released in 1936.¹³ Towards the end of the picture in Everytown 2036, John Cabal's grandson, Oswald Cabal, (both roles superbly played by Raymond Massey) organized a trip to the Moon. A sculptor, Theotocopulos, interpreted by Cedric Hardwicke, tried to thwart scientific progress by inciting

¹³H. G. Wells, *The Shape of Things to Come* (London: Hutchinson, 1933), and H. G. Wells, *The Ultimate Revolution* (New York: Macmillan, 1933). See also his *Things to Come: A Film* (New York: Macmillan, 1935, reprinted by Boston, Gregg Press, 1975).

a mob to destroy the giant space gun that launched capsules to the moon.¹⁴ But Cabal, and reason, prevailed and a capsule with Cabal's daughter and young man aboard (King Passworthy IV's son) was fired to the Moon.



Figure 5 Raymond Passworthy, played by Edward Chapman, listens to John Cabal (Raymond Massey, standing) discussing the Moon flight. Courtesy Arfor Picture Archives.

The final scene is unforgettable, with Cabal and Passworthy witnessing the space capsule as it soars Moonward. "There—there they go," exclaimed Cabal.

"That faint gleam of light."

"I feel that what we've done is monstrous."

"What they've done is magnificent."

"Will they come back?"

"Yes. Yes. And go again and again, until a landing is made and the Moon is conquered. This is only a beginning."

"If they don't come back—my son and your daughter—what of that, Cabal?"

"Then presently, others will go."

"Oh, God, is there ever to be any age of happiness? Is there never to be any rest?"

"Rest enough for the individual man—too much, and too soon, and we call it Death. But for Man no rest and no ending. He must go on, conquest beyond conquest. First, this little planet with its winds and ways, and then all the laws of mind and matter

¹⁴ Already outdated—the great space pioneers Konstantin E. Tsiolkovsky of Russia, Robert H. Goddard of the United States, Hermann Oberth of Germany, and Robert Esnault-Pelterie of France all postdate Verne—the cannon persisted in film as the propulsion system for Moon travel. Some of the special effects in this film are memorable, especially the mob converging on the giant cannon.

that restrain him. Then the planets around him and at last out across immensity to the stars. And when he has conquered all the deeps of space and all the mysteries of time, still he will be beginning."

"But . . . We're such little creatures. Poor humanity's so fragile, so weak. Little . . . little animals."

"Little animals. If we're no more than animals we must snatch each little scrap of happiness and live and suffer and pass, mattering no more than all the other animals do or have done," (Cabal points to the image of space in the mirror.) "It is this—or that: all the universe or nothingness. Which shall it be, Passworthy? Which shall it be?" (see Figure 5).

The Serials

These kinds of questions were neither asked nor answered in the swashbuckling, all fun Flash Gordon and Buck Rogers serials that thrilled millions from the mid-1930s to the early 1940s.¹⁵ It was Flash against Ming the Merciless. Buck against Killer Kane; whatever the cost, whatever the means employed, right had to triumph over evil. Scant thought was given to the scientific and technical underpinnings (or lack thereof) implicit in the action (see Figures 6 and 7).

Ten years and a World War later, a new attitude would emerge.

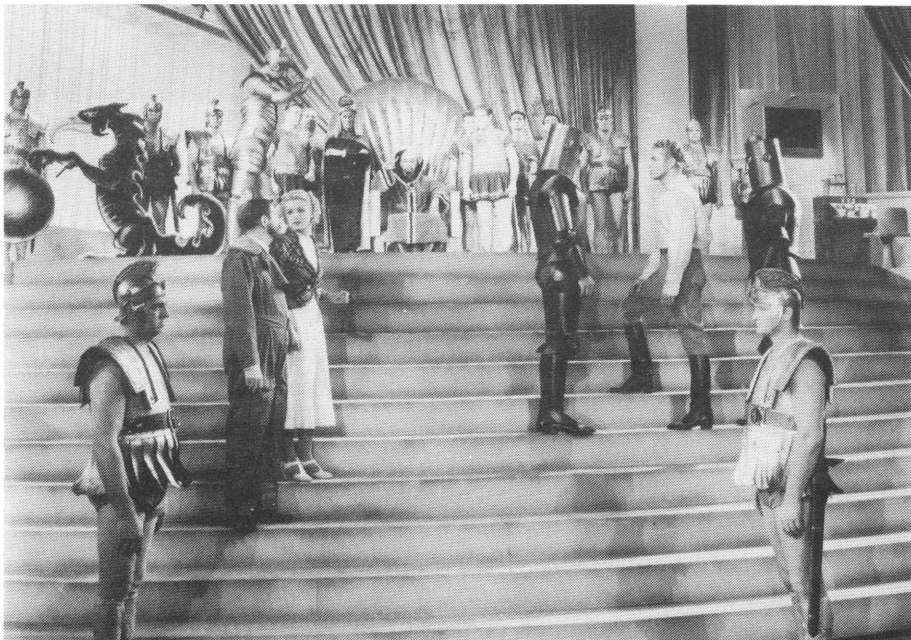


Figure 6 Emperor Ming on his throne in the Flash Gordon Serial, 1936, set on the planet Mingo. Blond Dale Arden, played by Jean Rogers, at left, and Flash Gordon, Buster Crabbe, at right. Courtesy of author.

¹⁵ A. Raymond, *Flash Gordon* (New York: Nostalgia Press, 1967), and P. Nowlan, *Collected Works of Buck Rogers in the 25th Century* (New York: Chelsea House, 1969).



Figure 7 A scene from a 1939 Buck Rogers serial with Constance Moore and Anthony Warde, who played Killer Kane. Courtesy of author.

Films of the 1950s

The year was 1950. The American public had become vaguely aware that flight into space was a possibility. A remote one, perhaps, but something that just might occur in the lifetimes of many then alive. A number of actors were helping to build this awareness.

For one thing, Willy Ley's *The Conquest of Space*, featuring stunning paintings by artist Chesley Bonestell, had come out the year before and had enjoyed a large readership.¹⁶ Also, German wartime V-2 missiles brought to the U.S. and suitably modified by Wernher von Braun and his German-American team of specialists had for some years been probing the upper atmosphere and borders of space. And there were stirrings in the scientific community on extensions of V-2 technology to carry out more ambitious explorations beyond the space frontier.

¹⁶ Willy Ley and Chesley Bonestell, *The Conquest of Space* (New York: Viking, 1949).

Destination Moon

Film producer-director George Pal, a master of special effects, sensed that the time was ripe for a realistic approach to space travel in feature films.¹⁷ Specifically, he wanted to depict the first manned flight to the Moon. And he wanted to do it as accurately as astronomical knowledge and the state of the cinematographic art would permit. He would call his creation *Destination Moon*, and would base it on science fiction writer Robert A. Heinlein's 1947 juvenile novel *Rocket Ship Galileo*.¹⁸

Early in the planning stage, Pal emphasized technical and scientific realism to all involved. He brought in Heinlein and Chesley Bonestell as consultants, who incessantly pep-talked director Irving Pichel and his entire crew. As Heinlein explained, "Mr. Pichel is not a scientist, but he is intelligent and honest. He believed what Mr. Bonestell and I told him and saw to it that what went on the screen was as accurate as budget and ingenuity would permit."¹⁹

For the time (1950), Lee Zavitz's special effects coupled to Bonestell's lunar backdrops were spectacular (Figure 8). They still are quite convincing. Of course, changes would be in order if the movie were being made today; after all, twelve Apollo astronauts landed there between 1969 and 1972. The mudflat cracks, for example, would be replaced by a fragmented, colorless surface rubble or "soil." And the background mountains would be less jagged and more rounded. But these are details and should not detract from *Destination Moon*'s excellence.

Other Films of the 1950s

Pal followed up his success the next year by adapting to the motion picture medium Edwin Balmer and Philip Wylie's novel *When Worlds Collide*.²⁰ Hurtling towards Earth are the worlds Bellus and Zyra, the former destined to destroy our planet and the other to take its place in orbit around the Sun. A private effort is organized to build a space ark, which is to carry a select group of 40 people to the distant but supposedly habitable planet of Zyra.

Again Pal's set director was Chesley Bonestell, who designed and built a convincing ark (Figure 9). In the film the 40 passengers board and make ready to travel from a doomed world to one they hope will prove suitable. The ramp-launch, created by special effects director, Gordon Jennings, is successful, as is the voyage to Zyra. Meanwhile,

¹⁷ On Pal's career see, Gail Morgan Hickman, *The Films of George Pal* (South Berwick, NJ: A. S. Barnes, 1977).

¹⁸ Robert A. Heinlein, *Rocket Ship Galileo* (New York: Scribner's, 1947).

¹⁹ Robert A. Heinlein, "Shooting Destination Moon," *Astounding Science Fiction*, July 1950, p. 6. This story was reprinted with notes as "The Making of Destination Moon," *Starlog*, No. 6, June 1977, p. 19. See also Robert A. Heinlein, *Destination Moon* (Boston: Gregg Press, 1979) which contains "Destination Moon" originally published in *Short Stories Magazine*, September 1950, and "Shooting Destination Moon."

²⁰ Edwin Balmer and Philip Wylie, *When Worlds Collide* (New York: Frederick A. Stokes, 1934).

Bellus' tidal forces wreak havoc on Earth and its man-made structures begin to crumble under the camera's eye.

Another memorable film came out that same year (1951), *The Day the Earth Stood Still*, directed by Robert Wise.²¹ The benevolent alien Klaatu warns the Earth to shape up and control its aggressiveness by disarming. If not, we are to be destroyed by the higher civilization he represents. Just to make sure we comply, before departing Klaatu instructs his faithful robot Gort to keep a watchful eye on us.



Figure 8 Two astronauts land on the Moon in *Destination Moon* (1950), the George Pal special effects extravaganza. Shown here organizing scientific equipment brought with them, the film had a very authentic look to it. The principal problem being the lunar cracks shown here. Courtesy of author.

A couple of years later, George Pal returned to the science fiction scene with H. G. Wells' *The War of the Worlds*.²² Perhaps unfortunately, the locale was changed from southern England to southern California. The special effects, however, saved the day; they were stunning and gained the film an Oscar (Figure 10). Coincidentally, this film came out at the same time as the silly grade B juvenile film *Invaders from Mars* (Figure 11).

²¹ Based on the novella by H. Bates, "Farewell to the Master," *Astounding Science Fiction*, October 1940, p. 58ff.

²² H. G. Wells, *The War of the Worlds* (London: William Heinemann, 1898).

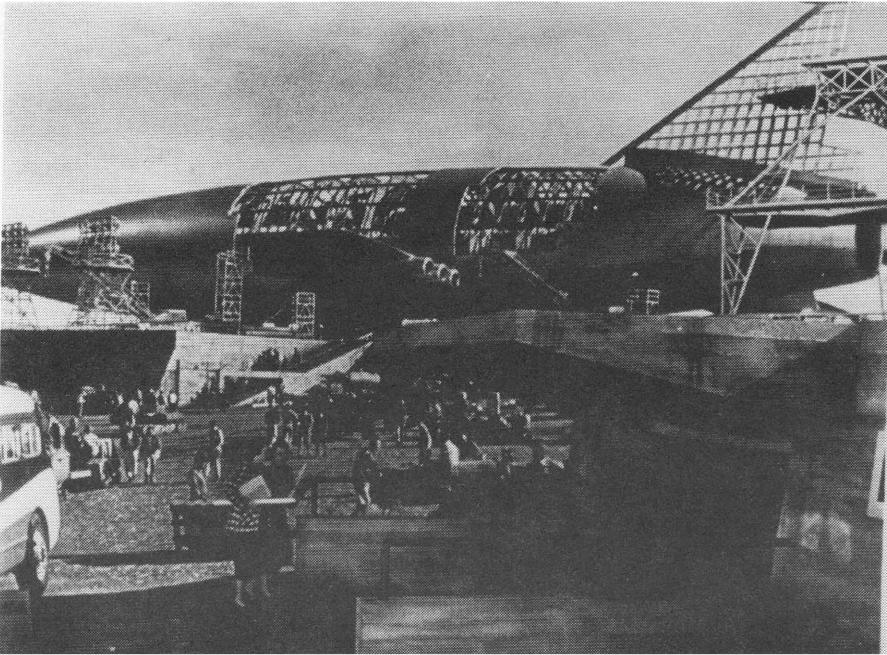


Figure 9 The Space Ark under construction in *When World's Collide* (1951).
Courtesy of Arfor Picture Archives.

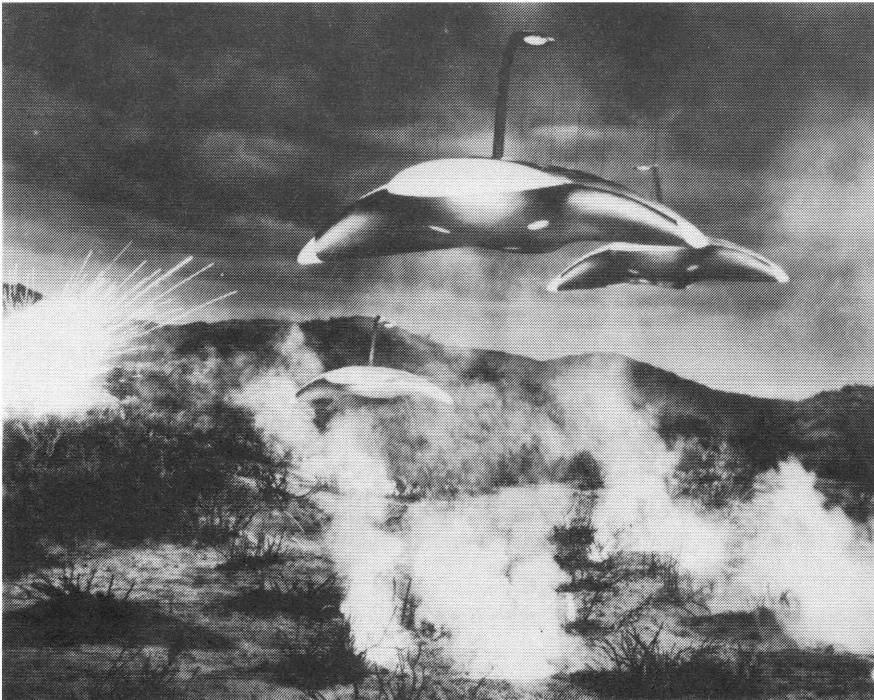
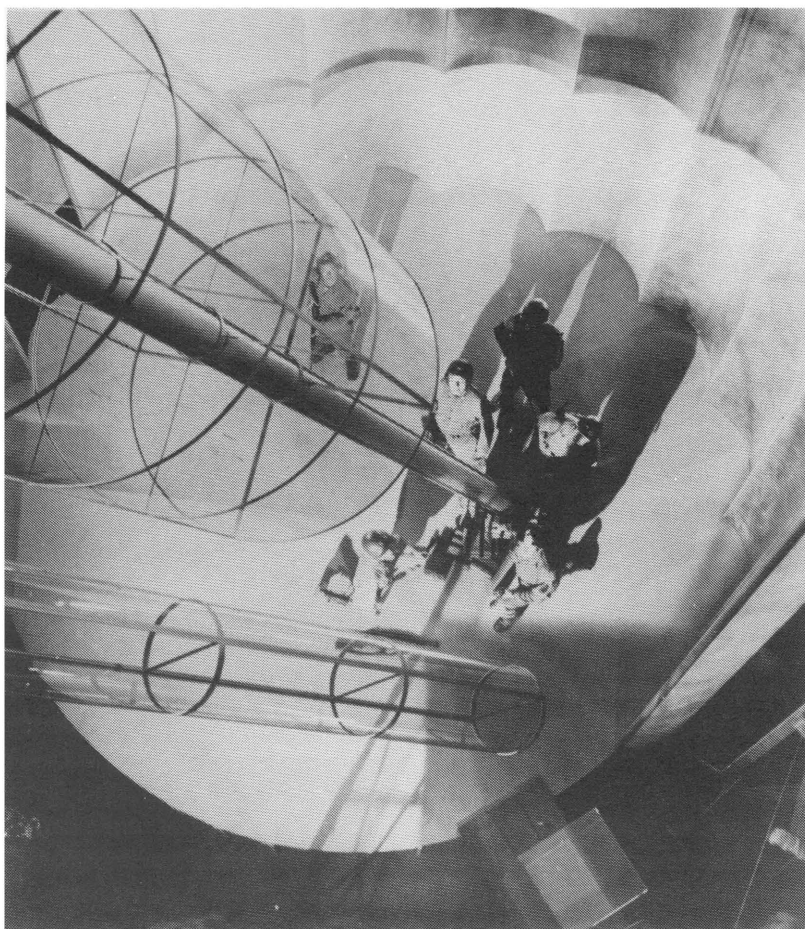


Figure 10 In this scene from *War of the Worlds* (1953), American military forces battle three Martian spacecraft. Courtesy of author.



Edward L. Alperson, Jr. presents
"INVADERS FROM MARS"
 Photographed in COLOR starring Helena Carter, Arthur Franz, Jimmy Hunt
 Production Designed and Directed by William Cameron Menzies
 Screen Play by Richard Blake Associate Producer Edward L. Alperson
 Music by Raoul Kraushaar An Edward L. Alperson Production
 Released by 20th Century Fox Printed in U.S.A.
 20th CENTURY-FOX
 Copyright 1953, 20th Century-Fox Film Corp.

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Figure 11 *Invaders from Mars* (1953) was intended to be a 3-D film, but the idea was abandoned during shooting. Courtesy of author.

Space fiction films continued to be a favorite subject during the remaining years of the 1950 decade. Perhaps the most memorable production was *Forbidden Planet*, with its extinct Krell superintelligent society, Walter Pidgeon as Doctor Morbius, and his beautiful and innocent daughter, Altaira, played by Anne Francis (Figure 12).²³ And the most disappointing film of the period? Many would point to the tepid production of Jules Verne's *From the Earth to the Moon* starring Joseph Cotten.

²³ The novel based on the film was later written by W. J. Stuart, *Forbidden Planet* (New York: Farrar, Straus & Cudahy, 1956).

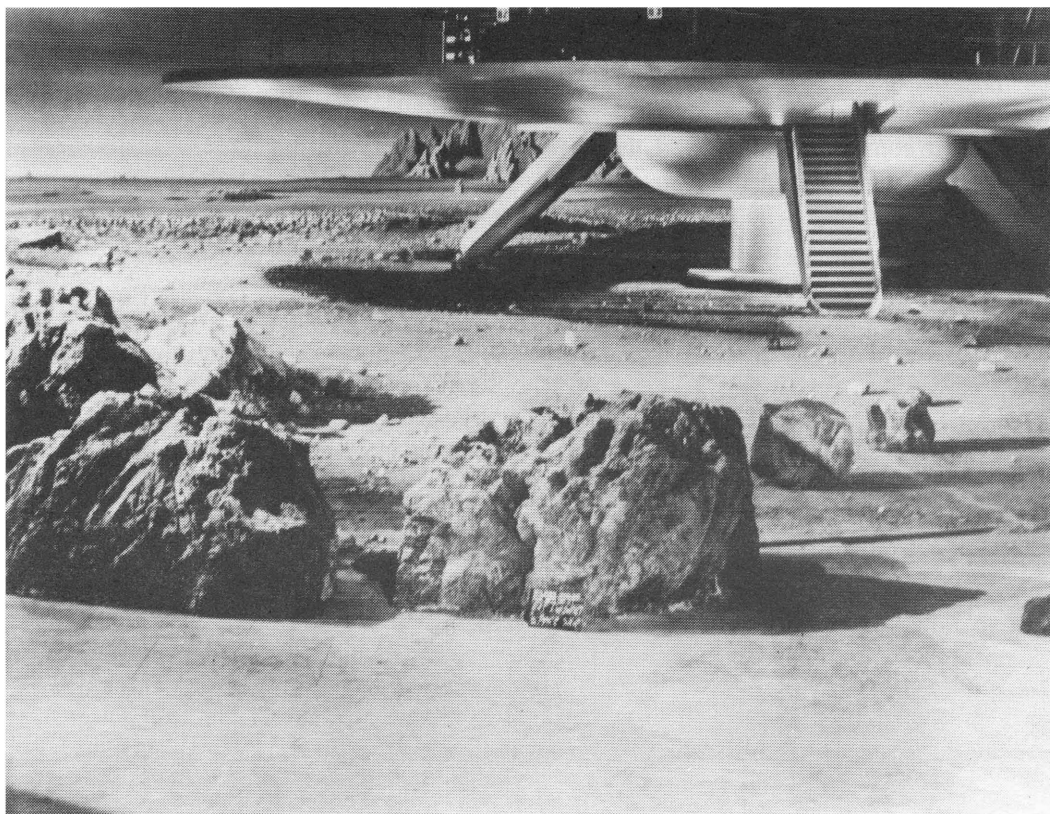


Figure 12 A flying saucer spacecraft lands on Altair 4 in a scene from *Forbidden Planet* (1956). Courtesy of author.

The Decades of the 1960s and 1970s

The 1960s brought forth Charles Schneer's nicely packaged version of H. G. Wells' *First Men in the Moon* (1964) and the Stanley Kubrick-Arthur C. Clarke blockbuster *2001: A Space Odyssey* (1968).²⁴ Despite initially mixed reviews and a somewhat tedious—and to many an unintelligible screenplay—*2001* quickly established a formidable reputation for itself and achieved classic status. For nearly a decade, including the

²⁴ Arthur C. Clarke, *2001: A Space Odyssey* (New York: New American Library, 1968); Arthur C. Clarke, *The Lost Worlds of 2001* (New York: New American Library, 1972); Arthur C. Clarke, "The Sentinel," *Avon Science Fiction and Fantasy Reader*, 1951. Also see Jerome Agel, ed., *The Making of Kubrick's 2001* (New York: New American Library, 1970); and Frederick I. Ordway III, "2001: A Space Odyssey," *Spaceflight*, 12 (March 1970); 110, and Frederick I. Ordway III, "Voyage to Jupiter, 21st Century Style," *Electronic Design*, 1 (4 January 1967). My experiences as scientific advisor and technical consultant on 2001 are described at length in Frederick I. Ordway III, "Space Fiction in Film—2001: A Space Odyssey in Retrospect," in Eugene M. Emme, ed., *Science Fiction and Space Futures: Past and Present*, Vol. 5, *AAS History Series* (San Diego, CA: Univelt, 1982).

entire period of the Apollo lunar landings and the Skylab orbital space station missions, it remained unchallenged as a science fiction film.²⁵

Discovery's mission to the Jovian system is the heart of *2001: A Space Odyssey*. Two astronauts, played by Keir Dullea and Gary Lockwood, and an advanced, vocal input-output computer named HAL (for HAL 9000 series) are the three conscious entities on board. Unconscious, because they are under artificially-induced hibernation, are three other astronauts, who are not to be awakened until the spaceship nears its destination. But, since they are scientists-astronauts rather than flight-astronauts, they are not needed to operate the *Discovery* en route and hence are placed into the hibernation state to conserve air, food, and other life support supplies. When the ship reaches the Jovian system, the awakened astronauts are to conduct whatever investigations may be necessary in an attempt to determine the correlation between the TMA-1 site on the Moon and the giant planet, its orbiting satellites or anything else that may turn up.

The first challenge to *2001* came in 1977 in the form of George Lucas' film *Star Wars*.²⁶ On a colossal scale, Lucas aligns on one side the Federation of Planets under an evil Emperor and, on the other, the Rebels, one of whose leaders, Princess Leia Organa (Carrie Fisher) has been captured. But she manages to place vital information on the enemy into the memory banks of faithful robots, R2-D2 and C3PO. They, in turn, transfer it to Obi-Wan Kenobi, played by Sir Alec Guinness, who, with Captain Han Solo, owner-captain of the space freighter *Millennium Falcon*, his copilot Chewbacca, Luke Skywalker, and the robots, set off for the rescue and confrontation with the Imperial forces aboard the gigantic space "Death Star" including the Governor of the Imperial Outland Regions, Grand Moff Tarkin; the evil Dark Lord of the Sith, Darth Vader; and hundreds of stormtroopers.

The action builds to the climax. And to an incredible commercial success. Not surprisingly, *Star Wars* paved the way for such competitors as Ridley Scott's space gothic horror film *Alien*.²⁷ Walt Disney Studios' *Black Hole*, a motion picture version of the television serial *Star Trek*, and *Outland*, a story set in a mining camp on Jupiter's moon Io, were all visual and commercial successes. Even Carl Sagan's television documentary science series *Cosmos* featured a "spaceship of the mind," that was no doubt inspired by goings on in the space fiction film world.²⁸

Three years after *Star Wars*, the second of a reported nine episodes appeared, *The Empire Strikes Back* (Figure 13). The cast of familiar characters returned, Darth Vader, Princess Leia, robots, and all. And the battle between the forces of good and evil continued. *Empire* was followed by *Return of the Jedi* in 1983.

From Georges Méliès to George Lucas and his contemporaries, four generations of film goers watched all manner of amazing things happen before their eyes, from a rocket lodged in the Man in the Moon's right eye to super-maneuverable craft engaged in deep

²⁵ On Kubrick see Norman Kagan, *The Cinema of Stanley Kubrick* (New York: Holt, 1972).

²⁶ George Lucas, *Star Wars* (New York: Ballantine Books, 1976). See also *The Star Wars Album* (New York: Ballantine Books, 1977).

²⁷ R. J. Anobile, ed., *Alien*, screenplay by Dan O'Bannon (New York: Avon, 1979).

²⁸ Carl Sagan, *Cosmos* (New York: Random House, 1980).

space dog fights. Some spectators sought realism, demanding that storylines and sets alike be convincing and not too far removed from the technology of today. Others, be they from the Flash Gordon-Buck Rodgers generation or that more familiar with *Star Wars* and *Star Trek*, were attracted by high adventure and by situations bordering on the impossible. They wanted to escape from reality rather than to meet it at every turn.



Figure 13 The spacecraft Millennium Falcon is being prepared for takeoff in a scene from *The Empire Strikes Back* (1980).

Conclusion

And so we have reached the 80th anniversary of the Georges Méliès *Un voyage dans la lune*. Cinema theaters everywhere are inundated with all manner of science fiction films, some dealing with space, some with other subjects. Steven Spielberg's *E.T.—the Extra-Terrestrial*, *Poltergeist*, the Disney *Tron*, the sequels to the first *Star Trek* film, *Bladerunner*, the list seems endless. Reminded we may be of the successes of the Space Shuttle, Vikings on Mars, Veneras to Venus, and Pioneers and Voyagers to Jupiter and Saturn, but man still thirsts for what lies beyond. And that is what makes the seemingly impossible become a possibility.