Redmond, Sean. *Liquid Metal: The Science Fiction Film Reader.*
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Images of Wonder: The Look of Science Fiction

Vivian Sobchack

Although a great deal has been written about the images in science fiction (SF) films, most often that writing has been more descriptive than analytic. There has been only minor consideration of the nature of SF images and their function in the creation of a film genre which in photographic content is unlike any other. Instead, discussions of the visual surface of the films have usually seemed to degenerate into a delightful but critically unproductive game film enthusiasts play: 'Swap that Shot' or 'The Robot You Love to Remember'. Although there is absolutely no reason to feel guilty about swapping nostalgically remembered images like baseball trading cards, it does seem time to go beyond both gamesmanship and nostalgia toward a discovery of how SF images in content and presentation function to make SF film uniquely itself. What, if anything, do all the films have in common in their visual surface?

Iconography

One approach to the images in genre films (most often the western or gangster film) has been iconographic. Jim Kitses, one of first film critics to discuss the relationship of iconography to the genre film in his *Horizons West*, explains the basis of the approach: 'As a result of mass production, the accretions of time, and the dialectics of history and archetype, characters, situations and actions can have an emblematic power.'[1] And Colin McArthur, in *Underworld U.S.A.*, emphasises the 'continuity over several decades of patterns of visual imagery, of recurrent objects and figures in dynamic relationship' which 'might be called the iconography of the genre.'[2] McArthur goes on to say: 'The recurrent patterns of imagery can be usefully divided into three categories: those surrounding the physical presence, attributes and dress of the actors and the characters they play; those emanating from the milieux within which the characters operate; and those connected with the technology at the characters disposal.'[3]

In certain groupings of films, then, the visual units which manifest – and often dictate – character, situation and action have been examined as those elements which not only link the films together, but which also carry meaning and emotional nuance beyond their physical particularity in any one film. Because these elements of visual content appear again and again in film after film, they have become visual conventions or icons, pictorial codes which are a graphic shorthand understood by both filmmaker and audience.[4] The western topography (whether photographed in the United States or Spain) is not just any place; beyond the specificity of badlands, mountains, rangeland, desert, its appearance evokes associations in the viewer which are, perhaps, more metaphysically than historically based. The same could be said of the city of the gangster film; buildings and alleys, rooftops and fire escapes surround themselves with clusters of meaning and yet-unplayed actions, with emotional reverberations which have little connection with the same physical objects represented, for example, in an urban comedy like Preston Sturges' *Christmas in July* (1940), or an urban musical like Robert Wise's *West Side Story* (1961). Costumes and tools also become objects of totemic significance in certain film genres; the gun of the western is different in significance as well as in kind from the gun of the gangster film.

This recognition of iconography is, perhaps, what Michael Butor was trying to indicate when, attempting to define science fiction, he felt it was sufficient to say: 'You know, those stories that are always mentioning interplanetary rockets.'[5] His statement, how-ever, brings us to a crucial issue regarding any iconographic consideration of the SF film. Butor, himself, acknowledges that rocketships are not in themselves necessary to science fiction.[6] And one could create a list of such SF 'objects' as the spaceship which do indeed evoke the genre, but which are specifically and physically not *essential* to it: the New Planet, the Robot, the Laboratory, Radioactive Isotopes and Atomic Devices. On the other hand, it is extremely difficult to think of a western which does not take place in a visually represented 'West' with guns and horses, or to recall a gangster film which does not show a nightclub or which has no guns and no automobiles. These settings and objects seem physically essential to these genres and

their iconographic significance seems readily approachable and comprehensible because they appear and send the same messages to us in almost every film.

It is also highly significant that both these genres are visually circumscribed by an awareness of history, the western even more so than the gangster film. This linkage of situation and character, objects, settings and costumes to a specific *past* creates visual boundaries to what can be photographed and in what context. This historical awareness, which leads at least to an imaginative if not actual authenticity, demands repetition and creates consistency throughout these genres. This is not true, however, of the SF film, a genre which is unfixed in its dependence on actual time and/or place. There is, then, a very obvious reason for the fact that most iconographic analysis has focused on the western and the gangster film. Simply, these genres play out their narrative in a specific, visually identifiable and *consistent* context, and the objects of these films accrue their meaning not only from repetitious use, but also because they function in a much more circumscribed and limited way than do objects in other genres. This limitation of meaning should in no way be considered a cinematic, aesthetic, or thematic liability – but it should point to why iconographic analysis serves a less potent critical function when it is used as a method to seek meaning in settings and objects in other film genres less affixed to history.

Consider, for example, the railroad – a frequent, although not mandatory, icon in the western. The meanings which are suggested by its appearance on the screen are both complex and richly paradoxical, yet they are also circumscribed in scope from movie to movie. The railroad is not merely its physical manifestation; it *is* progress and civilisation. It threatens the openness and freedom of the West and individual enterprise, but it also promises the advantages of civilised life and brings the gentling influence of the Eastern heroine who plays the piano and uses an English saddle if she rides horses at all. The ambiguity and paradox contained in the western's images of the Iron Horse are as rich as our mixed feelings about civilisation and progress, but they are also limited to those feelings and those feelings only. The railroad is not interchangeable with other means of transportation in the western; its meanings are not those which surround the images of a stagecoach, horse or covered wagon. From its first silent chugging to its clangorous present, the railroad in the history of the western film has not altered in its physical particularly or its specific significance; it is, indeed, an icon.

Now let us examine one of the most potential icons of SF cinema: the spaceship. Any inspection of the genre leads one in-evitably to the conclusion that there is no *consistent* cluster of meanings provoked by the image of a spaceship. The visual treatments of the ship vary from film to film – and sometimes even vary within a single film. Beyond the fact that seeing a spaceship on the screen signals to the viewer that he is watching a film which does not take place in the present (and even that signal is weakening since space flight is now a reality), there is no constant meaning generated by that image; because there is no consistent meaning, there is little accumulation of 'emblematic power' carried by the object from movie to movie.

There are those films, for example, which treat the spaceship lovingly, positively, optimistically. There is no doubt as to the 'goodness' of a technology which can produce such a magnificent toy (although this goodness does not necessarily extend to the men who created the technology nor to the men who employ it). The ship itself is 'good'. It is aesthetically beautiful. It is fun to play with. It promises positive adventure, an ecstatic release from the gravitational demands of Earth, and it can remove us from ourselves and the complexity of life on our planet, taking us to new Edens and regeneration. In *Destination Moon* (Irving Pichel, 1950), the silvery sleekness of Ernest Fegté's single-stage spaceship almost palpably glows against the velvet black and star-bejewelled beauty of a mysterious but non-hostile space; it is breathtakingly beautiful, awe inspiring and yet warmly comforting like the night light in a child's bedroom. In the interior of the ship the crew delights in its weightlessness, playing games with gravity like children released in a schoolyard for recess. *When Worlds Collide* (Rudolph Mat, 1951), although its plot and themes evoke what John Baxter sees as 'a 1930s vision of Armageddon',[7] presents us with the positive image of a spaceship as an 'interplanetary Noah's Ark',[8] destined to carry a group of potential colonists from a doomed Earth to a new world. The

spaceship, plumper and looking more fecund than its predecessor in *Destination Moon*, is visually divorced from the chaos and squabbling on Earth. Completed, it sits horizontally on its launching pad on a mountainside high above the confusion and it 'glows like gold, while the sky is in perpetual sunset'.[9] It visually promises, in contrast to the orange and dying hues of Earth, a golden dawn. Among other films which visually celebrate the spaceship and dwell on its surfaces with a caressive photographic wonder which precludes any ambiguous interpretation of its essential worth are *Conquest of Space* (Byron Haskin, 1955), with its lavish treatment of takeoffs, manueverings and landings, and *Forbidden Planet* (Fred Wilcox, 1956), whose 'palatial flying saucer'[10] operates 'via quanto-gravitetic hyperdrive and postonic transfiguration'.[11]

There is, however, a demonic side to the spaceship. In many films it is a trap from which there is little hope of escape. Its sleekness is visually cold and menacing, its surfaces hostile to human warmth. It functions mechanically and perfectly, ignorant of its creators and operators – or it malfunctions with malice, almost as if it could choose to do otherwise but prefers to rid itself of its unsleek and emotionally tainted human occupants. Instead of glowing like a night light, it coldly glitters like the blade of a stiletto. Instead of humming, it ticks. It evokes associations not of release, but of confinement. The womb-like and protective warmth of a positive visual treatment is nowhere apparent; rather, the ship is seen negatively, viewed with anti-technological suspicion, the images of it suggesting a tomb-like iciness, a coffin-like confinement. Its corridors and holds echo the sounds of human isolation or provide a haven for alien and lethal dusts and slimes; in unseen corners the subversion of human life begins.

In *20 Million Miles to Earth* (Nathan Juran, 1957), a spaceship returning to Earth from Venus crashes into the sea, carrying aboard the gelatinous embryo of an alien monster who subsequently hatches and proceeds, after growing, to terrorize Rome. The ship of *Mutiny in Outer Space* (Hugo Grimaldi, 1964), harbours a deadly fungus and transports it to a space station from whence it threatens to infect the Earth. These rockets and countless others harbour, support and transport alien 'things' which ultimately threaten not only Earth, but life itself as we know it. Even more menacing is the ship 'Discovery' which is to take astronauts Bowman and Poole to Jupiter in *2001: A Space Odyssey* (Stanley Kubrick, 1968). Although the film does not in any way deny the aesthetics of technology, it gives us in 'Discovery' a mechanism which barely tolerates and finally rejects human existence. Despite the vastness of the ship, the visual treatment impresses upon us a sense of claustrophobic and stifling confinement, cold and death. Most of the crew are temporarily frozen in cryogenic beds which resemble the sarcophagi of 'Egyptian mummies'.[12] Their movement from life to death because of a computer malfunction is discernable only through the impersonal and yet somehow malevolent red lights and computer print which let us know that their life support systems are no longer operative, and by the needles on the screens above their glass coffins which 'run amok on the graphs and then record the straight lines of extinction'.[13] Vast as it is, the ship allows no room for privacy; Bowman and Poole attempt to hide from the main computer HAL's omnipresent eyes and ears and unctious voice so they can discuss a possible solution to their predicament, but HAL can read lips and we are given a subjective camera shot to prove it. The astronauts are forced into their bulky and oppressive space-suits by the ship and its computer's increasing rejection of biological existence; HAL's paranoia is the ship's madness as well. This sense of entrapment and confinement is echoed in a more 'realistically' plotted film, *Marooned* (John Sturges, 1969), which 'was released during the week the world waited for Apollo 13'.[14] Three astronauts are confined in a malfunctioning space capsule; almost all the visuals are in close-up, showing the men cramped in their potential coffin orbiting the moon. The capsule is dubbed 'Ironman One', a name perhaps suggestive of the medieval torture chamber, called the 'Iron Maiden', in which the victim was most securely confined. And, in *Silent Running* (Douglas Trumbull, 1972), the space freighter 'Valley Forge' literally becomes a coffin for its crew, murdered by Freeman Lowell (the ecologically-minded protagonist) to protect his specimens of plant life from destruction. In this film, the visuals emphasise the vastness of solitary confinement, the deadness of a hermetically sealed existence which is silent and unyielding in its evocation of eternal loneliness.

The spaceship need not, however, be treated either positively or negatively. In numerous SF films, it is seen and used neutrally; its wonders are de-emphasised visually, made to seem commonplace, accepted not only by the characters but by the camera as well – matter-of-factly. The ship is merely a means to get from here to there – and has about as little visual impact and iconic power as a Greyhound bus. The dials and lights and switches are neither warmly supportive nor coldly sinister. They exist – like an automobile dashboard – as something familiar, conquered and forgotten. The complex workings of the ship pose no problems to the garage-mechanic confidence aboard. In *Marooned*, when the capsule malfunctions, one astronaut helplessly and impotently refers to the good old days in contrast to a present whose technology no longer admits salvation through tinkering: 'We used to fix the planes we flew with paperclips', he says, frustration apparent on his face. In those films which treat the spaceship like a Ford, repairs on malfunctions can be affected with the equivalents of paperclips and hairpins – or the problem is so 'understood' by the crew in their mechanic-like overalls that there is no mystery whatsoever connected to the malfunction. Films like *Rocketship X-M* (Kurt Neumann, 1950), *The Angry Red Planet* (Ib Melchior, 1959) and *Queen of Blood* (Curtis Harrington, 1965) treat the spaceship as a mechanical convenience which, devoid of wonder, will carry the crew to visually exciting adventures having little to do with a technology already accepted and dismissed. To be nostalgic for a moment, but also to the point, I fondly remember a scene aboard the spaceship in *The Angry Red Planet* in which the attitude toward the voyage to Mars is visually encapsulated: one sees the hero shaving with an electric razor and the heroine putting perfume behind her ears while a tape bank records a mundane log entry. This domestication of the spaceship leads one to recall the recent terminology used by actual astronauts on the various moon flights and aboard Sky Lab, their references to 'housekeeping'. Perhaps no film to date, however, has visually evoked the reduction of space flight to 'the ultimate in humdrum'[15] as has *2001: A Space Odyssey* in the section in which space-scientist Floyd flies Pan American to an orbiting spaceport and from there to the moon. As Joseph Morgenstern aptly comments: 'We see that space has been conquered. We also see it has been commercialised and ... domesticated. Weightless stewardesses wear weightless smiles, passengers diddle with glorified Automat meals, watch karate on in-flight TV and never once glance out into the void to catch a beam of virgin light from Betelgeuse or Aldebaran'.[16]

The spaceship of the SF film, then, is in no way comparable to the railroad of the western in the latter's ability to communicate by its standard physical presence a constant and specific cluster of meanings throughout an entire genre. Unlike the railroad, in so far as the spaceship is a means of getting from here to there, it is, at times, functionally interchangeable with other modes of transportation like the time machine. In films such as *The Time Machine* (George Pal, 1960) and *The Time Travelers* (Ib Melchior, 1964), there are definite mechanisms which are at least physically differentiated from the spaceship, but in *World Without End* (Edward Bernds, 1956) and *Planet of the Apes* (Franklin Schaffner, 1968), the spaceship is the time machine. Unlike the railroad, not only can the spaceship's meanings and functions change from film to film and from decade to decade, but its very shape and colour are plastic and inconstant – ergo, the sleek and silver body of the ship in *Destination Moon*, the circular perfection of the flying saucer in *Forbidden Planet*, the bright yellow of the minaturised submarine in *Fantastic Voyage* (Richard Fleischer, 1966), and the combination of dark awkward bulk with the latticed delicacy of the plant domes on the 'Valley Forge' of *Silent Running*.[17] In addition, one can draw no conclusions from the films as to a tendency to visualise positively those ships which belong to us (Earthlings) and to visualise negatively those ships which belong to 'them' (aliens). Treated as a thing of beauty, the alien Klaatu's 350-foot flying saucer in *The Day the Earth Stood Still* (Robert Wise, 1951), is so pure in line, so ascetically designed by Lyle Wheeler and Addison Hehr, that it concretises the Platonic virtues of clarity, sanity, reason – virtues sadly lacking in the Washington, D.C., *mise-en-scène* in which the saucer comes to rest.[18] On the other hand, the Martians' individual war ships in *War of the Worlds* (Byron Haskin, 1953), could hardly be more sinister (and eerily beautiful) in their realisation; their shape suggests a cobra or the ocean's deadly manta ray, their silent movement over city

and countryside metaphorically turns Earth's atmosphere turgid, their inexorable progress is punctuated only by the hissing of their incinerating rays.[19] The morally ambiguous and finally reprehensible Metalunans of *This Island Earth* (Joseph Newman, 1955) kidnap two Earth scientists and transport them to another world aboard a spaceship which is pointedly emphasised as a marvel of design, containing as it does such visual delights as a main control centre composed of a brightly-lit and revolving replica of the atom, and a series of translucent tubes which transform their occupants' molecular structure before our eyes.

Even more obvious in their capacity to change shape and colour and evocative power than spaceships are SF robots, all too frequently considered *en masse*, lumped together superficially and erroneously for critical convenience as emblematic of that vague term 'SF technology'. Yet, again, after seeing robots in a wide range of films, the viewer must be drawn inevitably to a recognition of their essentially expressive singularity. Gort, the huge intergalactic 'policeman' of *The Day the Earth Stood Still*, is definitely mysterious and menacing. Shot much of the time from a low angle, he is faceless; the otherwise smooth and metallic impenetrability of his blank visage is broken only by a visor which slowly opens to reveal a pulsing light or to emit incinerating rays after which it silently closes. His metallic surface, that visor, is a perverse visualisation of the medieval knight in shining armor, and the images of Gort are far removed from those of the lumbering but pleasant clumsiness of *Tobor the Great* (Lee Sholem, 1954), devised as the 'answer to the problem of human space flight'.[20] Tobor is treated with the reverence one usually reserves for a can opener, and in one highly comic scene, the robot – operated by a scientist's young grandson – walks stiff-leggedly about the house crashing into furniture and through doors in what amounts to a parody of Frankenstein's Monster. Tobor becomes a mindless hero because of his inexplicable emotional attachment to the little boy, explained away in the film as 'a new synthetic instinct, race-preservational concern for the young'.

Perhaps the most celebrated robot of all SF film, Robby of *Forbidden Planet*, bears no resemblance whatsoever to either Gort or Tobor. He was 'one of the most elaborate robots ever built for a film production. More than two months of trial and error labour were needed to install the 2,600 feet of electrical wiring that operated all his flashing lights, spinning antennae and the complicated gadgets that can be seen moving inside his transparent dome-shaped head'.[21] Visually, Robby looks like the offspring of some mad mating between the Michelin tire man and a juke box. He is 'a phenomenal mechanical man who can do more things in his small body than a roomful of business machines. He can make dresses, brew bourbon whiskey, perform feats of Herculean strength and speak 187 languages … through a neon-lit grille. What's more, he has the cultivated manners of a gentleman's gentleman'.[22] Although essentially a servant and programmed according to Isaac Asimov's famous Robotic Laws of SF literature (whose prime directive is that robots shall not harm human beings), Robby has a distinct personality. He is comically humourless and proud. ('This is my morning's batch of Isotope 217. The whole thing hardly comes to ten tons', he says, carrying the 'whole thing' around.) He is alternately petulant and helpful; 'when Francis [Anne Francis, who plays the role of Alta in the film] asks him for star sapphires, he croaks, 'Star sapphires take a week to crystallise. Will diamonds or emeralds do?' 'So long as they're big ones', Francis says. 'Five, ten, fifteen carats are on hand', Robby replies smugly'.[23] Robby's personality – although treated positively – prefigures to a degree the more sinister HAL of *2001: A Space Odyssey*, the computer (an immobile robot) who pushes Robby's comic *hubris* over the edge of reason. 'It is when HAL cannot admit he has made a mistake that he begins to suffer a paranoid breakdown, exhibiting overanxiety about his own infallible reputation and then trying to cover up his error by a murderous attack on the human witnesses.'[24] Ultimately, despite their similarity of manner, Robby and HAL are decades apart in both visualisation and meaning. Even if HAL were physically realised as more than 'a bug-eyed lens, a few slabs of glass',[25] it is hard to imagine him becoming the darling of the toy industry as Robby was to become after the release of *Forbidden Planet*. Robby's cute rotundity and comic primness, however, did not influence the subsequent screen images of robots. He was revived the following year in *The Invisible Boy* (Nicholas Nayfack, 1957),

as 'the playmate of his inventor's ten-year-old son'[26] and then he disappeared.

Through the 1950s and 1960s, mobile robots continued their singular ways, sometimes visualised negatively, sometimes positively. And they also occasionally functioned interchangeably with other SF manifestations. In *Kronos* (Kurt Neumann, 1957), the robot is not an instrument of an alien race as was Gort in *The Day the Earth Stood Still*; brought to Earth by a fireball, Kronos *is* the alien, a 'strange machine, half creature, half construction'.[27] The huge electronic robot of *The Colossus of New York* (Eugene Louri, 1958), is a monster also, but his technologically-devised exterior is motivated by impulses found in the most traditional horror films. The robot's brain is not a complex gadget or an incomprehensible alien mind; it is the transplanted human brain of a scientist's son and it turns against its father, its creator, as Frankenstein's monster had done years before.

Perhaps the most innovative and intellectually complex treatment of robots was in the low budget *Creation of the Humanoids* (Wesley Barry, 1962), a film which considers the robot both positively and negatively. Here is posited and visualised a 'history' of robotics which leads to the creation of humanoids. The rationale for making the machines look and act human is that 'Humans found it psychologically unbearable to work side by side with machines'. Finally, the dividing line between robot and human is totally extinguished. Interpreting Asimov's Robotic Laws literally, the robots have been transferring and duplicating sick humans and accident victims into perfect mechanical bodies; as one robot says, 'Humanity doesn't always know what is in its best interest.' The film's protagonist, antirobot and member of the Order of Flesh and Blood, turns out to be a humanoid himself and – along with the heroine – is finally raised to the humanoid level R100 by undergoing an operation which will enable him to 'humanly' contribute to the reproductive process, a function which the robots see as crude but which 'fulfills a psychological need'. The film ends with a close-up of a pleasant-looking 'man' – our narrator – who smiles directly at the viewer and says, 'Of course the operation was a success or *you* wouldn't be here.'

The mixed treatment of robots is still apparent in the 1970s, in the new group of SF films which followed the commerical success of *2001*. The mechanical 'drones' of *Silent Running* are affectionately named Huey, Louey and Dewey, but although they waddle, their visual realisation reminds one less of Disney than of Tolkien. (Paul Zimmerman has aptly called them 'iron hobbits'.[28]) They are unaesthetic squat boxes on stumpy short legs, neither marvelous nor sinister in their physical realisation. It is their very ordinariness which makes them endearing. The drones are not superhuman like Gort or Robby, nor are they capable of insubordination like HAL; they don't even talk and their literal interpretation of the English language results occasionally in functional *faux pas*. And yet, as the film progresses and they are programmed to play poker, to perform a surgical operation, to be 'companions' to the isolated Lowell, the camera's treatment of them becomes progressively sympathetic and subjective, suggesting the merest hint of an animate life of some kind tucked away in their circuitry. As William Johnson points out in an excellent review of the film: 'They are machines with at least as much claim to animate being as a responsive and well-trained pet.'[29] The subjective camera lets us see out of their monitor-screen 'eyes' in a way which does not deny their machineness (the images are obviously poor TV quality and in black and white), but promotes as well a feeling of sentient watchfulness. 'When two drones, standing side by side, bury a dead crewman, Lowell sees part of the body through one drone's eye and part through the other's. Later, this odd subjectivity is taken a stage further: when Lowell is talking to the two drones, we (the audience) are shown their monitor screens, through which we look at Lowell and Lowell looks at us ... Here, through the drones eyes, 'man is linked with his creation in a single circuit of consciousness'.[30]

Such is not the case in *Westworld* (Michael Crichton, 1973). The subjective camera may let us in one instance look through the scanner-eyes of the robot gunfighter (coldly played to mechanical perfection by Yul Brynner), but what we see is so remote from human vision that we are emphatically made aware not of a 'single circuit of consciousness', but of the vast separation between man and his creations. The little colored cubes which move geometrically over a graph paper-like grid may be aesthetically pleasing in their pastel visualisation, but they

deny any but the most tenuous connection between the robot's vision and our (the audience) vision of a warm-blooded and un-geometric human being trying to escape from mechanical retribution. The robots which run amok in this nightmarish extension of Disneyland do so for no known reason. The initial competence of the scientific staff who run the resort, the calm and often boring visual emphasis on computers and monitor screens under expert control, the close-ups of mechanical 'operations' and repairs which in their detail suggest a technology thoroughly understood, routinised and conquered, all are quickly subverted by images which emphasise chaos and claustrophobia in the control centre, and a world outside which has been stolen from its anthropomorphic gods in white lab coats. The robots' malevolence which goes beyond mere malfunction is inexplicable in scientific terms. And Asimov's Robotic Laws seem purposefully mocked by the mechanical creations turned perfect and skilled killers.

The fluctuating meanings of what superficially seem to be iconic objects in SF films can be demonstrated many times over. Time and place are not constants either. The temporal setting of science fiction has no obligation to history; it may be a speculative past (*Creation of the Humanoids*), the present (*Seconds*, [John Frankenheimer, 1966]), the immediate future (*The Andromeda Strain*, [Robert Wise, 1971]), the distant future (*Forbidden Planet*), or a combination of times as in the *Planet of the Apes* series. As well, the settings of science fiction know no geographical boundaries and may be found literally anywhere – from smalltown USA, to distant and undiscovered galaxies, to the interior of a human body. Inevitably, then, we must be led away from a preoccupation with a search for consistent visual emblems into more ambiguous territory. It is the very plasticity of objects and settings in SF films which help define them as science fiction, and not their consistency. And it is this same plasticity of objects and settings that deny the kind of iconographic interpretation which critically illuminates the essentially static worlds of genres such as the western and gangster film.

Notes

1 Jim Kitses, *Horizons West* (Bloomington, IN.: Indiana University Press, 1969), p. 25.
2 Colin McArthur, *Underworld U.S.A.* (New York: The Viking Press, 1972), p. 24.
3 Ibid., p. 25.
4 For further discussion of the theoretical aspects of iconography in genre films, see Edward Buscombe's 'The Idea of Genre in the American Cinema', John Cawelti's *The Six-Gun Mystique* and Tom Ryall's 'The Notion of Genre'.
5 Michael Butor, 'Science Fiction: The Crisis of its Growth', *SF: The Other Side of Realism*, ed. Thomas D. Clareson (Bowling Green: Bowling Green Popular Press, 1971), p. 157.
6 Ibid.
7 John Baxter, *Science Fiction in the Cinema* (New York: Paperback Library, 1970), p. 150.
8 Jacques Siclier and Andrew S. Labarthe, *Images de la Science-Fiction* (Paris: Les Editions du Cerf, 1958), p. 62.
9 Baxter, *Science Fiction in the Cinema*, p. 151.
10 Ibid., p. 13.
11 Denis Gifford, *Science Fiction Film* (London: Studio Vista/ Dutton Pictureback, 1971), p. 118.
12 Renata Adler, Review of *2001: A Space Odyssey* in *A Year in the Dark* (New York: Random House, 1969), p. 103.
13 Penelope Gilliatt, Review of *2001: A Space Odyssey* in *Film 68/69*, eds Hollis Alpert and Andrew Sarris (New York: Simon and Schuster, 1969), p. 56.
14 Gifford, *Science Fiction Film*, p. 130.
15 Gilliatt, in *Film 68/69*, p. 55.
16 Joseph Morgenstern, Review of *2001: A Space Odyssey* in *Film 68/69*, pp. 61–2.
17 For more information on the design these spaceships, see John Brosnan, *Movie Magic* (New York: St. Martin's Press, 1974).
18 Brosnan, *Movie Magic*, p. 197.
19 Ibid., pp. 191–4.
20 Gifford, *Science Fiction Film*, p. 54.
21 Brosnan, *Movie Magic*, pp. 198–9.
22 Bosley Crowther, Review of *Forbidden Planet* in the *New York Times*, (4 May 1956).
23 Baxter, *Science Fiction in the Cinema*, p. 113.
24 Alexander Walker, *Stanley Kubrick Directs* (New York: Harcourt, Brace, Jovanovich, 1971), p. 255.
25 Ibid., p. 258.
26 Gifford, *Science Fiction Film*, p. 59.
27 Baxter, *Science Fiction in the Cinema*, p. 136.
28 Paul D. Zimmerman, Review of *Silent Running* in *Newsweek* (20 March 1972), p. 113.
29 William Johnson, Review of *Silent Running* in *Film Quarterly* 25 (Summer 1972), p. 55.
30 Ibid.