National College of
Art & Design

Faculty of Design
Department of Industrial Design

Design on Film
The Visual Culture of the Alien Film Trilogy

by

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Submitted to the Faculty of History of Art & Design and Complementary Studies in Candidacy for the Degree of Bachelor of Design in Industrial Design

1997

With Thanks to
Gemma Bradley and all the staff of the library
at the National College of Art & Design for
their help and assistance.

And finally a
special thanks to my thesis tutor,
Dr Paul Caffrey for his patience and words of
advice over the past year.

This Thesis is dedicated to My Family.

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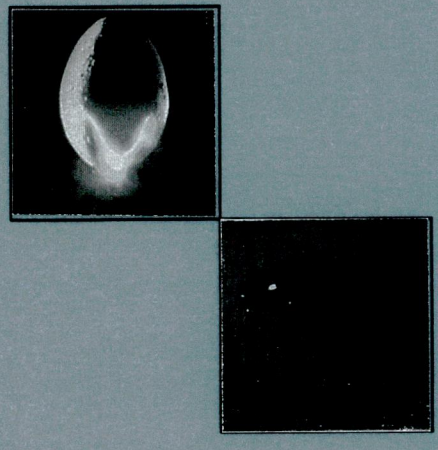


Introduction

Introduction

If it can be written, or thought, it can be filmed.
(Angel, 1970, p. 11)

The words of Stanley Kubrick speaking prior to the release in 1968 of his then new science fiction film, 2001: A Space Odyssey (Stanley Kubrick, MGM, UK, 1968). Few, except of course Mr. Kubrick and those who had worked on the film, could have foreseen the visual impact which this film was to have. But how was this vision of the future accomplished, and how was it designed? This question will form the basis for the subject matter of this thesis. The aim of this thesis is to explore and develop the theme that design, and in particular the extended fields of industrial design, play a major role in films, a role that can be considerably extended depending on the type of film, or film *genre* (see thesis glossary) involved. It will examine how the look of a film is affected by the design of the film, and how in turn that design comes about.

This thesis is concerned with the question of why particular films look the way they do? Apart from the director or *cinematographer* having a particular 'vision' for his/her film, the people who ultimately decide what the film actually looks like are the *production designers*, *art directors*, *conceptual designers/artists*, and *visual effects designers*/supervisors. So, in a sense: "The stage is the universe." (Barsacq, 1976, p. vii) and as film is an extension of the theatre, a film set should enhance reality. When a film (as an art form) is looked at from this point of view, it is essentially a fusion of a number of separate areas and elements of art and design to give a common united 'look' to a particular film. These include architecture, photography, graphic design

and fashion design, and to a lesser extent, painting, sculpture and textile design. However, the design field with the greatest reciprocal relationship to certain types of film (e.g. science fiction, in particular) is that of industrial and product design. It is this relationship and the role of design in film, which this thesis will explore. It will examine the relationship between the fields of industrial design (design for the real world) and design for films/production design (design for an imaginary world). The thesis will push the limits of what can be defined as industrial design, and consider what these findings will hold for the future of industrial design.

The origins of this belief that film is a fusion of a number of different elements from the art and design world, came from the arena of the theatre and the stage, and the idea of 'total theatre' as pioneered by the Bauhaus, from it's earliest days:

> . . . the Bauhaus embraced the whole range of visual arts: architecture, painting, sculpture, industrial design and stage work. The aim of the Bauhaus was to a find a new and powerful working correlation of all the processes of artistic creation to culminate finally in a new cultural equilibrium of our visual environment.
>
> (Moholy-Nagy, 1961, p. 7)

which has developed and matured to:

> Today, the motion picture is our most powerful and expressive medium. Much of its impact . . . . lies in the fact that it is still dominantly a photographic medium. To many people, 'seeing is believing'.
>
> (Olsen, 1993, p. XIX)

The Bauhaus had its own theatre (see **Fig. 1**) and it used this medium to show the work of the individual departments in one common and related medium- the stage. One of the tutors in the Bauhaus, who was most actively involved in the theatre was Oskar Schlemmer. He concentrated on producing choreographed dances in primary colours and shapes (see **Fig. 2**). The

Fig. 1: Bauhaus Theatre: The stage in the canteen at the Bauhaus in Dessau. (Image from Bauhaus - The Face of the 20th Century).

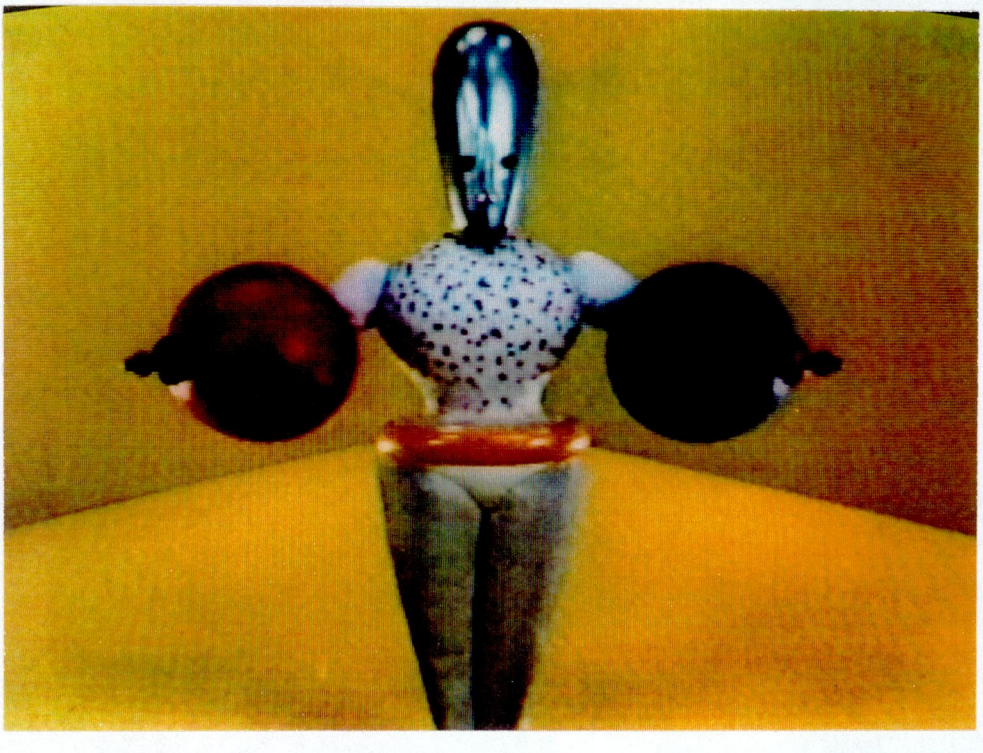


Fig. 2: Schlemmer Dance: A choreographed dance by Oskar Schlemmer, based on primary colours and shapes. (Image from Bauhaus - The Face of the 20th Century).

theatre was one of the schools most important elements because it put communal theories most clearly into practice. Its importance is demonstrated in the words of Walter Gropius:

> I gave this stage shop wider and wider range within the Bauhaus curriculum since it attracted students from all departments and workshops.
>
> (Moholy-Nagy, 1961, p.7-8)

Gropius felt that the major overall contribution of the Bauhaus was that the school developed what he liked to call a visual science, which was a means for dealing with life on an aesthetic level. "The face of the Twentieth century was designed, manufactured and *staged* at the Dessau Bauhaus" (Bauhaus - The Face of the 20th Century, Frank Whitford, A Late Show Special for the BBC, UK, 1995). And this means industrial design. In film, production design is it's aesthetic level.

When a film is set in the past, the design team, to a certain extent and allowing for artistic license, already has a very good idea of what the film will look like beforehand. So the challenge may be in interpreting what the visual history of that period/time has already shown them, in a new way. But what about a film set in the future? What are the factors that will ultimately decide what that particular film will look like? The science fiction *genre* offers the best scope in the area of design. Science fiction is the true literature of the twentieth century, showing us the present through an image of the future. Science fiction tells us about the world we live in. The film-makers have to create a plausible and convincing future world from scratch. So how will they do that? Will the design team draw its influences from the present, (as science fiction writers regularly do) and give an impression of the society of that day's view of the future? Or will the design team draw its inspiration from

the past perhaps? Whichever one it chooses, will these interpretations be equally valid ten, twenty or fifty years later, or will they date accordingly?

This thesis will explore the whole area of production design (in films) and examine a number of films from a design point of view. The design aspect of a film has many elements. There is the actual design as regards the setting of the film, what look or style it will have, but also there is the design and composition of shots, design of stunt/action sequences, and effects design and implementation. In the words of Dean Tavoularis, the pre-eminent *production designer* of the seventies, and a major collaborator on the films of Francis Ford Coppola: "A production designer should be involved in all visual aspects of the film" (Barsacq, 1976, p. 240). The production designer and his team can have a huge influence on the final look of a film (if the director lets them!):

> A production designer is an art director who designs the 'look' of an entire picture, making sure that the sets, props, and costumes work together to declare the nature of that films world in purely visual terms.
> (Kawin, 1992, p. 333)

The aims of this thesis shall be achieved by using as specific examples, the films of the Alien film trilogy, (Various directors, 20th Century Fox, US, 1979-1992) and a chapter shall be devoted to each of these films in turn. The thesis will examine how each individual film of the series relates to one another but at the same time has a different 'look' and how this is principally due in each case to the different director (who each had strong design sensibilities) and design team that worked on each individual film. This is as opposed to say a film series like that of Star Trek (Various Directors, Paramount, US, 1979-1996) where the design team on the each film (it is generally the same team, though) has to work within the parameters of an

already established look which continually runs through each separate film in the series. The Alien trilogy was the dystopia to the utopia of the likes of the Star Trek series of films and TV shows. All these films (both the Alien and Star Trek series) have a futuristic setting and come under the genre term of science fiction. And while the script will signify this fact, the film's design must clearly make this evident.

The Alien trilogy of films is just a framework for me to discuss the larger question of the role of design in film and also to discuss the question of futuristic design and what that means for the role of industrial design in the future. Each film in the Alien series evolved differently, principally due to who worked on it. It is also interesting to note that each individual film in the Alien series came from a different decade. Also in the following chapters there will be: profiles of the principle people who worked in key areas on each of the three films; an examination of the process of production design (in chapter 1); composition and perception of visual imagery (in chapter 2); while the conclusion will look to the future and examine the changing nature of what can be defined as industrial design.

It is important to remember, however, that in a film, design is one of the least tangible and measurable aspects of that film. It is something that more often than not, is taken for granted by the audience, and it is not really noticed by them, unless by its absence or poor quality. That is to say that good design in a film has done its job if it is not noticed. While this may seem like a contradiction, it is also true of design, and its status in everyday life. Design, in general, is something that is only appreciated fully by the few,

but it makes (and this is probably even more true in the case of design on film) a huge subconscious impression on the masses that are exposed to it:

> Each combination [of the separate elements in a film] arouses different feelings that are difficult for the spectator to analyse but of which he is nevertheless aware.
>
> (Barsacq, 1976, p. 126)

Design in a film can therefore create a mood or even become a character. This thesis will also look at the relationship between design on film and design for the real world, and the implications of films and their design/look, on real world design. It will therefore involve an examination of the area of production design for films (in the period leading up to and beyond the films of the Alien trilogy) and of the related area of industrial product design of that time too. These will form the basis for assessing the resulting visual culture that each film either reflected or established.

As this is the introduction, by way of illustrating the basic format of the thesis, we shall now examine the early relationship between the role of design in film and industrial design. The design element in early films, such as Metropolis (Fritz Lang, UFA, Germany, 1926) is a reflection of the design of that day, and an interpretation of the implications of design for the society and culture of tomorrow (see **Fig. 3**). It is interesting to note this early link between film design and industrial/product design. Both were entirely new professions of the twentieth century, and coincidentally started to come to prominence during the 1930s. This was seen by the advent of streamlining becoming prominent, especially in American design and also by the increasing production values and transition to sound of films in the 1930s. This enabled many designers, most notably Norman Bel Geddes to successfully negotiate the transition from production design to industrial

design. He started with designing shop windows: "The window is a stage" (Pirovano, 1991, p. 162) According to Pirovano, he then moved on to, like a lot of the early American industrial designers to the design of exhibits and exhibition stands. (Pirovano, 1991, p. 163). As regards production design during the thirties, the studio system (where studios were self sufficient and most had their own internal departments) was just taking off. Stars were being created and sets were designed and built to allow camera views to suit particular sides of certain stars faces (This was accomplished with the aide of *wild walls* (see thesis glossary)).

At this time, one of the most ambitious productions, of this or any other decade since, was launched. It was the British science fiction film Things To Come (William Cameron Menzies, London films, UK, 1936). Among those asked to contribute designs to the film was Laszlo Moholy-Nagy, (whose fellow Hungarian Alexander Korda produced it) who would later go on to play a central role in the Bauhaus, and also in the theatre there. As both professions developed, the role of the production designer, and of design in films, would go on to assume greater importance as the technical and creative aspects of film making became more advanced.

The apogee of this fusion between the elements of product/industrial design and production design for films, as 'design on film', was impeccably executed in 1968 by Stanley Kubrick and his design team for his film 2001-A Space Odyssey, (see **Fig. 4**)

> Kubrick and his crew hired product designers to create the world of the future. McDonnell Douglas helped plan the spaceships, IBM the computers, RCA the communication devices and even Parker Brothers worked on the pens.
>
> (Sennett, 1994, p. 128)

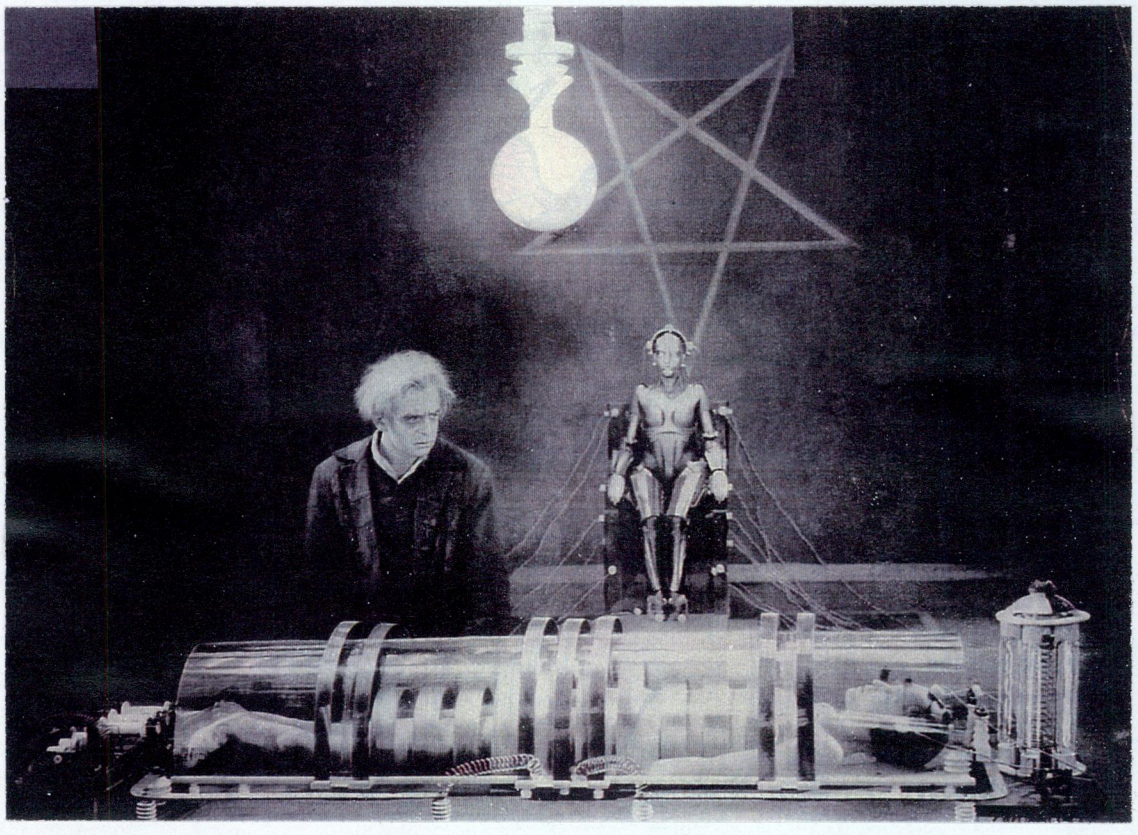


Fig. 3: Metropolis: An early German attempt (1926) at designing the future on film.

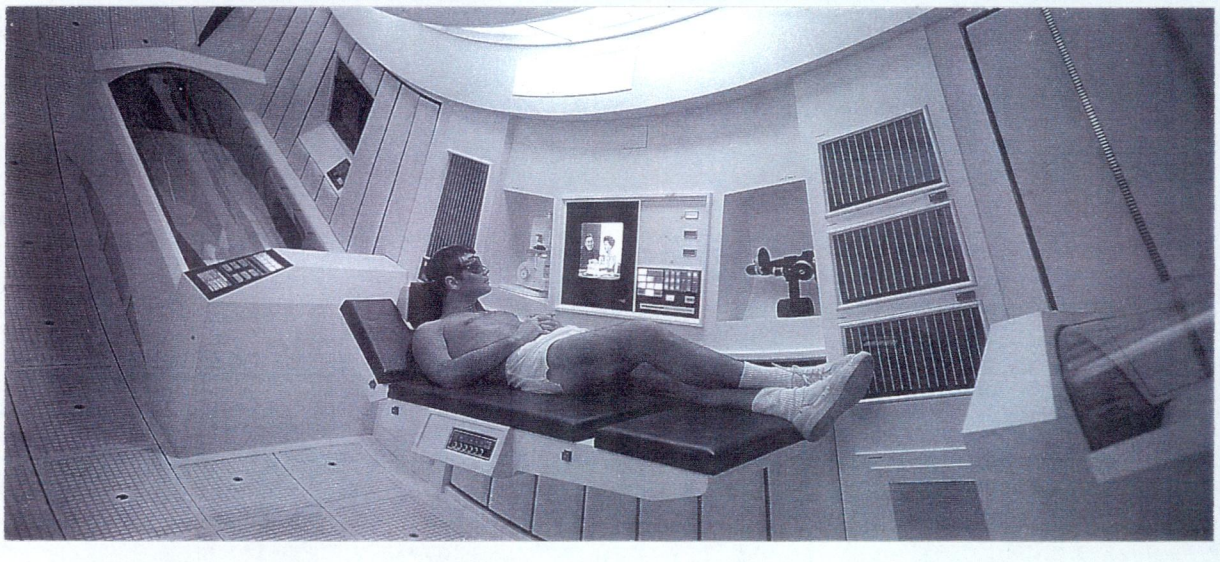


Fig. 4: 2001: A Space Odyssey: The apogee of the fusion between industrial design and design for film, Kubrick's 2001: A Space Odyssey.

"2001 worked due to the plausibility of the environment." (Shaping things to Come, The Sunday Times (Book Supplement), 16 May 1993, p.8). The impact which this film made at the time, and in the subsequent years and decades has been immense:

> In its audacity, in its ability to challenge the viewer with new ideas and to couch them in an appealing, if enigmatic visual design, 2001- A Space Odyssey remains unsurpassed.
>
> (Sennett, 1994, p. 129)

Kubrick as a director has as extremely acute visual awareness, as can be seen from 2001: A Space Odyssey:

> The director most involved with all aspects of his productions is probably Stanley Kubrick. Nothing goes into his films without its passing his scrutiny and he is certainly most actively involved in making design decisions. 'What makes Kubrick's films so interesting is the fact that he has a number of criteria against which he judges everything that goes the film. He wants to make each single element of the film as interesting as possible as he possibly can by unflagging attention to every detail. Because a film is so complicated with sound, music, photography, acting etc., the sheer quantity of interest one is faced with makes it almost impossible to be bored by anything Kubrick makes.'
>
> (Olsen, 1993, p.52)

According to Joyce, when the renowned production designer Ken Adam (who designed most of the James Bond films) was working with him on Dr. Strangelove (Stanley Kubrick, Columbia, US, 1964) he wanted to know why Adam had based the overall design of the war room seen in the film around the shape of the triangle. Adam had done this because the triangle is the strongest known geometric shape and he wanted to reinforce the notion of the war room as impenetrable. (Stanley Kubrick - The Invisible Man, Paul Joyce, Lucida Productions for Channel 4, UK, 1996).

> Directors have proved understandably wary of picking up the glove thrown down by Kubrick, and few have risen to the challenge posed by the wilder flights of, say, Philip K. Dick [the author of Do Androids Dream of Electric Sheep, the sci-fi novel that formed the basis for the film Bladerunner (see **Fig. 5**)]in imagining the look of the alien.
>
> (The Good, the Bad and the Ugly, Sight and Sound, Vol. 2 No. 12, 1992, p. 12)

According to Lawlor, certain cinematographers believe that the most important element of a film is not the dialogue but how the story is told visually, because moments in a film happen as a result of what is there visually, and this all relates to the film's design. People remember images as well as the words. (Visions of Light, Terry Lawlor, American Film Institute, US 1992).

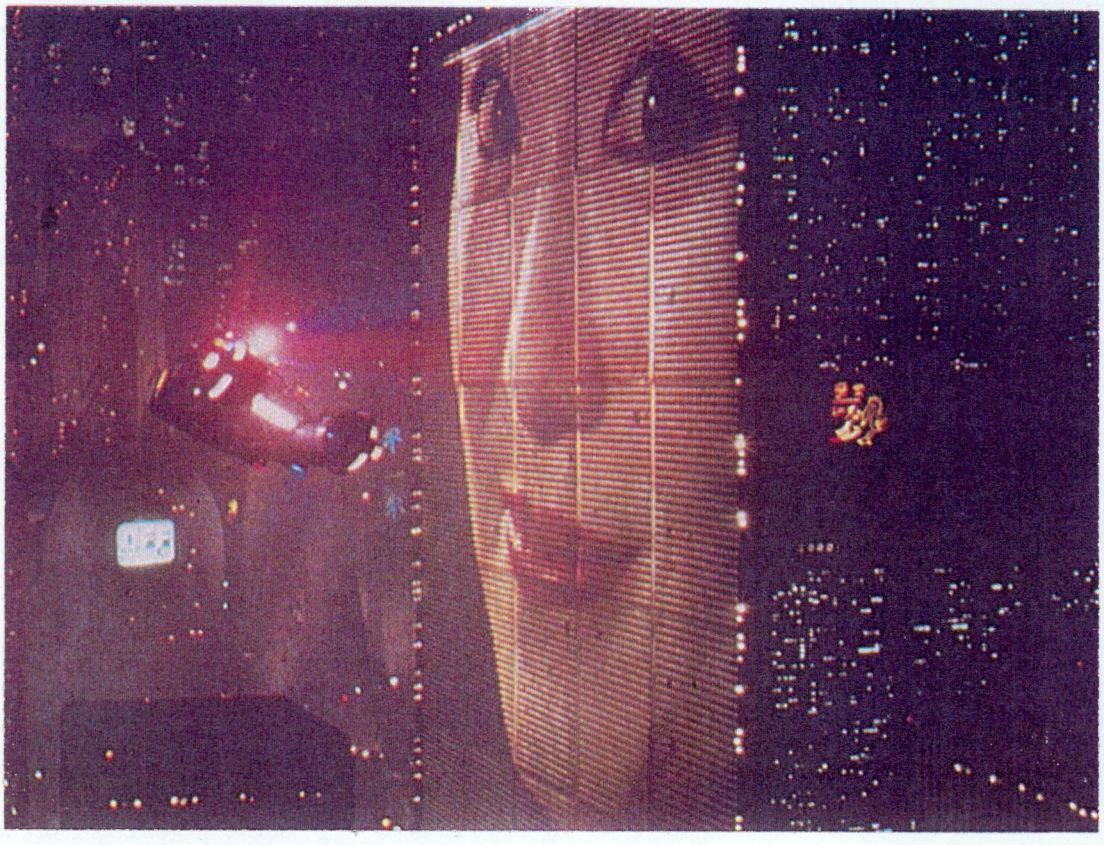


Fig. 5: Bladerunner: Director Ridley Scott's design based vision for the society of tomorrow.

The Natural Future:
Alien

The Natural Future: Alien

The first film of the Alien Trilogy, Alien (Ridley Scott, 20th Century Fox, US, 1979) was released in 1979. It has since gone on to become a screen classic of its kind, an enduring and startling tale of otherworldly terror and primal human fear. It was directed by Ridley Scott, a 'cinematician', who is responsible for such visually stunning films as Bladerunner (Ridley Scott, Warner Bros., US,1982) and Legend (Ridley Scott, MGM, US, 1986):

> There are some directors who work out their shooting script in collaboration with the designer and sometimes the cameraman [Director of Photography].
>
> (Barsacq, 1976, p. 164)

This is certainly the case with Scott, whose own strong visual sensibility and that of his films, clearly indicate this. Scott's background was in art direction and before this film he had directed over 3,000 commercials, some of which are the most successful television commercials ever created. According to Dormer, after his later design laden futuristic film, Bladerunner (see **Fig. 5**), Scott was picked to direct the launch commercial for a new computer company and symbol of friendly controllable technology - Apple. (Dormer, 1993, p.44). Scott has been said to have the "best eye for filmmaking in the world" (Sammon, 1996, p. 43). The popularity and success of Alien can be attributed to a combination of many storytelling and film-making techniques, but the essence of this film lies in its superb visual depiction of the classic conflict between man and the unknown forces of nature.

This first film in the Alien series was principally concerned with the depiction of a realistic future human setting, and also that of an other worldly setting which would be completely new to anyone who was seeing it and unlike anything ever put on the screen before. Alien, therefore, set about establishing one of the most realistic future worlds/environments ever

committed to film. The director, Ridley Scott wanted to create a 'total environment'. He cited his influences as 2001: A Space Odyssey and Star Wars (George Lucas, 20th Century Fox, US, 1977)(Indeed seeing this film convinced him to do Alien). Scott believed the film's setting (spaceship interiors, etc.):

> . . . had to look real and like it worked, something that wasn't like 2001 which was absolutely beautifully designed and conceived, like a NASA object, we weren't into that. We were way beyond that, where all the cosmetics had fallen away and the external panels didn't exist.
>
> (Ridley Scott Interview, Don Shay, 20th Century Fox, US, 1991)

Scott wanted to make (outer) space into an industrial area, an environment where people lived and worked (see **Fig. 6**). This was principally achieved through design. The makers of the film designed a future world that looked like it worked, or could work, and therefore it did! This was also a result of meticulous attention to detail.

The design in this film can be divided into two specific areas. The design and appearance of the human world and environment, principally the Nostromo (human spacecraft) and its interiors, and the design and appearance of the alien world, its spaceship, interior, and of course its inhabitants, the alien xenomorph. So straight away there is a clash between the hi-tech human world, and the low-tech and organic alien environment, a situation which is further heightened by the design of these relevant areas, and the fact that two different design sensibilities were responsible for creating each of these.

A problem for Scott was how to depict the central element of the film, the alien and its world of the future, as something new. Scott saw the

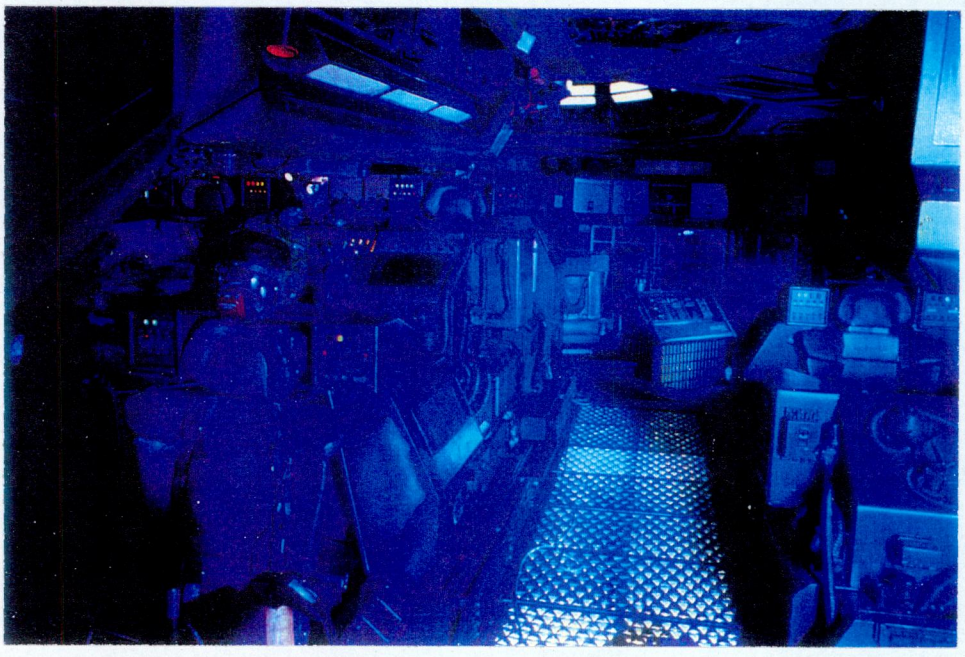


Fig. 6: Nostromo Bridge: Time and motion studies were carried out to create this realistic working environment of the future.

Fig. 7: Giger Painting: H.R. Giger's Bacon inspired early concept for one of the lifecycle development stages of the alien.

creature not as a monster, but as a character, an essential element of the story.

'Who is the Alien? Whenever you get to the monster in a horror film it's a big let down, everyone has a good laugh and that's it. All the atmosphere bursts like a bubble. There was no way I could approach the film until I had an extraterrestrial creature that we could, so to speak, live with.' Part of the answer, was to have *several* Aliens - the thing grows like some tropical insect through a series of metamorphoses.

(Ridley Scott Interview, Don Shay, 20th Century Fox, US, 1991)

The designer of the alien world is the Swiss surrealist artist/designer H.R. Giger. Scott showed Giger one of the furies from Francis Bacon's Three Studies for Figures at the Base of a Crucifixion, 1944, (see **Fig. 7**) as an indication of what he was looking for in respect to his vision for one of the lifecycle stages of the alien. A former student of industrial design, Giger pioneered a look in this film for the alien environment, of a fusion of the mechanical/technology and natural/organic - Biomechanics. The scriptwriter of the film Alien (and also it's visual consultant) Dan O'Bannon, had seen some of Giger's work and felt that "if he could put his work into a film and onto the screen, it would be the most extraordinary monster anyone had ever seen." (Brave New Worlds, Paul Oremland, Flightmate Films for Channel 4, UK, 1992). Giger created the alien as an almost prehistoric looking insect type crustacean, with three separate development stages (see **Fig. 8**). The resulting creatures were very heavily endowed with sexual imagery, and this is also evident throughout the world of the alien, for example the entrance to the derelict space craft. Giger believes that "my paintings always look like plans for three dimensional things - so it's close to doing things for a film." (The Making of Alien[3], Back Stage Productions for 20th Century Fox, US, 1992).

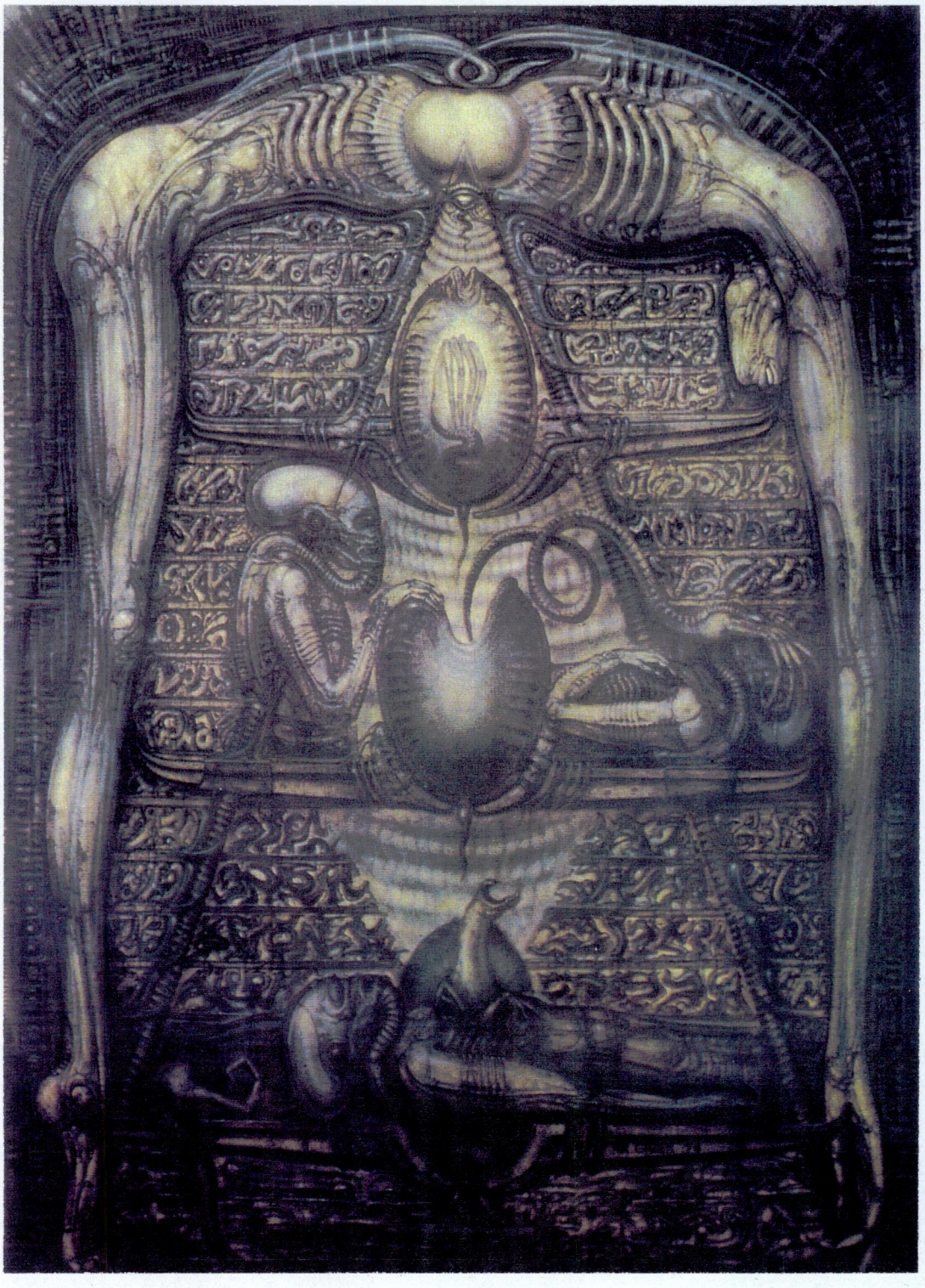


Fig. 8: Alien Life Cycle: A Giger painting of the three stages of the alien lifecycle.

> The present day designer Van Ling, who worked on the creatures in James Cameron's The Abyss, 1989, has suggested a useful rule of thumb for close encounters: when the visitor is friendly, as in E.T. The Extra-terrestrial, 1982, or Mac and Me, 1988, the eyes are large and childlike and the mouth small. Reverse the formula and you have the blindly murderous xenomorphs of the Alien series.
>
> (The Good, the Bad and the Ugly, Sight and Sound, Vol.2 No.12, December 1992, p. 12)

The emergence of this type of look in a futuristic film of this time (the late seventies) is interesting, in that it reflects a trait then developing in the world of industrial/product design. The sci-fi boom in the seventies was due to the fascination of a possible life in space, sparked off by the Apollo missions and moon landings. In cinematic terms the science fiction *genre* was all but extinct up until the mid seventies, when the success of Star Wars rejuvenated the genre.

This new found freedom in product design was indicative of a turning away from the harder, more mechanical looking products of the fifties and sixties, such as the typewriter; the Remington standard of 1950, and the kitchen mixer; the Braun electric kitchen machine, KM2 of 1957, to softer, more organic looking products which harked back to the earliest days of industrial design, and took their inspiration from nature, in much the same way as Christopher Dresser's first products did. This was also aided at the time by a proliferation of new advanced manufacturing techniques and a more wider acceptance of newer materials such as different types of plastics. This new fusion of the organic and the technical was illustrated in the work of the Italian designer Luigi Colani, who specialised in the area of 'Bio-Design'. In the early eighties this was evident in a series of conceptual cameras that he produced for the Canon Corporation of Japan, the 'Frog' underwater camera

Fig. 9: Colani Cameras: Luigi Colani's Bio-designed cameras for Canon, whose organic styling is reminiscent of Giger's work on Alien.

and the 'Hypro' camera (see **Fig. 9**). Colani's "crustacean inspired shells of cameras" (De Noblet, 1991, p.283) for Canon were the very embodiment of organic design, or biomorphism, a direct descendent from Giger's organic alien.

In the film, the fully grown creature especially, has an almost robotic look, with all the wires and tubes attached to it (see **Fig. 11**) (which disguised the *animatronics* well), and yet is completely organic in appearance, and was at the time unlike anything seen before in science fiction cinema. Dan O'Bannon on seeing the work of Giger for the first time, commented that:

> I had never seen anything that was quite as horrible and at the same time as beautiful as his work. And so I ended up writing a script with Giger's monster at the centre.
>
> (Giger, 1979, p.20)

Giger's work subsequently went on to considerably influence the screenplay (which was then only half written). When filming the scene on the derelict spaceship, where ". . the giant corpse of an other worldly pilot whose biomechanoid torso is hard to distinguish from the surrounding hardware." (The Good, the Bad and the Ugly, Sight and Sound, Vol.2 No.12, December 1992, p. 12), (see **Fig. 10**), the design team showed their inventiveness by using children in spacesuits to add the impression of scale to the entire sequence. This saved both time and money by avoiding the construction of a costly set. At the film's climax, the biomechanical nature of the creature becomes clear when it is able to camouflage itself on the Narcissus escape pod (human ship) among the pipes and ducts of the pod's interior (see **Fig. 11**).

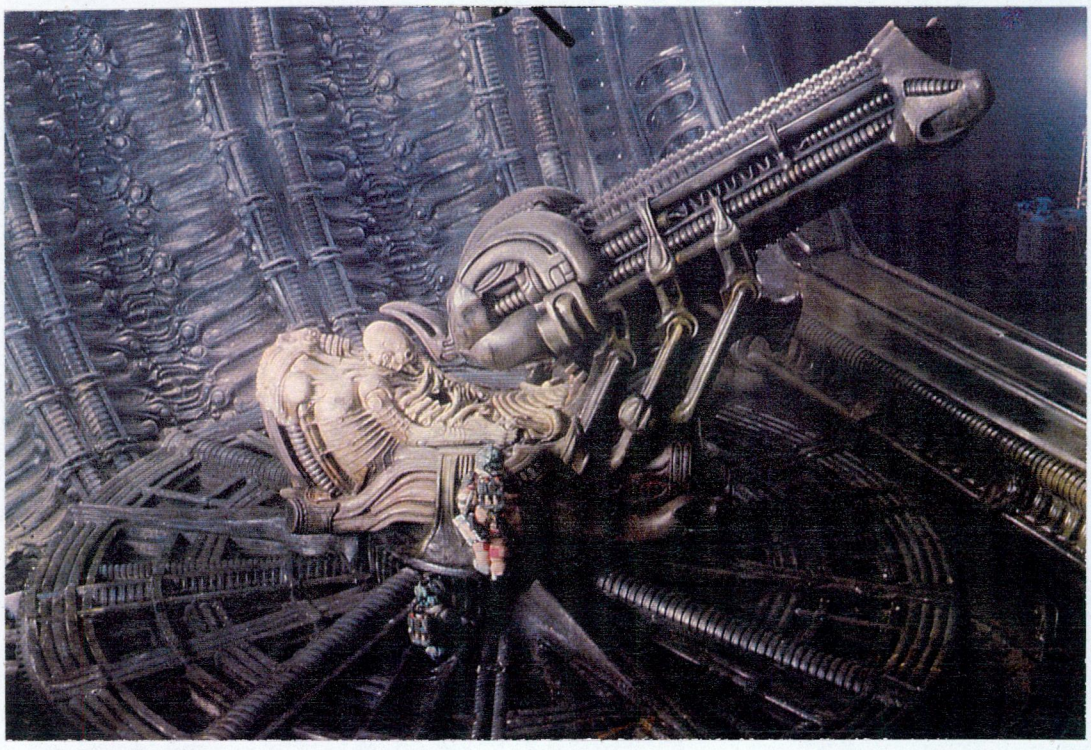


Fig. 10: Space Jockey: The Mysterious pilot of the derelict alien ship, whose Biomechanical origins are clearly evident, in it's fusion with the surrounding environment.

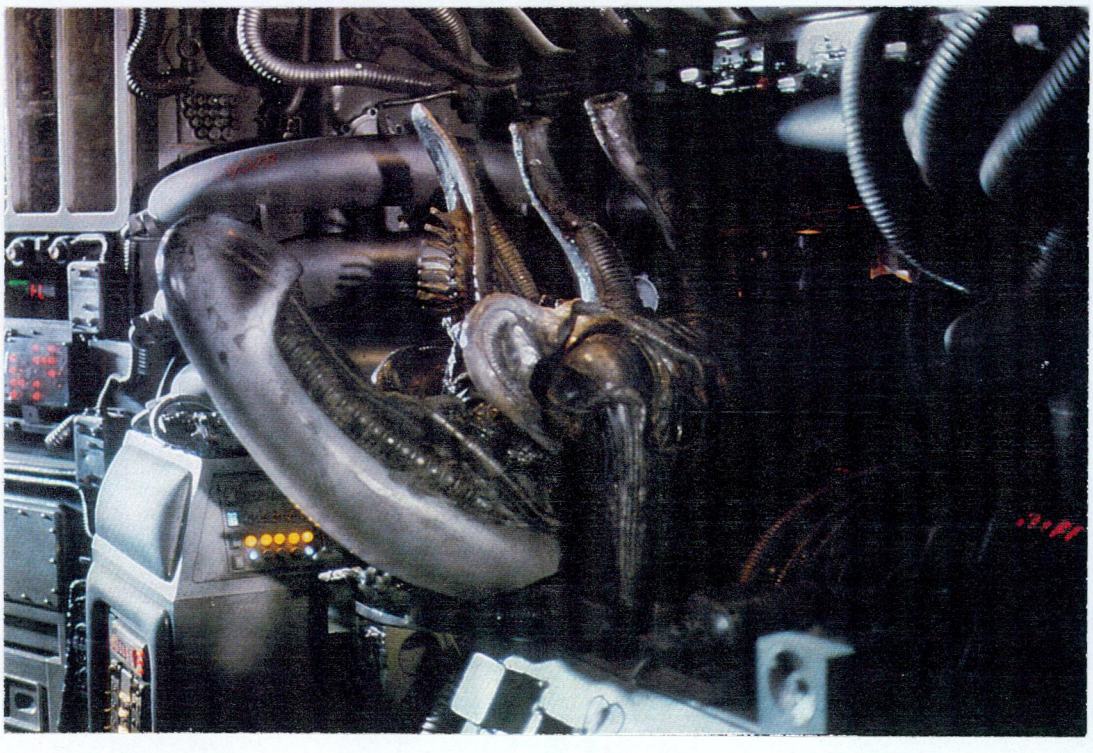


Fig. 11: Biomechanics: The Biomechanical styling of the alien makes it almost indistinguishable from the surrounding ducting and piping of the Narcissus interior.

In complete contrast to H.R. Giger was Ron Cobb, the designer responsible for most of the look of the human environment in the film (see **Fig. 12**). A former political cartoonist, Cobb is a man whose style of work is in complete contrast to that of Giger's, and it is precisely for this reason that both visions worked so well together in representing the two opposing environments in the film. He is very much in the 'design' tradition - clean, high-tech and polished, and this is reflected in his work on the Nostromo. The 'Mother' room in the Nostromo represents the company. The impression of the all knowledgeable, but invisible computer system is created by filling the room with hundreds of tiny lights. According to Lawlor, the idea of intelligence is further enforced by the colour of the interface on the screen, which is green, a colour that is associated with knowledge. (Visions of Light, Terry Lawlor, American Film Institute, US, 1992). Cobb said that:

> I like the challenge of designing a spaceship right down to the fuel tolerances and the way the engines function . . . . films are ideal for at least demonstrating the premise [of a plausible future]. It's an excitement I have to communicate.
>
> (Gross, 1979, p. 27)

However, a gritty, 'lived in' look was applied to some parts of the spaceship's interior at the request of the films director, Ridley Scott. Details in Alien include the spraying of a fine mist on the spacesuits and also the littering of certain parts of the Nostromo interior with beer cans.

The alien film was to be a tougher version of life in space than had been witnessed up to now. This look was typified by the bridge of the Nostromo. It was inspired by the look of the actual cockpits of the Boeing B-52 bomber, as seen in, Dr. Strangelove (Or how I learned to stop worrying & love the bomb). Scott showed this film to members of the film's production

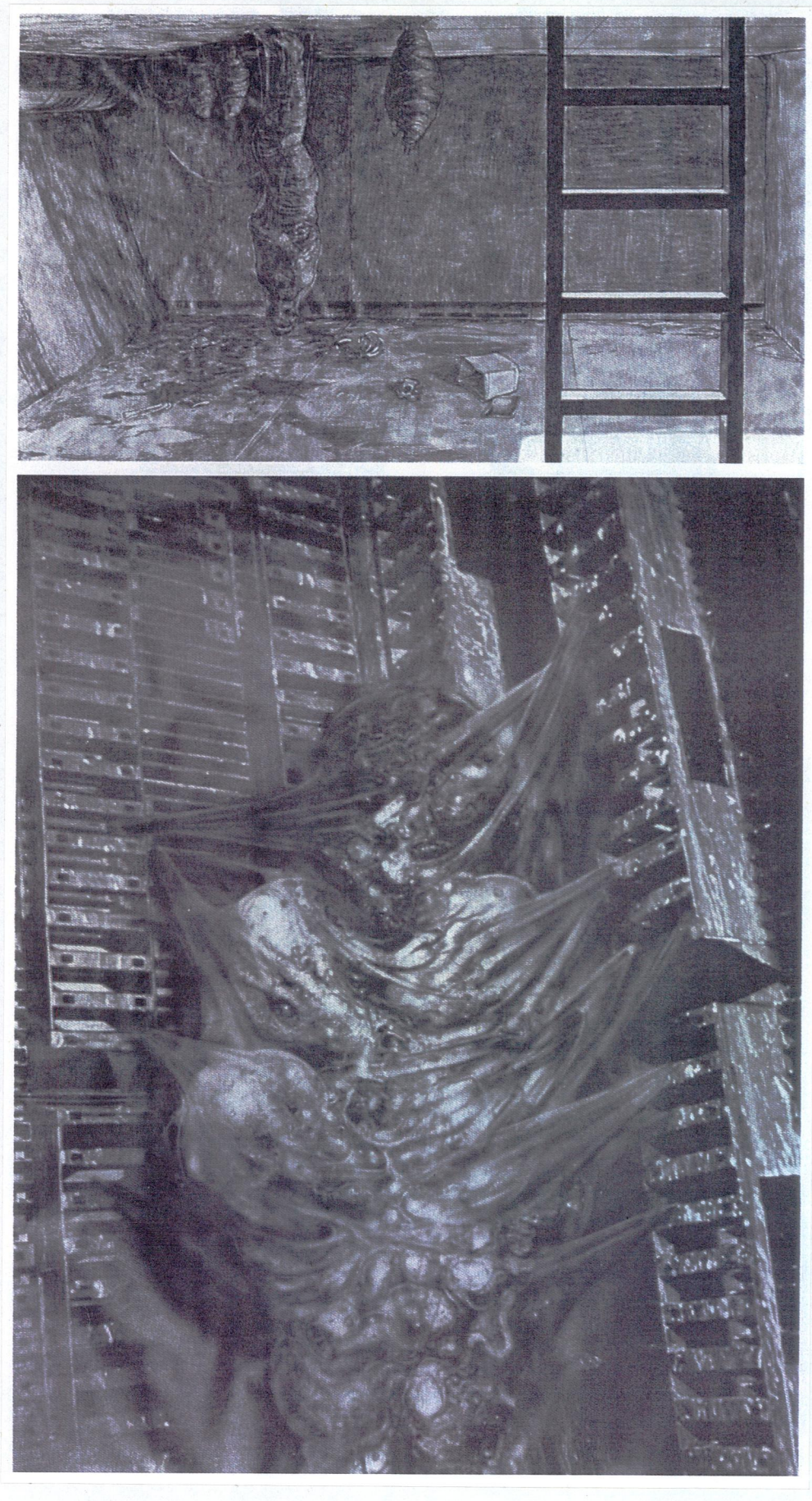


Fig. 12: Cobb/Giger: These conceptual drawings for a scene which didn't appear in the final film, illustrate the different styles and approaches of Alien's two principle design influences.

design staff. "That's what I want. Do you see? Not that it's a B-52 in outer space, but it's the military look. You can't really draw it. . . ." (Gross, 1979, p. 38). Task analysis's and time & motion studies of the ship's bridge (see **Fig. 6**) were then conducted so that all the separate elements would come together and form a regimented future environment. This was overseen and implemented by the film's production designer Michael Seymour:

> We wanted to have the impression that it was a real place, that it is more science fact than science fiction, and also that the whole place is well used, lived in and slightly battered after years of service.
> (Flynn, 1995, p. 36)

The thick walls, scarcity of windows, lack of space, and low ceilings of the ship's interior create a heavy atmosphere and are perfectly suited in keeping with the brooding mood and atmosphere of the film's claustrophobic setting and feeling. Note how the interiors of the Nostromo are in complete contrast to the open spaces and vast internal chamber of the alien spaceship. This is another way of further emphasising the differences between these two opposing cultures, and indeed of the two designers who principally created them.

The computer graphic displays were created at the RCA in London, where Scott had studied. However one mistake that most science fiction films have made, up until the beginning of the nineties, and this includes Alien, has been in their depiction of computers of the future. Films have tended to concentrate on the hardware side of them i.e. lots of flashing lights and buttons etc., while almost ignoring the software side and the actual fact that the real computers of the future will in fact be software and not hardware orientated.

There were other contributions to the overall design and visual appearance of the film, from a variety of sources . The spacesuits were originally designed by Jean 'Moebius' Giraud, (see **Fig.13**) one of the artists from the French comic for adults, Metal Hurlant (Heavy Metal). These were then adapted with some ideas from Japanese samurai films, by the film costume designer John Mollo. A veteran of the Star Wars films, for which he won an Oscar, he is also an authority on military costumes. Contributions also came from the films art directors and Star Wars veterans, Les Dilley and Roger Christian, and also from Ridley Scott himself, who storyboarded the entire movie before he even went near a soundstage.

This first film in the trilogy formed a visual and stylistic aesthetic which set a benchmark for all future science fiction films, despite its derivative origins in terms of its storyline and ideas. Subsequently it established a visual culture which went on to influence the then emerging new wave of sci-fi of the 1980s, typified by the writings of William Gibson and his Cyberpunk vision of the future.

Director Ridley Scott's consummate control over all the disparate design elements of his film was further illustrated by the award winning opening titles/credit sequence of Alien. It was only really matched on a design level anyway, by the film Bladerunner (which was also directed by Ridley Scott), and by the appearance of the sequel to Alien - Aliens (James Cameron, 20th Century Fox, US, 1986). While this sequel is ambitious in it's overall scope, Aliens predecessor while being more restrictive in it's scope, is a genuine work of art.

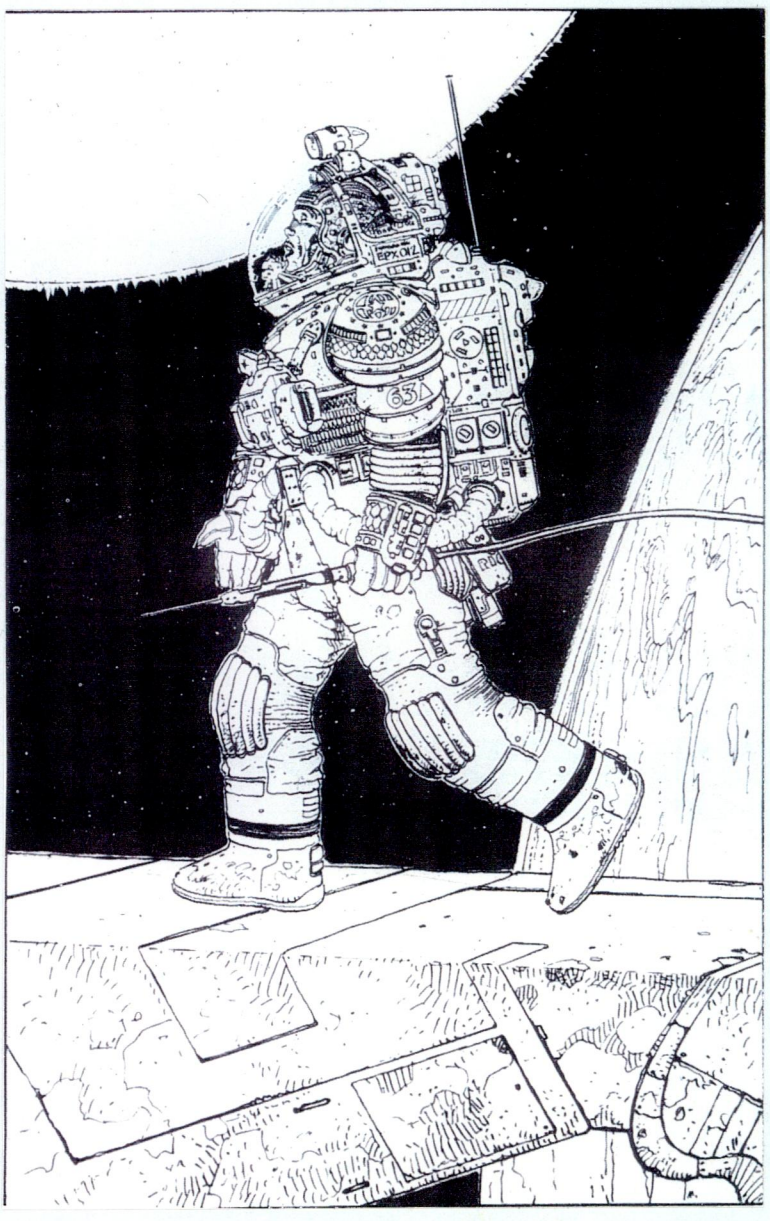


Fig. 13: Moebius Sketch: Jean 'Moebius' Giraud's samurai inspired concept for the spacesuit from the film Alien.

The design process is essentially the same for both areas, i.e. design for film/production design and industrial/product design. Design for film must take account of a number of different considerations, camera angles, etc., but essentially it is there to aid the filmmaking process which is to tell stories with images. In *genre* pictures with a strong visual identity, inspiration can come from many places, e.g. Michael Mann & The Last of the Mohicans (Michael Mann, Warner Bros., US, 1992).

> I was influenced by Beirstadt's landscape painting in terms both of composition and of what the place looked like. Before I got involved I thought his paintings were romantic, fanciful Hudson valley landscapes, that forests don't look like this. But then I realised that they did look like this, they just don't look like this anymore .
>
> (Michael Mann - Wars and Peace, Sight and Sound, Vol.2 No.10, October 1992, p. 7)

When designing for film, initial ideas and concepts are generated so as to come up with overall defining look for the film. Then mock-ups and models of proposed settings are then constructed, (See **Fig. 14** & **15**) and in the words of Norman Reynolds ,production for Alien^3, with the following purpose.

> . . . . to be torn apart and adjusted if the director, by virtue of seeing it comes up with an idea that is better, then they can quickly be changed and modified, and he can leave knowing that he will get the sort of set that he is looking for.
>
> (The Making of Alien^3 Backstage Productions for 20th Century Fox, US, 1992)

This is exactly the same process as designing products. Industrial design involves the generation of a number of concepts, from which one design is chosen and developed into the final product.

A key player in the whole process is the *storyboard* artist, who is the visual link between the director and the other departments, including the art department, effects, etc. His function is to enable the other departments to

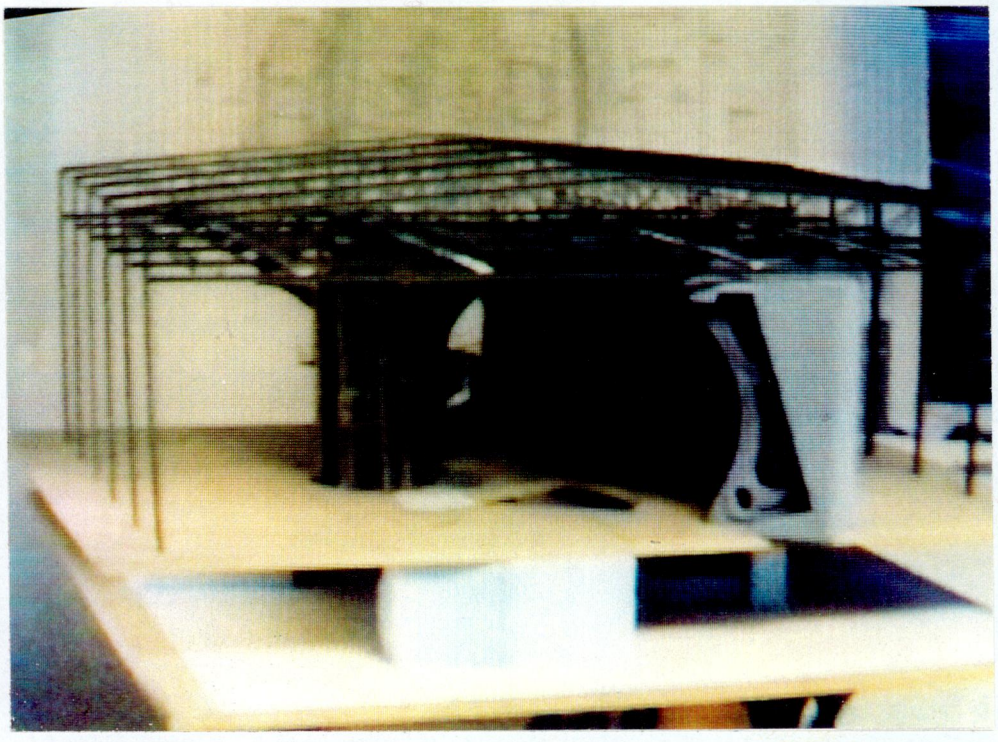


Fig. 14: Set Design: Model of one of the sets from Alien^3, showing the soundstage framework. (Image from The Making of Alien^3)

Fig. 15: Set Construction: One of the sets from Alien^3 under construction on a soundstage at Pinewood studios. (Image from The Making of Alien^3)

see how the director envisions the film looking (see **Fig. 31**). The actual design process in relation to a film is much the same as that for the design of a product in industrial design.

> The blue-print for a film is the script and it is during the first reading of the script that the Designer begins to shape the film in his mind. 'When one reads the script the story content conjures up pictures in one's mind'.
>
> (Olsen, 1993, p.35)

> Although initially working alone with the Director, the [Production] Designer will have to determine what resources he will need to call upon to help him realise the kind of design necessary for the film. After reading the script through he will have a rough idea of the basic technical problems that he will face, and the Director's own interpretation of the script will have presented other problems, perhaps by insisting on using precise though distant locations, or in wanting to have maximum value from the special effects department. Whatever the position the [Production] Designer will have a great number of technicians and craftsmen to help him in his task.
>
> (Olsen, 1993, p.47)

For example, in Aliens the action element of the script required very agile suits for the performers who were playing the aliens, so in the words of the film's director, James Cameron; "The action of a film is the catalyst for the design." (James Cameron Interview, 20th Century Fox, US, 1986). Scale models and mock ups of proposed sets are employed because;

> The finished set is obviously three-dimensional and it helps the Director in his visualisation if he can look through a viewfinder at a three-dimensional representation of the finished set. He can quickly see what he will get using various lenses.
>
> (Olsen, 1993, p.54)

For a more in depth analysis and explanation of the production design process, please refer to; Olson, Robert, Art Direction for Films and Video, Boston, Focal Press, 1993.

A Hardware Future:
Aliens

A Hardware Future: Aliens

This chapter will look at how the second film of the Alien trilogy, Aliens (James Cameron, 20th Century Fox, 1986) continued in the same vein as that established by the first, but also how it expanded considerably on it, from a design point of view. There is an overall expansion in the scope of this film, and this is also evident in the design of the film. We are shown a much broader and more fully realised vision of the future in this film when compared with the first. The reason for this is evident on hearing the words of the film's director, James Cameron:

> Part of the attraction of doing the film was that it was a design feast, an opportunity to do all sorts of wonderful hardware. . . . But the hardware has to be up to certain standards. . . .
>
> (Aliens, Cinefex, No. 27, Aug '86, p. 7)

The film essentially has as it's centre the element of confrontation which is illustrated by the abundance of high-tech hardware (available to the humans) versus the lack of it (the aliens). This was seen by many at the time as a metaphor for the Vietnam war, but can be better explained by the fact that the film's screenwriter and director had just completed a script for Rambo: First Blood Part 2 (George Pan Cosmatos, Carolco, US, 1985). Like his predecessor, Ridley Scott, James Cameron also has strong visual sensibilities and comes from a film design background. He started as an *art director* at Roger Corman's no budget New World Pictures, where he went on to supervise the special effects on Corman's Star Wars rip off Battle Beyond the Stars (Jimmy T. Murakami, New World Pictures, US, 1980). Cameron is a virtuoso action film director who believes in the power of stylised, stripped down storytelling, and this was exactly what he delivered with Aliens. He also has an excellent technological and design background in film, and this was brought to bear on this film. For further information on the career of James

Cameron, please refer to Iron Jim, Premiere, Vol. 7 No. 12, August 1994, pp. 47-49.

The first considerable change is a huge increase in the range of the human environment that is presented to us in this film. Whereas the first film was (from a human aspect) set entirely in the confined area of a spaceship, this second one shifts from spaceships to space stations, to other planets, and back to spaceships again. All of these environments had to be designed and created in such a way as to be realistic and convincing with regard to the viewers vision of the future. The importance of the design element of this film to the director, became evident with the urgency he placed on the design pre-production stage of the film:

> I knew that the most critical thing was to get the designs fast, because you can't storyboard without them and you can't build anything without them.
>
> (Aliens, Cinefex, No. 27, Aug '86, p. 8)

However the fact that in this film, technology is treated in a matter of fact way establishes this fictional world as reality, and therefore it becomes believable and plausible in the eyes of the audience. The three men principally responsible for the design of this film were: Peter Lamont, the *production designer* and veteran of the James Bond series of films, and the *conceptual designers*, Ron Cobb, who worked on the first film, Alien (and on the second helped Cameron brainstorm many of the films key sequences) and Syd Mead, who was previously responsible for much of the look of the film Bladerunner (see **Fig. 16**). Peter Lamont, did not work on the earlier film, so he inherited a pre-set visual style and faced the choice of continuing to work within these limits or of extending them.

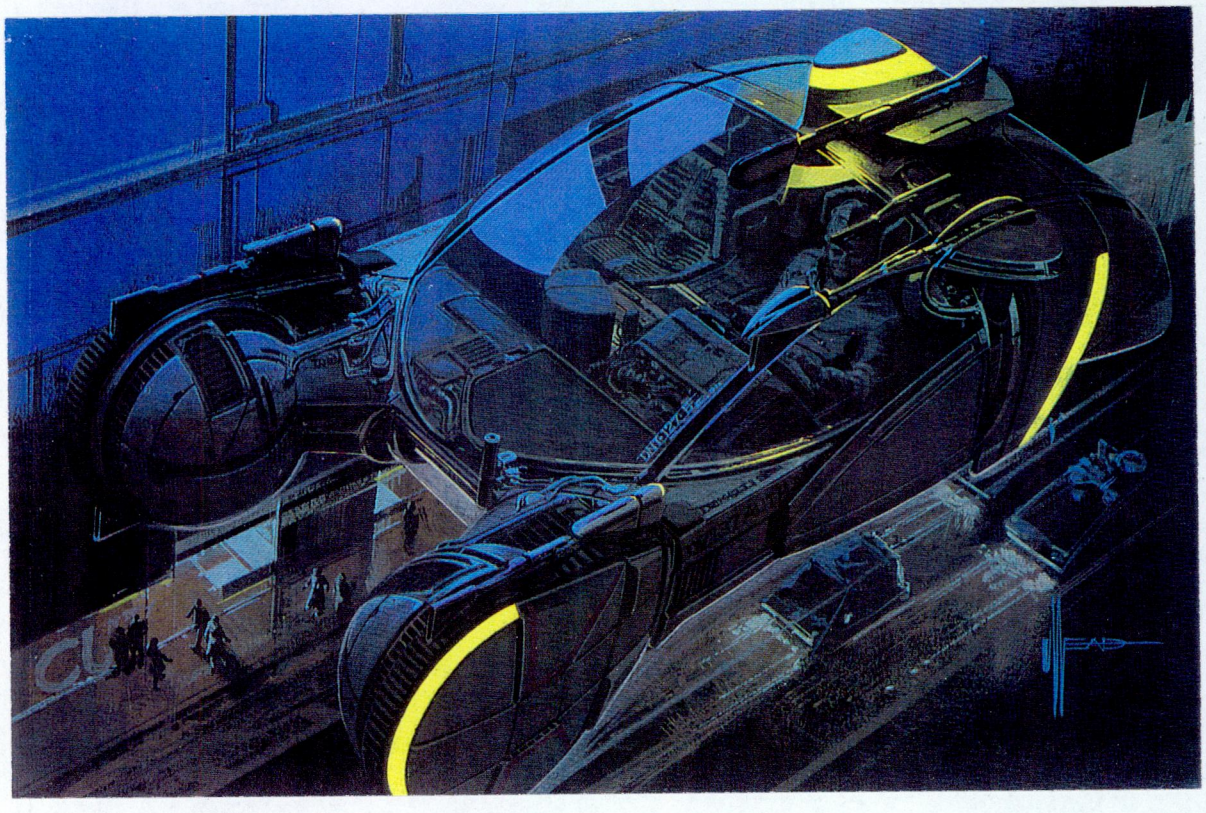


Fig. 16: Mead Renderings: A Syd Mead design rendering of the futuristic car from Bladerunner, also seen in **Fig. 5**.

> . . . . From Alien's production designer, Michael Seymour, Lamont borrowed the idea of making the scenery resemble the aliens, both having long, cable like extensions and slick surfaces that are halfway between the industrial and the organic. He also inherited H.R. Giger's design of the creature's themselves.
>
> (Sennett, 1994, p. 98)

The second considerable change from the first film was the fact that the original designer of the alien and the alien environment, the Swiss surrealist artist H.R. Giger, did not work on this film at all. Instead what he had established in the first film was built upon and also reinterpreted by a new creative team, led by Stan Winston (a creature creator who worked on Jurassic Park (Steven Spielberg, Universal, US, 1993) and also by the film's director James Cameron (whose knowledge of design and art direction contributed immeasurably to the overall look of the finished film.). In the words of Cameron: "My attitude on the alien was to render unto Giger what was Giger's." (Aliens, Cinefex, No. 27, Aug '86, p. 8). These changes included a new alien warrior creature, based on the original from the first film, but without the cowl on its head (see **Fig. 17**). Changes were also made so as to improve overall movement for the performer. This was achieved by making the suit out of a new material which was not available for the first film. According to the James Cameron Interview (20th Century Fox, US, 1986), they (Cameron and Winston) went for motion over design. They wanted a quick blurring image of a lizard type creature, and so concentrated all their research & development efforts on the way the alien moved, with respect to the performer. So they redesigned and simplified the suits, and made them less sophisticated and more flexible so as to suit the gymnasts and acrobats who would be wearing and performing in them. Ultimately, what they carried out was a study in human motion. The final overall alien

Fig. 17: Alien Head: The alien warrior from Aliens, featuring the revised head of the creature when compared to it's original version from Alien, as seen in **Fig. 11**.

body consisted of many iterations in relation to the one seen in the first film. Only six suits were ever used in any one shot, so the illusion of hordes of advancing creatures was generated under quite controllable circumstances.

Also, a major shift took place in this film in regard to Giger's vision. A new element that did not exist in his original lifecycle for the alien, was introduced. This was the alien queen, a creature that was at the same time totally part of the world established by Giger in the original film, yet different from any of the previous creatures seen in the earlier film (see **Fig. 18**). The alien queen was an opportunity to take a design stance and go beyond the first film. Cameron "wanted to continue with the design philosophy [as established by Giger] but also to give it other characteristics, in terms of size, grace, speed and feminine qualities that the warrior didn't have." (James Cameron Interview, 20th Century Fox, US, 1986). It was principally designed by the film's director, James Cameron, with the assistance of creature creator Stan Winston. From a design point of view, the alien queen was designed so as it would not look as if there could possibly be any human performers inside, when in fact there weren't one, but two people operating it from inside, (see **Fig. 19**) and a number of off screen operators controlling other parts of it with actuated cables.

Finally, a major new element of the second film was the military and hardware aspect in it. The film involved the establishment of two completely opposing worlds, the hi-tech, hardware intensive human one, and the low-tech organic alien world. The establishment of the military aspect of the film involved everything from the design of spaceships and their interiors, right down to the marine deployment vehicles and their equipment. The film's

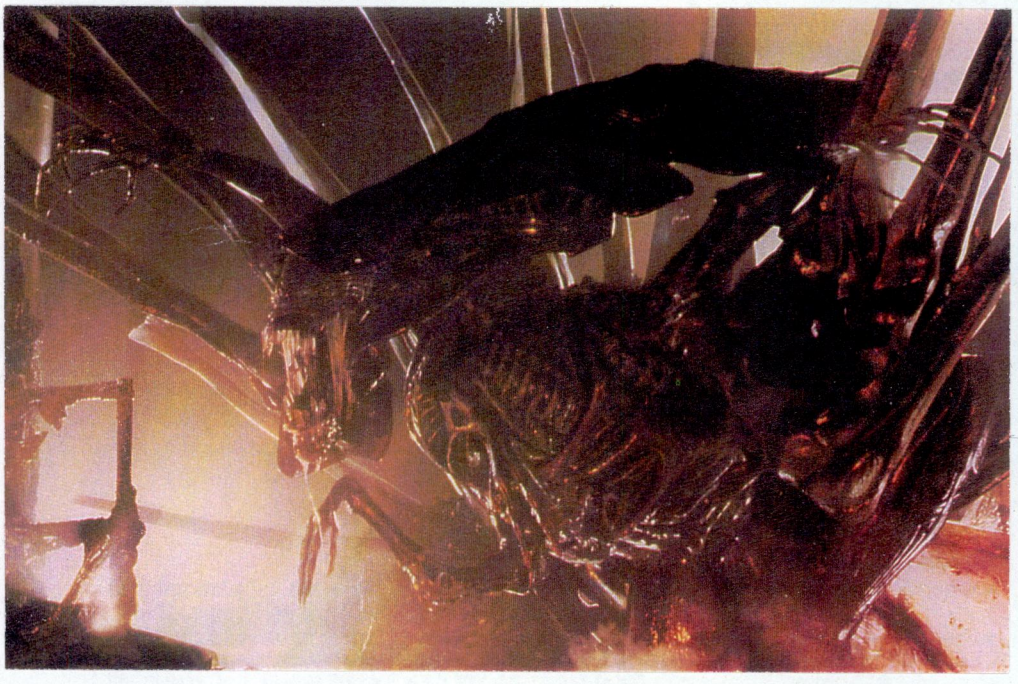


Fig. 18: Alien Queen: The new design element of the alien world, the Alien Queen, from Aliens.

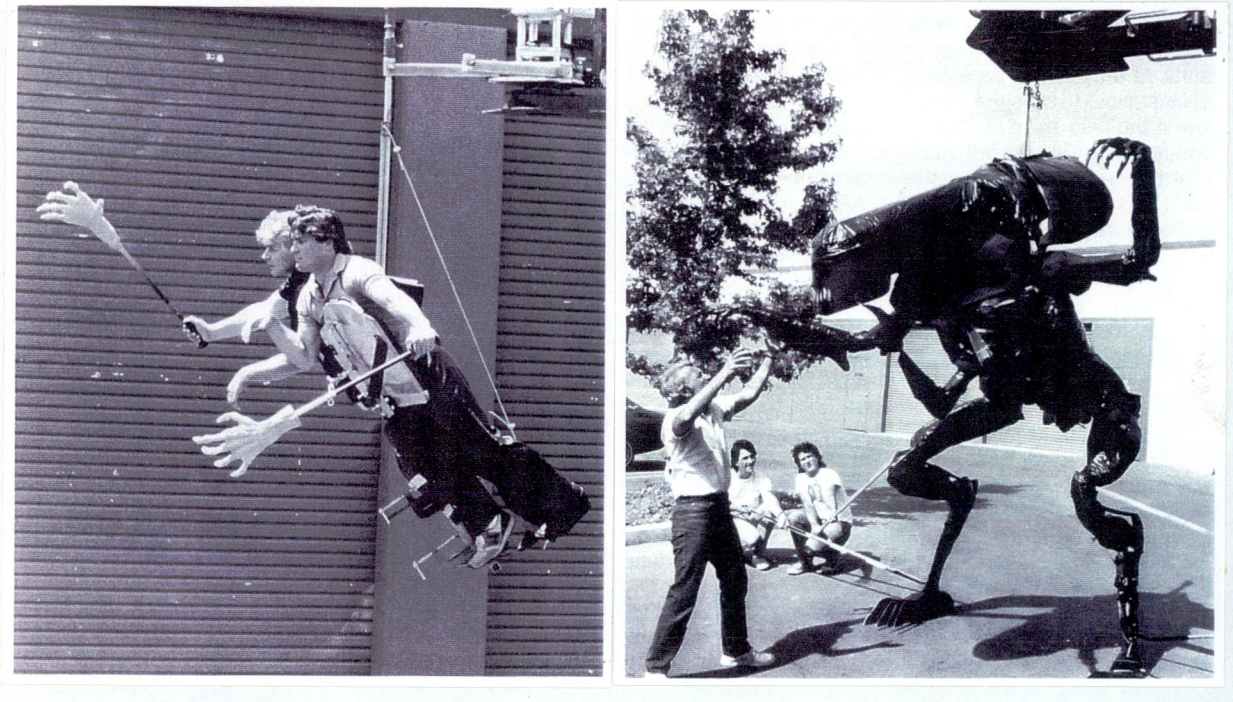


Fig. 19: Queen Development: Design development concepts and mock ups for the Alien Queen.

conceptual artist Ron Cobb, described the film as "a Vietnam war movie in outer space." (James Cameron Interview, 20th Century Fox, US, 1986). The design of this aspect of the film was created by Syd Mead, a veteran industrial designer who has worked for Boeing and Nasa and who has also worked on many science fiction themed films, including; Bladerunner, 2010 (Peter Hyams, MGM, US, 1984, the sequel to 2001: A Space Odyssey) and Strange Days (Kathryn Bigelow, 20th Century Fox, US, 1996), and whose final design work in this film is typical of his aesthetically advanced yet functionally practical output. According to Dean, Mead majored in Industrial Design at the Art Center School in Los Angeles before going on to work for Ford and US Steel. (Dean, 1984, p. 62). And this was also appreciated by the films director, Cameron, who noted that:

> Syd is very thorough when it comes to designing things that can actually be constructed and work - that's his background - so I thought I'd let him handle the cutting edge technology, which I envisioned as primarily the military stuff.
>
> (Aliens, Cinefex, No. 27, Aug '86, p. 8)

The film's principal space ship - the colonial marines transport vessel, the Sulaco is reminiscent of an aircraft carrier, with it long slender body horizontally juxtaposing the vastness of space (see **Fig. 20**). The concept designs for the film's dropship illustrate the different design concerns and influences of the two principle designers and also of Cameron himself. Of the three concepts presented by each of them for the vehicle (see **Fig. 21**), Cameron's one was chosen and is a variant of sort of helicopter/harrier jump jet hybrid.

Other design considerations and problems encountered in the film include a miniature radio controlled version of the colonial marines armoured

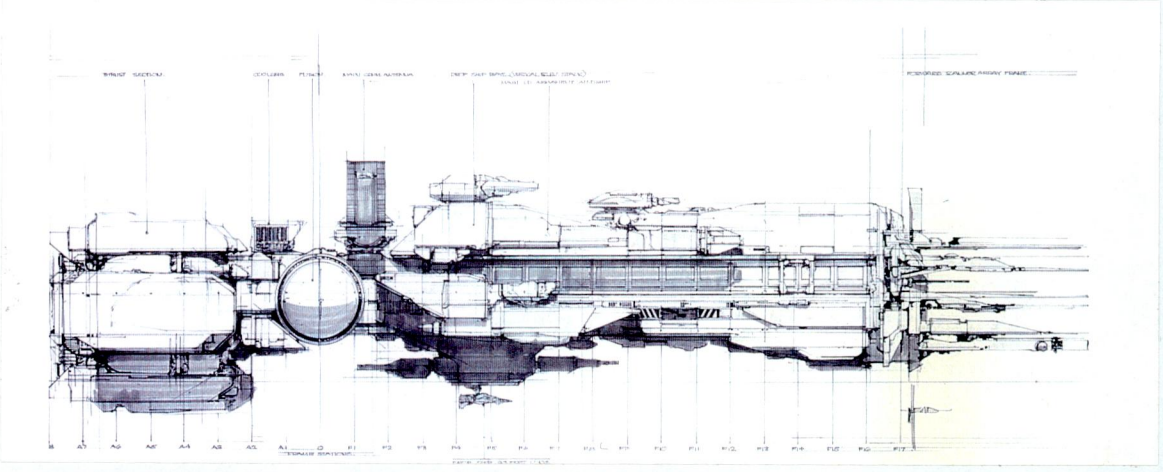


Fig. 20: Sulaco Sketch: A Syd Mead design sketch for the colonial marines military transport, the Sulaco (from Aliens).

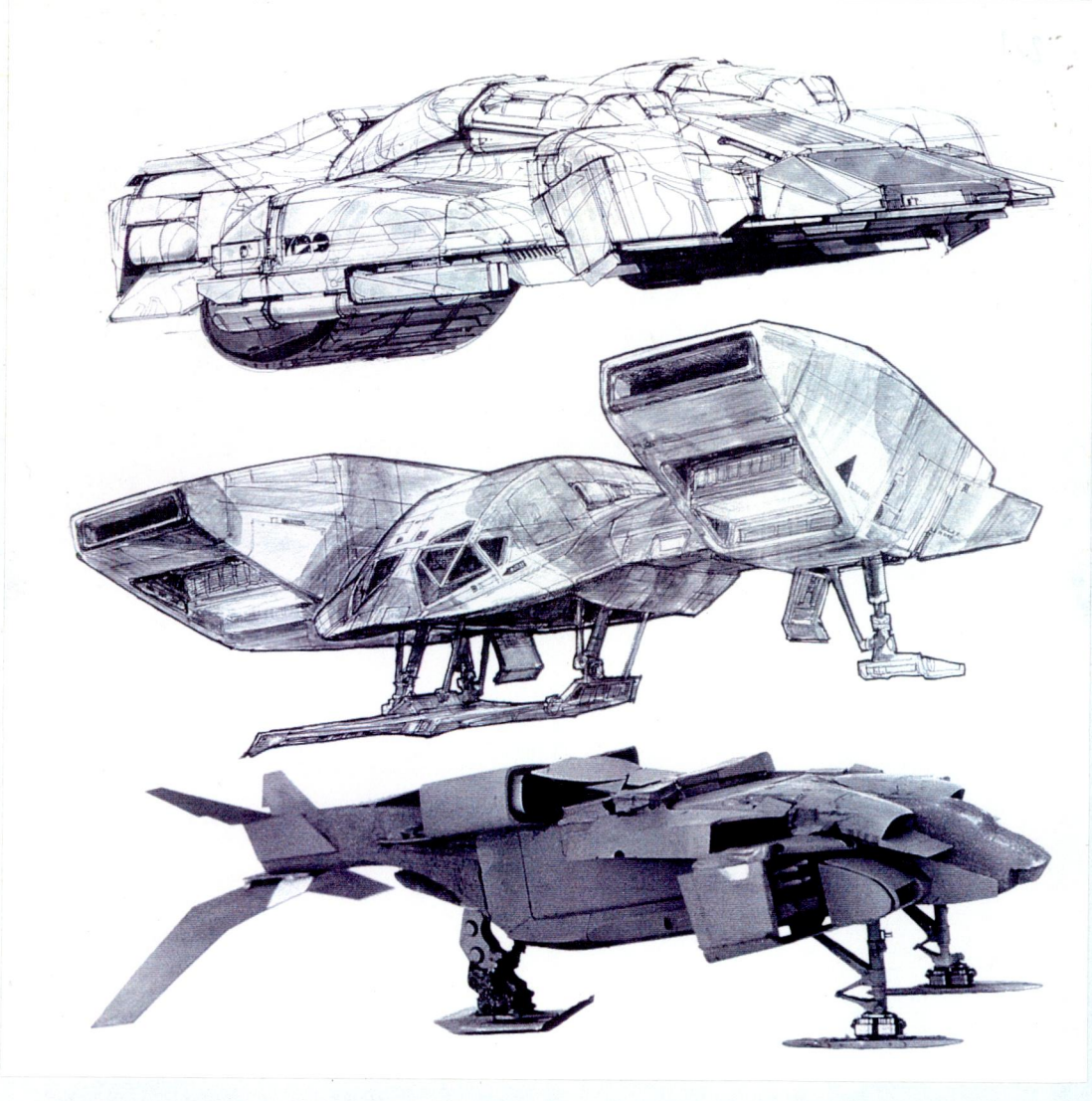


Fig. 21: Dropship Concepts: Three different concepts for the marine dropship from Aliens, designed by, from the top, Syd Mead, Ron Cobb and James Cameron. Cameron's concept was the one chosen.

personnel carrier, which was built and placed in a similarly scaled version of the *set* which was built at an angle in order to generate the required speed necessary for the scene.

Aliens concentrated on the high tech and hardware aspect of the future. The film opened with the Narcissus escape pod, which provided a visual link with the designed look of the previous film, but the intentions of Aliens from a design point of view were made very clear from the next scene, when a high-tech probe (see **Fig. 22**) entered the Narcissus to examine the ship. Another link, or difference in the establishment of the new aesthetic for this film is evident from the interiors of the Sulaco, with its polished metal surfaces, and over designed hypersleep chambers, which generate the notion of the colonial marines as cyborgs, and which is later reinforced when we see them in their body armour and with their weaponry. The difference between the hypersleep chambers in the two films are deliberately designed so as to reinforce the visual identity of each separate film (see **Fig. 23**). Two of Cameron's favourite themes, time travel and the *cyborg* are elements of the story, with the cyborg, also becoming a design element in the film, with the appearance of the powerloader. Laptops, hi-technology black box products of the eighties are visible and there is also a retro element (going back to the past to seek an interpretation of the future) in the design context of the film. This is evident when the marines, during the course of their encounters with the aliens, produce twentieth century automatic weapons when their own futuristic weapons became unusable. Another (retro) feature of eighties films becomes evident in the product placement aspect of the film, and the fact

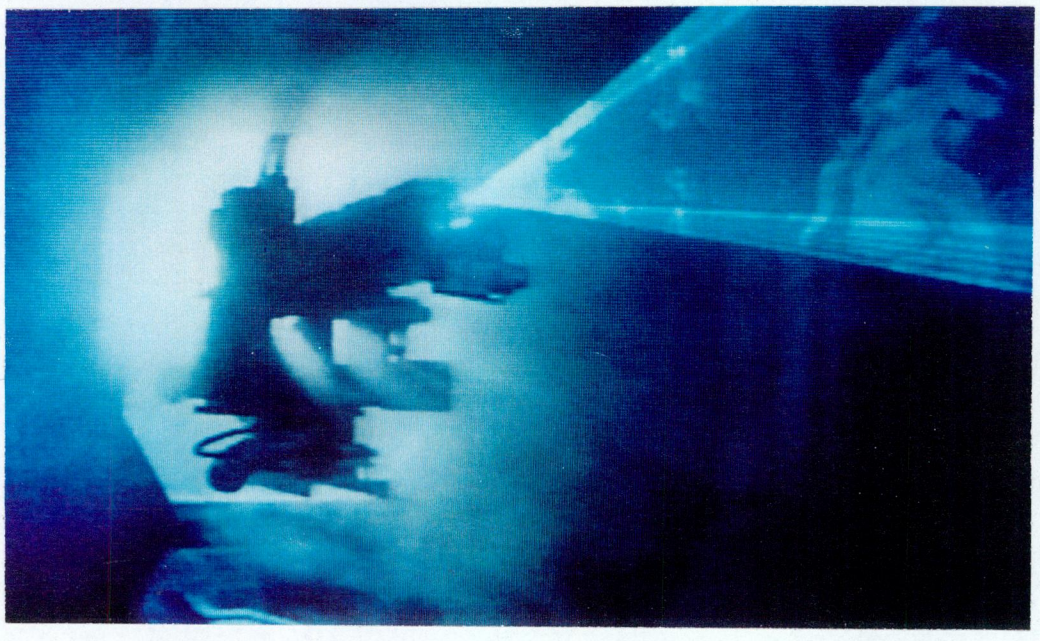


Fig. 22: High Tech Sensor: The high tech probe seen at the start of Aliens examining the interior of the Narcissus. (Image from Aliens).

Fig. 23: Hypersleep Chambers: The over designed and *cyborg* like hypersleep chambers of the colonial marines, as seen in the film Aliens. (Image from Aliens).

that Reebok designed a special pair of 'spaceboots' for the film's lead character and main protagonist, Ripley.

> A great number of factors contributes to the *design* of each image on the cinema screen and each member of the film unit bears some responsibility for one or more aspects of the design content.
>
> (Olson, 1993, p. 26)

However equally as important are the methods by which the audience perceives these images and therefore the design of the film. Thanks to the *persistence of vision*, we can see the images, but how do we perceive these images and therefore the design of the film that we are viewing?

This is linked to the composition of the frame which:

> . . . . relates the representational and interactive meanings of the picture to each other through three interrelated systems: (1) *Information value.* The placement of elements (participants and syntagms that relate them to each other and to the viewer) endows them with the specific informational values attached to the various 'zones' of the image: left and right, top and bottom, centre and margin. (2) *Salience.* The elements (participants and representational and interactive syntagms) are made to attract the viewer's attention to different degrees, as realised by such factors as placement in the foreground or background, relative size, contrasts in tonal value (or colour), differences in sharpness, etc. (3) *Framing.* The presence or absence of framing devices (realised by elements which create dividing lines, or by actual frame lines) disconnects or connects elements of the image, signifying that they belong or do not belong together in some sense.
>
> (Kress, 1996, p.183)

The *production designer* must be aware of the above concerns, but it is the *cinematographer* who will ultimately decide on the final composition for a scene. In Alien[3] (David Fincher, 20th Century Fox, US, 1992) for example:

> Fincher's predilection for extreme low angles emphasises the oppressively massive scale of the combination prison/hospital/blast furnace (Foucault in the twenty-sixth century) set. His refusal (whether intentional or not) of the conventions of continuity editing (most of the film is shot in close-up: what long shots there are could hardly be

considered 'establishing') results in a space that's all the more confining for being without discernible boundaries.

(Film Review, Sight and Sound, Vol. 2 No. 10, October 1992, p. 47)

Scott came up and developed a style which Cameron continued with and it centred around the roughness of space. Cameron's tremendously visceral sequel to Ridley Scott's original film was the rarest of phenomenon, a film that builds on that which was established by the first, but also goes on to define its own unique identity. James Cameron stamped his 'hi-tech' trademark on the film and in so doing set a task which would prove to be impossible for the creative and design teams who were to work on a sequel to his film, the subject of our next chapter; Alien^3 (David Fincher, 20th Century Fox, US 1992).

The Future as History: Alien^3

The Future as History: Alien^3

This chapter will examine the third, and for the moment, final film in the Alien series - Alien^3 (David Fincher, 20th Century Fox, US, 1992). Alien - Resurrection (Jean-Pierre Jeunet, 20th Century Fox, US, 1997) is currently in production with a summer 1997 release date. Alien^3 will show in many ways how this is the most unique film in the series , even though it had an overall vision that was ultimately not fully realised. As seen from the previous two films, the future is not going to be a pleasant place to live, and Alien^3 perpetuates this harsh bleak view of space with a cold and pessimistic outlook on the future.

The final film in the Alien trilogy is unique for a number of reasons. Firstly, it is set in a completely low-tech future environment and as such is in complete contrast to the first two films. Here, there is no major contrast between the human and alien environments, as both lifeforms must adjust and adapt to their new surroundings, the humans as convicts in their prison, and the alien as a visitor and intruder there. And as we have seen already, the alien is highly specialised in adapting to new environments. The setting for Alien^3 is on a near derelict mining planet, and is a colony/prison that is worked for 'the company'. It is an almost monastic/medieval community (lit by candles) with no high tech weapons, just fire - a huge irony given that this is a film set in the future! The prison compound (it originally appeared in the script as a monastery) on the planet surface is surrounded by huge industrial cranes, more common in a shipyard, while the interior is lined with stone walls lit by candles. Its design influence is drawn from the past, and is expressed in such a way as to create a familiar yet somehow futuristic

environment and 'look' to the film: "The newest thing in science-fiction motion picture design is the past." (Sennett, 1994, p. 129)

The second element in this film is again the design of the alien creature. What is interesting in this film is that for the first time, the creature is not a hybrid of a human, but is that of a dog. So now this creature, while being totally new, will also have in its design characteristics, a combination of both previous alien creatures, and now that of a dog (see **Fig. 24**). This decision was taken by the film's makers so as to introduce us to a new 'strain' of the creature. They also wanted speed to be the essence of this particular creature, and this had to be incorporated into it's physical appearance. They achieved this by making the creature a lot more aerodynamic and sleeker looking, when compared to the other creatures in the previous films. It is interesting to note here that Giger was asked back to work only briefly on this film, so his input was not as considerable as what he contributed to Alien. Giger tried to produce an alien for the third instalment of the film that was ; ". . .more [a] beast like Alien, very fast and going up walls and on the ceilings. . . " (The Making of Alien^3, Backstage Productions for 20th Century Fox, US, 1992) The alien of the first film was overall more human like, than the one of Alien^3, which was to be what the director, David Fincher called a "freight train crossed with a jaguar. . . . it was to be much faster, more cunning and much more lethal than we have ever seen before." (The Making of Alien^3, Backstage Productions for 20th Century Fox, US, 1992). But the appearance and look of the finished creature in the film was in fact the work of another completely new (to the alien series) design team, namely those from the

Fig. 24: Alien³ Creature: The new creature design of the alien from Alien³, more organic looking and based on the anthroponics of it's host in the film, a dog.

animatronic creature design and creation group, Amalgamated Dynamics (Tom Woodroof and Alec Gilles Jnr).

> We wanted to get to the look of the alien in Giger's paintings, rather than what he had done on the suit in Alien. We tried to give it a more organic, sculptural feel and remain truer to his concept than even *he* had been.
>
> (Zealots & Xenomorphs, Cinefex, No.50, May '92, p. 32)

The appearance of the alien this time, was to be more animal like and overall more elegant. It was to have the same head, but a different body. Due to the anthroponics of the final version, it was decided to depict the full motion sequences of the adult alien via visual effects and an intricate rod puppet (see **Fig. 25**).

From a design point of view, this final film in the Alien trilogy is very interesting. As mentioned above, the contrast between the human and alien environments is not as much in evidence here as it was in the previous two films in the series. In Alien^3 the film's *production designer*, Norman Reynolds produced mammoth and striking sets which he used to get away from the expected science fiction look. He also tried to invest in the overall film "the smell of realism" (The Making of Alien^3, Backstage Productions for 20th Century Fox, US, 1992), an idea he had picked up from George Lucas while working as an *art director* on the Star Wars series of films. Alien^3 has a proto industrial look, with wire frames and steel girders, lit by candles protruding from background. The *sets* of the third film, with their massive and imposing scale (see **Fig. 15**) create a cold atmosphere which gives a sense of imposing space which goes further to emphasise the complete isolation of Ripley.

Fig. 25: Alien³ Puppet: Using *bluescreen* composition techniques, the unhuman-like motion of the creature from Alien³ was created with the aid of a rod puppet.

This film however, does set an interesting premise in regard to the whole area of 'Retro-Design'. In film terms, this is the idea of a future society that exists and is based around technologies from the past, and it involves the establishment of a visual culture based on one from the past, for example: the low tech standard of the almost Victorian medical equipment of Alien^3 when compared to the high tech equipment seen in the medical lab of Alien. This retro look is always based on a visual culture which has rather eclectic design influences. This could be said of the overall look of Alien^3, a film of the nineties, as well as of industrial design from the same period, which has produced the likes of the retro looking Philips video recorder, which has as part of it's display, an analogue clock (see **Fig. 26**), which replaces the perfunctory digital display on all models.

Alien^3 was one of the first big budget science fiction films of the 1990s to adopt this type of approach, and it seems to have set a trend for the overall look of certain futuristic films of this decade, for example: Twelve Monkeys (Terry Gilliam, Universal, US, 1996) and The City of Lost Children (Jeunet & Caro, Lumiére, France, 1996) to name but two. What this approach also gives is a very eclectic appearance to the overall finished look of these films, which have a grandeur in their simplicity. The visual settings of Alien^3 have a lot in common with Terry Gilliam's vision of the future as seen most recently in his film Twelve Monkeys (see **Fig. 27**). The reason for this is that the conceptual architect/designer Lebbeus Woods worked on both films. In both, the future is seen as a somewhat futuristic version of the past, but not advanced in a technological way, with low-tech equipment operated by gears and pulleys being able to achieve very high-tech results - time travel in

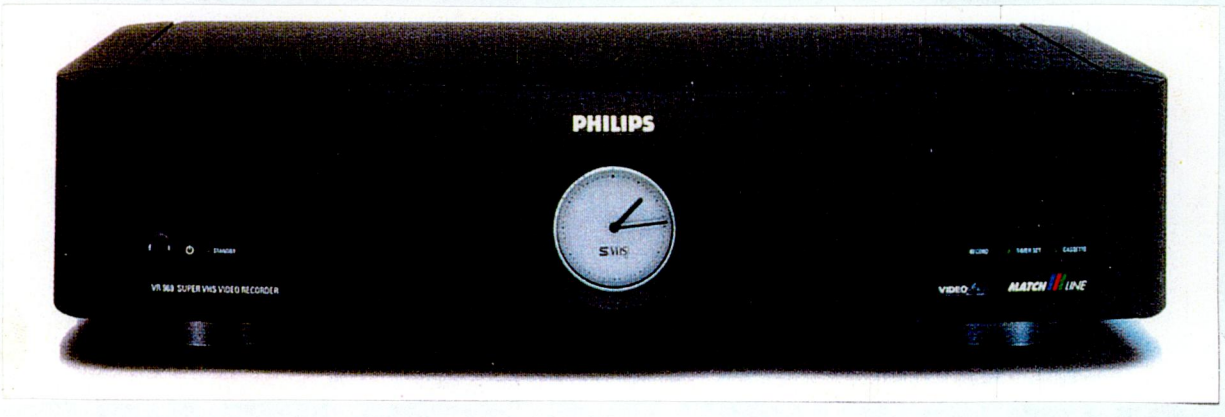
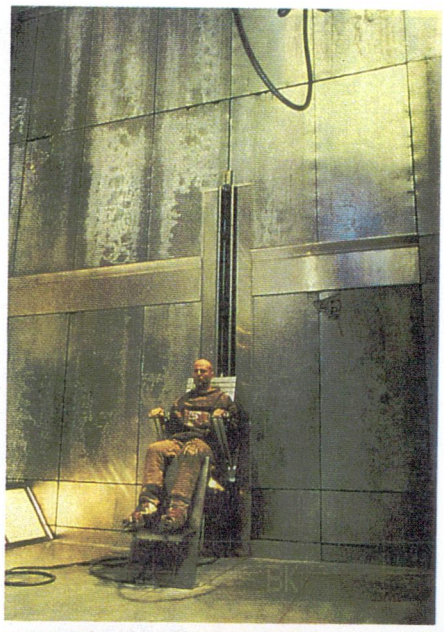


Fig. 26: Philips Video: An example of Retro design from the nineties, the Philips VR563 SVHS video recorder.

the case of Twelve Monkeys. Again the cosmetics are gone from this future, with the internal workings of equipment being visible during their operation. Like Gilliam's earlier film Brazil (Terry Gilliam, Universal, US, 1985), "High tech equipment is undesigned to make it more sinister" (The Shape of Things to Come, I.D. Magazine, Vol. 33, March/April 1986, p. 56). In this sense they are not too far away from the post holocaust scavenger look of films like Mad Max (George Miller, Warner Bros., Australia, 1979) and Water World (Kevin Reynolds, Universal, US, 1995), where inhabitants of these future worlds (and the film's designers) have to make do with what they have, and create a future which is a hybrid from past cultures and their trappings (see **Fig. 28**) This shows the inventive nature of humans, creating as they do, a rebuilt society using adhoc mixtures of technologies.

If we examine another futuristic sci-fi film of the nineties, namely Strange Days (Kathryn Bigelow, 20th Century Fox, US, 1995) we see that its look and overall visual design is basically the same as today's reality, except that it's based on a sort of hyper reality, which is in keeping with its cyberpunk pretensions. Cyberpunk links have been suppressed in Alien^3, even though William Gibson (author of Neuromancer) worked on a draft of the script. Cyberpunk is primarily a literary world, one in which a lot of it's elements are idea based, and therefore very hard to translate into three dimensions. Gibson however, has cited the first Alien film as a huge influence on the basics he used for the generation of the visual ideology of this literary world.

Due to the exceptionally poor quality of the script for this film, (everything has been subordinated to visual effect) Alien^3 had huge production difficulties. It's range of ideas and the somewhat eclectic nature of



The Chair
Left: We used three power stations, two in Philadelphia and one in Baltimore. Here in Baltimore we built two walls and dressed it for the interrogation room. An existing place has a structure and a lot of detail to begin with. I always enjoy that more. We were never going to get to Jeffrey Beecroft's design or my sketches. While walking around this power station, I said, "This is what we're going to use." It was too small, with many things wrong, but "end of hunt!" I said "We work it within that, do what I've sketched out and stick it in and make it work." And this came out of it. The chair and the walls came from Lebbeus Woods, an architectural visionary who does these amazing drawings. The sense of what he was doing intrigued me.

Cole in the Surface World
Left: In the script it wasn't the middle of winter but the studio delayed our start. But I realised that it would be more quiet, more desolate and so we created snow. We had a corner of City Hall which is like a big traffic island. We commandeered a little bit out to about 50 feet, and built a little lip up and covered it all with foam blankets. That was enough because we couldn't see the cars, though we stopped traffic when shooting because the odd bus would have ruined the thing. Then afterwards, using computers, we broke masonry and had trees growing out of the top, and we put the snow flurries in afterwards. There are people out in Texas that make their living doing Snow Flurries on computers and we bought some and stuck them on.

The Multi-screen Interrogator
Above: I love the idea of being interrogated in a room with all this technology between you and the interrogator. It's that nightmarish intervention of technology. You try to see the faces on the screens in front of you, but the real faces and voices are down there and you have these tinny voices in your ear. To me that's the world we live in, the way we communicate these days, through technical devices that pretend to be about communication but may not be.

Fig. 27: Twelve Monkeys: A film similar to Alien³, Twelve Monkeys created it's future world by basing it on an eclectic hybrid of the past.

it's look came from the variety of scripts and ideas/influences that went into the final shooting script, which wasn't ready at the time when filming started. This led to *sets* being designed, constructed, and torn down again as the storyline changed. It infused the Alien concept with a depressing and nihilistic outlook.

The alien in these films was given physical form in purely cinematic terms, in respect to something that would truly terrify it's audience. It also succeeded on a design level as the film series created a creature, the like of which had never been seen before on screen or anywhere else. So while the creature may have been recognised on a subconscious level by the audience as the embodiment of their primeval fears, it wasn't recognised on a physical level, so it was new to them. And this is the function of industrial design in many respects: to introduce as packaged items, what essentially may be new technologies and products to the general population, which will improve their daily lives, and which at first many people will not have seen, but on a subconscious level, people will feel that they have a connection with.

The Alien trilogy has:

> . . . established a down and dirty look and feel to the future in outer space which is unique and in sharp contrast to the sterile and antiseptic worlds of it's predecessors. . . . and led to the Alien films carving out their own genre in the world of science fiction films.
>
> (The Making of Alien[3], Backstage Productions for 20th Century Fox, US, 1992)

Each film in the series turned out to be what people were not expecting from the future, and Alien^3 was no exception. The final word on this troubled film will go to the cyberpunk author William Gibson who contributed an unused script which was considered unfilmable:

> I think its success will hinge on the look of the film. If it looks great it will be very satisfying; if not, there will be a problem.
>
> (Alien^3, Cinefantastique, Vol. 22 No. 6, June 1992, p.13)

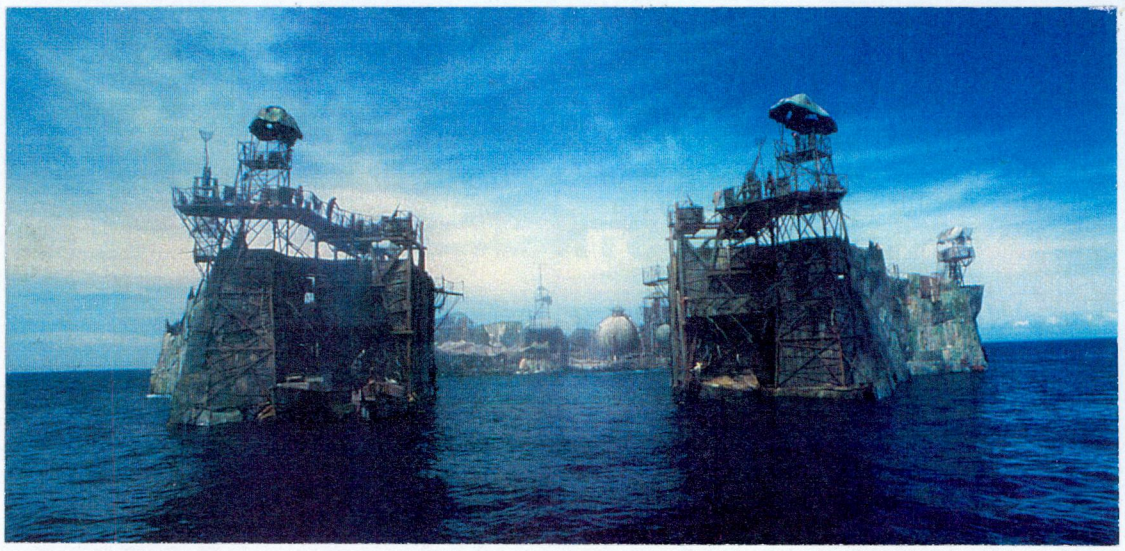
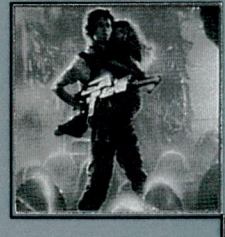


Fig. 28: Waterworld: An example of the scavenger look of the future, also common in films with a retro vision of the future.

Fig. 29: Toy Story: The first film where characters and settings were generated completely within a computer.



Conclusion

Conclusion

In the Alien trilogy we have seen how design in a film can influence the overall direction of that film. In the previous three sections we have seen how the films of the Alien trilogy have been given, through design, a unique visual culture and cinematic style that is both classic and at the same time contemporary with regard to the design of today. They have become the equivalent of a design 'classic' in the same way as a VW Beetle or the Coca-Cola bottle has achieved this status in the field of industrial design. The films succeed in presenting to us a view of a realistic future environment as opposed to a fantastical one. The actors live in a realistic, if imaginary and timeless world, created by design.

> It is simply a question of finding for each film the setting best calculated to situate the action geographically, socially and dramatically.
>
> (Barsacq, 1976, p. 122)

This is the function of design in film, creating a realistic visual culture, and making it believable to an audience that lives in an altogether different one.

> The success of the film [2001-A Space Odyssey] had little to do with the story being told. It was the visual magnificence of the film - the purely visual experience - that attracted attention.
>
> (Hutchinson, 1987, p. xvii)

Design's function in a film is purely visual, it is to lend credence to, and create the mood of, the script as envisioned by the film's director.

In reviewing the previous chapters and examining the design and visual culture of the three films (in relation to other films and products from their eras), it becomes evident that design is an essential element in a film that a spectator is not immediately aware of, but which makes a huge impression on their subconscious. However, just as all the minor design details of a film can come together to improve the overall cumulative look of a

film, the opposite can be said of an accumulation of repeated minor errors in a film which is enough to falsify completely the style and appearance of a particular film. While the goal of designing a realistic visual culture for the world of a film may be at times difficult, it is ultimately more achievable than the design of everyday products and objects for the real world. This is so because subjects of prophecy and nostalgia are more simple than dealing with the design problems of the present reality.

Design on film has to embody a director's ideas and requirements for the look that his or her film is going to have. As Ridley Scott would later say himself, "Sometimes the design is the statement" (Sammon, 1996, p.1). So a director with a strong visual sensibility is an essential part of a film like this, and he/she must also be backed up by a creative and innovative design team. This was certainly the case with each of the three Alien films, and the results are up there on screen for everyone to see.

Design in film, can be applied to all the separate elements of that film, in the sense of designing shots, composing the frame as well as the overall look of it, positioning the camera, designing effects and effects sequences, etc. (Refer to *mise en scene*, *mise en cadre* and *découpage* in the glossary) But overall design in film can push the limits of design in general and as a result it can push the limits in the future, for what is to be considered or referred to as industrial design. Industrial design is ultimately a combination of artistic and technological sensibilities and requirements. An example of this, and of the integration between design and film (and of design on film) is shown by:

> . . . . Edge Innovations, a Palo Alto [California] based venture that specialises in creating sophisticated models for film. Established three

Fig. 30: Mars Attacks: An example of realistic interaction between a computer generated character and a live action actor and film set.

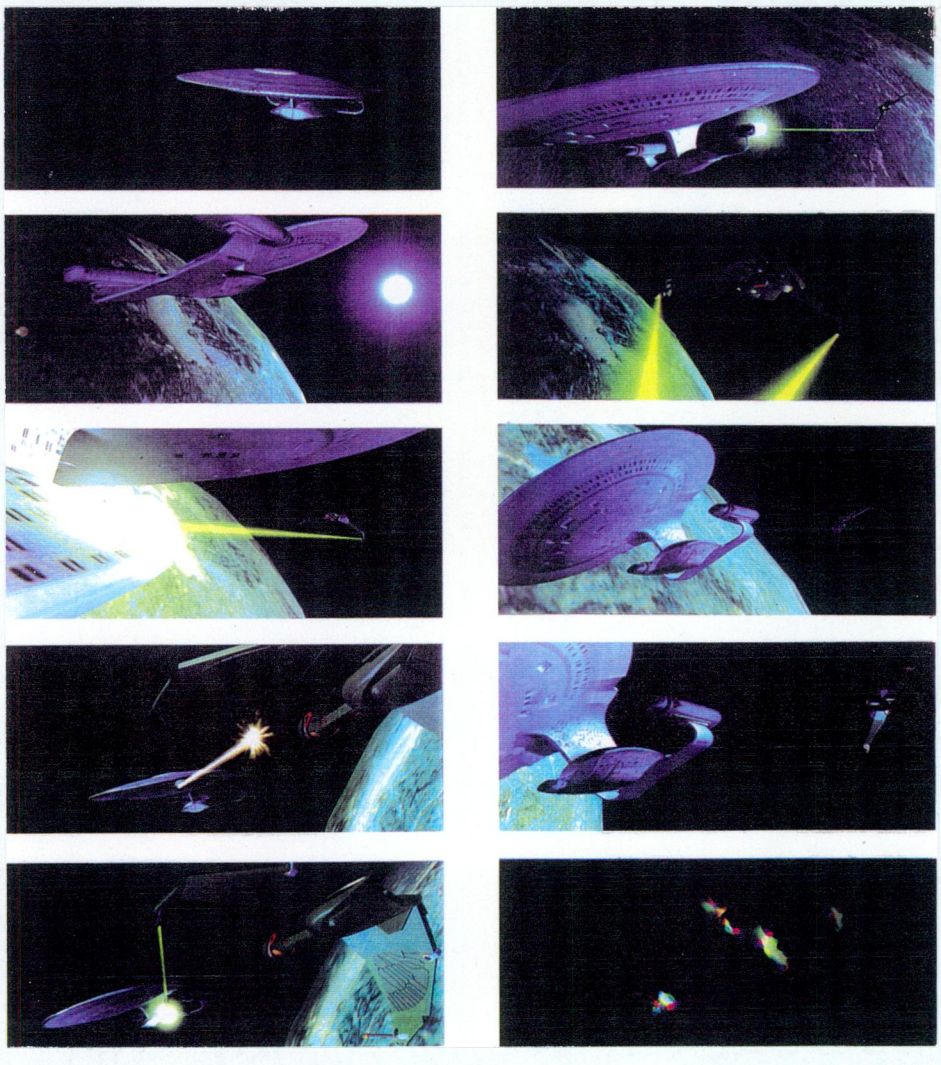


Fig. 31: Digital Storyboards: Complex storyboards, essential to all departments on a film for visualisation of the director's intended look for a film, are now being created with the assistance of computers. These are from Star Trek: Generations.

> years ago, Edge is the movie animatronics division of the product development [and design] firm IDEO headed by [Walt] Conti. Conti studied with IDEO president David Kelly at Stanford's Product Design program, where he imbibed some of Kelly's thinking - especially his career long tendency to push the outer limits of what is defined as industrial design. . . . . Edge brings a new design sensibility as well as a new level of technical sophistication to creating animatronic models for film.
>
> (Whale Tales, I.D. Magazine, Vol. 40 No. 6, November 1993, p. 58)

Design in film is purely visual, its function as such, is to lend plausibility to the environment in which the film is taking place. And the truly successful films, from a design point of view, transcend this to become completely believable. Ultimately, designers design for a real world, whether it exists on film or in reality, and objects that work well and compliment their environment, either in life or celluloid, will be the ones that succeed.

The link between the two fields is also illustrated by the career path of one Guy Dyas, who graduated from the Royal College of Art's industrial design course in 1991 and went to work for Sony in Japan, designing their 'My First Sony' range, and:

> . . . he then crossed the Pacific last autumn to a dream job in San Francisco as an art director with George Lucas's Industrial Light and Magic, the design firm responsible for the special effects in such films as Star Wars, ET and Jurassic Park. Dyas is about to start as an art director on his first feature film, Twister, which is about tornadoes in the American mid-west.
>
> (Design Counsel, The Sunday Times (Style Supplement), 27 August 1995, p. 24)

Certain products make a statement even before they are used, the same can be said of the role of design in film. Whatever a director wishes to say in a scene will be said in the set before it is said in the action.

Film shapes our imaginations and fills our memories. Cinema is a showcase for all art, but what gives films a realistic setting (be it past, present

or future) is that if the objective is, as it was in the Alien trilogy, the strength of its visual environment, which comes about through the integration of it's many design elements, which is created by design - a controlled art. And this is the same for the products and objects of industrial design; they define the environment and setting in which they find themselves, which is life today as we are surrounded by the objects of industrial design.

The future of design on film is increasingly and evidently going to be one of digital nature. Films like Toy Story, (John Lasseter, Walt Disney, US, 1995) which "was shot on location in cyberspace" (Have we Created a Monster, The Sunday Times (Culture Supplement), 17 March 1996, p. 13) have shown the possibilities of completely computer generated (*C.G.I.*) films (see **Fig. 29**). Also films like Water World and Mars Attacks (Tim Burton, Warner Bros. US, 1996). have demonstrated the successful integration of photorealistic characters and objects (which had to be designed first) into a traditional film setting (see **Fig. 30**). Indeed Water World will be remembered for many things, one of them will being the fact that it was the first film to have a fusion of practically and digitally created production design elements. Also, other essential elements of the design and filmmaking process, such as *storyboards* are also now being created on computer (see **Fig. 31**).

Advantages of this type of production method are numerous. As the digital techniques become more widespread their cost will drop, and their increased use will lead to a minimal need for the construction of large-scale sets, location showing, or the employment of thousands of extras. In the case of Toy Story: "The 3-D geometry of the characters [can now go] straight to the milling machines [*CAD/CAM*]in the toy factories" (Have we Created a

Monster, The Sunday Times (Culture Supplement), 17 March 1996, p. 13). Also today, digital *story boards* are being used to create and plan sequences. Very soon there won't be a 'computer' look to a lot of the work done in the digital realm, and then anything will be possible. We must remember however, that the computer is just a tool and that these new digital techniques are there to support the essence of filmmaking, which is to tell a story, not to supplant it. Everything, and this includes technology in the guise of *visual effects* and design elements, must be subservient to the story. Computers will change storytelling, and as there will not be any limits with this new medium, so a new mythology for stories will develop. It seems at the present that the only limitation is our imagination, and money! New developments, such as *virtual sets* are freeing production designers and extending the overall scope for design on film. In fact, soon the separate fields of *production design* and *visual effects/special effects* may merge in some instances as the differences between them are slowly disappearing. This was especially the case in last summer's film Twister (Jan De Bont, Warner Bros., US, 1996) where the 'look' of the actual tornadoes on film had to be designed (see **Fig. 32**)

The future of industrial design may well be one where the work that industrial designers do will be impossible to define and the range of contributions that they may make to people's lives will be immeasurable. The work they could do would range in everything from the design of computer interfaces and environments to the virtual generation and depiction of planet surfaces and landscapes, to the design of completely photorealistic digital films and entertainment media.

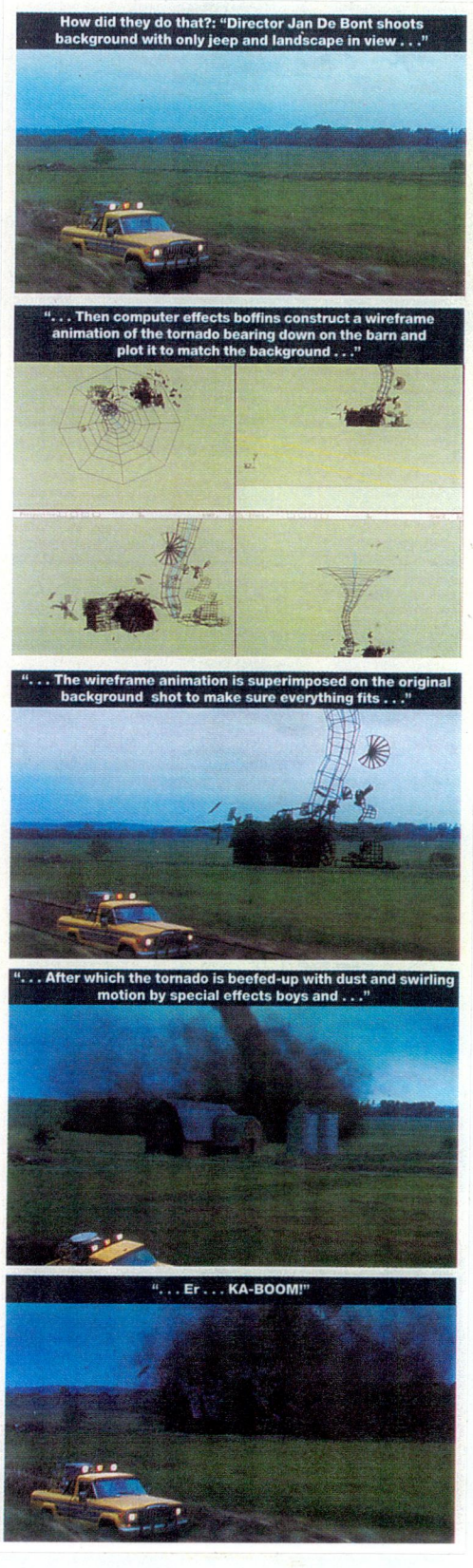


Fig. 32: Twister: The design and construction of digital tornadoes.

This thesis ends by saying, that, contrary to the dictum 'Truth is stranger than fiction' the role of design in film is called to demonstrate that fiction transcends truth. The Alien trilogy demonstrated that each new film in the series brings a myriad of design possibilities. The future of design in general is bright and the spirit of confidence first witnessed in 1979 with Alien is indeed alive and well today. Current developments in technology are continuing to push the overall levels of design in both the fields of production and industrial design, and continue to ensure that design overall, promises to hold for the future the same potential for creative development and excellence as it did in earlier decades.

Appendix A: Thesis Glossary

Animatronics: These form a section of special effects for films. They are part of the creature design element of a puppet or model for a film and are basically the internal movement devices which give expression to the creature/puppet. They principally consist of remote or cable actuated motors, drivers and servos.

Art Director: This is a person who works under the production designer and acts as his assistant in designing a film's look. They also head the separate sections of the art department and co-ordinate these according to the production designer's instructions.

Blue Screen: A process of combining separate images using a travelling matte. Involves actors or objects being filmed in front of a blue (or green) coloured screen and later being either optically or digitally composited into a scene.

CAD/CAM: Acronym for computer-aided design and computer-aided manufacture, disciplines which are an integral part of industrial design but also have special effects applications in such areas as computer graphics and motion control (computer controlled movement of cameras and models).

Cinematographer: Also known as the director of photography or, in England as the lighting cameraman. Responsible for the camera and the lighting and, therefore the quality of the image. Liaises with the film's Director and Production Designer to create the look of that film.

Computer Graphics Imagery (C.G.I.): Refers to the three dimensional computer images and animation completely generated in a computer.

Conceptual Designer/Artist: An essential member of the art department on any science fiction/fantasy related film. Works closely with the film's Director on developing the look of a film, and produces drawings/sketches/renderings of objects from the film so the Production Designer has some ideas of the directors requirements for that particular film.

Cyborg: The man as machine, a futuristic living robot/android created by cybernetics, the branch of science dealing with man made biological systems.

Découpage: The design of the film, the arrangement of its shots. "Découpage Classique" is the French term for the old Hollywood style of seamless narration.

Film Noir: Originally a French term now in common usage, to indicate a film with a gritty, urban setting that deals mainly with dark or violent passions in a downbeat way. Especially common in America cinema during the late forties

and early fifties. Has also created sub-genres, such as Future Noir, if the film has a futuristic setting.

Frame: 1. Any single image on the film. 2. The size and shape of the on the film, or the screen when projected. 3. The compositional unit of film design.

Genre: A type of film. Certain archetypal patterns, such as the Western, the Gangster, the Science Fiction film, and the Detective Story.

Matte Paintings: These are used to provide expansive establishing shots and extend soundstage and back-lot sets. They have been a key design and effects technique since the earliest days of filmmaking. Traditional matte painting is rendered with brush and oils on glass, a surface that will not buckle or warp and thus betray the two-dimensional nature of the medium. However, they are now also generated with the aid of computers and digital tools.

Mise En Scene: The term usually used to denote that part of the cinematic process that takes place on the set. Literally the "putting in the scene": the direction of actors, placement of cameras, choice of lenses, etc.

Mise En Shot, Mise En Cadre: The design of an entire shot, in time as well as space.

Model/Miniature Shot: A shot using a scale or full size model instead of the real objects or locations. It is especially useful for staging great disasters or a scene which because of the cost or complexity involved would be best achieved in miniature. Model building is an art form in its own right, but today it is being superseded by the digital revolution in special effects.

Narrative : Story; the linear, chronological structure of a story. Every other element of a film, cinematography, design, music, etc. should be subservient to this.

Persistence of Vision: The physiological phenomenon that makes cinema and television possible. An image is retained on the retina of the eye for a short period after it is seen so that, if another image takes its place soon enough, the illusion of motion can be created. Related to the PHI effect, which is the psychological perception of motion.

Production Designer: An art director who is responsible for designing the overall look of a film and he achieves this through working closely with the film's director. He is in charge of the film's design and also of co-ordinating the separate art departments of a film during pre-production including set design, costume design, effects design, prop design etc.

Props: These are objects designed and created by the art department of a film, to be used by the actors, or else to fit into the background of a set, and aid in creating the overall desired effect and look of a scene as envisioned by the film's Director.

Scene: A complete unit of film narration. A series of shots (or a single shot) that take place in a single location and that deal with a single action.

Sequence: A basic unit of film construction consisting of one or more Scenes that form a natural unit.

Set: The location of a scene, usually artificially created on a sound stage and designed by a Set Designer (under the supervision of the Production Designer), who produces a set of technical drawings against which it is constructed. They consist of constructed buildings and environments designed to represent real or imaginary locations called for in a film script.

Set Designer: This person is a member of the art department and liaises with both the Production Designer and Art Director(s) in deciding on the sets and is responsible for their construction.

Set Dressers/Decorators: These are the members of the art department responsible for the props and details in the background of sets and scenes. They conduct research into the type of details that would be correct for a set and a specific scene.

Special Effects: A broad term for a wide range of devices and processes, including some kinds of work performed by stunt men, Model Shots, optical effects, in camera effects, Matte shots, etc. Generally refers to an effect that is achieved physically. Has been revolutionised in recent years by the advent of the computer and digital effects.

Stop-Motion Photography: Also known as claymation, this is a technique in which the camera operates one frame at a time, allowing objects to be moved and adjusted between frames. Responsible for much trick photography, it is also an art form in its own right, related to animation, except that this technique is three dimensional.

Story Board: A series of drawings and captions (sometimes resembling a comic strip) that shows the planned shot divisions and camera movements of the film, its découpage. Essential in the planning and execution of intricate and complex action or special effects orientated sequences. Story board artists are known as "wrists".

Virtual (or Synthetic) Characters or Sets: Three-dimensional characters (synthespians or vactors - virtual actors) and sets that have a photorealistic quality yet are created in the digital realm. The film Toy Story was entirely made up of these two elements.

Visual Effects: Any visual manipulation of motion picture frames, in the past done optically, but today these effects are primarily by digital means (the use of computer technology).

Visual Effects Designer: The person who is responsible for how a particular visual effects sequence will look, and how it will be created. Oversees computer animators in achieving this. For example, they would decide the exact shape of the tornadoes in the film Twister.

Wild Walls: The walls of a set that have been constructed in such a way that they can be easily moved to facilitate that positioning of the camera. Camera angles are thus obtained that would not be possible on a practical set (one which has working doors, windows etc. and doesn't allow for wild walls). The integration of these items into an actual set is supervised by set designers.

Appendix B: Film Credits

ALIEN Credits:

Creative Department:
Ridley Scott - Director
Derek Vanlint - Cinematographer
Michael Seymour - Production Designer
Les Dilley & Roger Christian - Art Directors

Design Department:
H.R. Giger - Alien Design
Dan O'Bannon - Visual Design Consultant (and also Screenwriter)
Ron Cobb - Concept Artist
Jean 'Moebius' Giraud & Chris Foss - Conceptual Artists
John Mollo - Costume Design
Carlo Rambaldi - Animatronic Effects Creator

ALIENS Credits:

Creative Department:
James Cameron - Director
Adrian Biddle - Cinematographer
Peter Lamont - Production Designer

Design Department:
Ron Cobb - Conceptual Designer
Syd Mead - Conceptual Artist
Stan Winston - Alien & Animatronic Effects Creator
Emma Porteous - Costume Designer

ALIEN^3 Credits:

Creative Department:
David Fincher - Director
Alex Thomson - Cinematographer
Norman Reynolds - Production Designer

Design Department:
H.R. Giger - Alien^3 Creature Design
Tom Woodroof & Alec Gilles Jnr - Alien & Animatronic Creature Effects Designers
Lebbeus Woods - Conceptual Architect
Gregory Pruss & Jake Scott - Conceptual Artists
Bob Ringwood & David Perry - Costume Designers

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Bladerunner (Ridley Scott, Warner Bros., US, 1982)

Brazil (Terry Gilliam, Universal, UK 1985)

City of Lost Children (Jeunet & Caro, Lumiére, France, 1995)

Mad Max (George Miller, Warner Bros., Australia, 1979)

Metropolis (Fritz Lang, UFA, Germany, 1926)

Star Trek 1-8 (Various Directors, Paramount, US, 1979-1996)

Star Wars Trilogy (Various Directors, 20th Century Fox, US, 1977-1983)

Strange Days (Kathryn Bigelow, 20th Century Fox, US, 1995)

Things to Come (William Cameron Menzies, London Films, UK, 1936)

Toy Story (John Lasseter, Walt Disney, US, 1995)

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