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Science Fiction Film

A Critical

Introduction

New York: Berg, 2001

PP. 7-25,

41-50.

Genre, Theory and Science Fiction

A definition of the science fiction genre from an academic perspective might focus on thematic areas around technology, science, futurism or the figure of 'the Other'. An equally valid definition might come from popular identification of iconographic elements such as flying saucers, robots, ray guns and aliens. A third discussion of the term, from an industrial perspective, might focus on special effects or spectacle. Any attempt to understand the genre must engage with all three and accept that further viewpoints would be equally valid. However, academic and popular criticism, as well as individual audience groups, often desires limitations on genre, a set of rules or conventions within which films are, or are not, contained. Yet genres do not exist *a priori*; they are not a natural phenomenon that can be precisely catalogued and labelled. Rather than pre-existing forms, genres are cultural creations that are formed and reformed on a regular basis, prone to shifts in emphasis and meaning. A genre definition such as 'science fiction' can be used regularly in film production (directors, producers or actors might refer to their project in generic terms); by film audiences (discussing whether they want to see a specific genre); within advertising materials (promoting elements that are seen as intrinsic to the genre); or by critics or academics reviewing or writing on the film or genre. In each instance, the exact definition of what each individual means by the term 'science fiction' is more fluid than traditional genre boundaries allow. Equally, their definition will be different from what a producer, audience member or critic might have meant by the term 'science fiction' ten, thirty or fifty years ago. Defining the links between these disparate groups, historical meanings and the industrial and cultural backgrounds that such genre films are produced (and discussed) within is the aim of this current chapter, although it is an approach that will echo through the rest of the book.

It may be possible to say that everyone knows what a science fiction film is to them, within their own definitions and experience, but there is no guarantee that those opinions would coalesce into a more rigid definition (Neale, 1990). Many genre theorists look to (contemporary and historical) industrial discourses, or to the film text itself, to identify generic definitions or, at least, some generic common ground. Within science fiction, stories based around advanced technology, robotics, space exploration or time travel are likely candidates of such standard genre narratives. Yet such selections are continually open to challenge: the story of *Starline* (2000) was built around advanced technology creating a virtual actress, but the film is more concerned with romance and Hollywood satire; *Short Circuit* (1987)

features a central robotic character but shares many similarities with broader family films of the period. Equally, space exploration is at the heart of *Apollo 13* (1997) and *The Right Stuff* (1978), but these films make claims to biographic and dramatic status; time travel, perhaps the most likely candidate, features as a plot device for romance-based films such as *Kate & Leopold* (2000), *The Lake House* (2005) or *The Time Traveller's Wife* (2009).

This chapter will begin the process of exploring text- or discourse-based definitions of the science-fiction genre, establishing what traits and elements these approaches use, and how generic categories have historically been defined and applied. If genre is a collective exercise (Tudor 1974, 135), a cultural construct that draws from more than simply a series of films (and books, and television shows) that have been identified (and canonized) as something called 'science fiction', then it is important to consider how such shared understanding is created and how it has been investigated academically. Such genre studies have, historically, been overly reliant on an exclusive notion of genre as text: if the study of films within a genre need not look beyond genre films then 'genre histories further the notion that genres are reducible to lists of texts' (Mittell 2002, 30). Expanding genre history beyond the text is a crucial function of modern genre study and, while this book will be concerned with the visual, textual and thematic analysis of films that could be construed as science fiction, it will be equally aware of the popular discourse surrounding science fiction. As such, the book contributes to recent investigations of how such discursive networks have historically shaped perceptions of 'science fiction' as much as the films that are produced and marketed to audiences (see, for example, Geraghty, 2009). However, before moving into a debate about the path for future genre study, it is important to first consider why genre has been so important within both Film Studies and Hollywood.

Describing a film as being 'Science Fiction' is, to paraphrase Andrew Tudor, to state that the film shares something – 'an indefinable "X"' – with other films called 'science fiction' (Tudor 1974, 15). The quest to isolate that unknown 'X' has been at the core of genre studies since it became institutionalized within Film Studies in the late 1960s and through the 1970s. The move towards genre theory has been described as a move away from the auteur theories of the 1950s and 1960s, where the director was identified as a film's main creative force (Hutchings 1993, 60; Hollows et al. 2000, 82). Film authorship studies had been used to identify and define the artistic merits of a sole author who could exploit the rigid production practices of Hollywood to create individual film art, thus claiming higher cultural value for such films and directors. Developed partially in opposition to this (although there has been work on how auteurs used generic conventions: see Kites [1969] 2004; McArthur 1972), genre theory offered a way to think about wider industrial practices in Hollywood – to investigate culture, history, ideology and the generic evidence of the films themselves. Early academic genre studies were dominated by textual and formalist analysis designed to identify (what were seen as) self-contained generic

categories (the Western and Gangster film were dominant examples of this trend: Kites [1969] 2004; Warshaw 1970; McArthur 1972). Film-genre analysis began, therefore, as an attempt to analyse the codes and conventions of a series of films, with the underlying assumption that those films were connected in some way, often around iconographic and thematic traits that were identifiable to 'all' viewers. The Western film was seen as repeating key visuals (the cowboy, the six-shooter and the frontier town) while thematically representing larger cultural and historical oppositions built around the American frontier myth: wilderness and civilization, nature and culture, the West and the East.

Science fiction was not a central example in this initial flourish of genre studies. Although there is no clear reason for its exclusion, issues around juvenilia and cultural superiority may have acted against it. In the mid-to-late 1960s, when genre analysis was popularized, science fiction films were split between larger action blockbusters (*Fantastic Voyage*, 1966; *The Time Machine*, 1960) and lower budget independents (*The Beach Girls and the Monster*, 1965; *Santa Claus Conquers the Martians*, 1964), but both varieties were predominantly popular with youth audiences. Science-fiction films had been tagged with juvenile characteristics since the early 1950s, and this critical reputation has echoed through the decades since. Many critics have attempted to avoid this tag by canonizing certain 'adult' texts (2001: *A Space Odyssey*, *Blade Runner*, and *District 9* (2009) would be pertinent examples here) ahead of those with more popular leanings. Making such distinctions is not a purely academic or critical move: individual audience groups also identify and police their own genre boundaries, chastising others who do not recognize similar borders (Jancovich 2002). These assumptions of superiority around the classification of genre texts are as potent today as they were in the 1960s when the initial work on film genre elided the role of science fiction.

The absence of science fiction from this initial round of genre theory may also have been linked to its lack of auteur figures, its existence in small pockets of production activity across multiple companies and (despite its apparent interests in the Cold War and atomic bombs) a lack of academic interest in exploring its connections to deeper social mythologies.¹ There was also a concern over genre boundaries, most notably between the science fiction and horror genres, with films such as *The Invisible Man* (1933) or *The Thing from Another World* (1951) blurring clear lines where one genre ended and another began. With genre studies preferring stricter border control (as seen in the early success of work on the Western, gangster film or *film noir*), science fiction offered a more challenging case study. Yet, barring the work of Susan Sontag, the absence of science fiction from early genre theory is striking, particularly given its strong visual and thematic content. There is an argument (at least in the 1950s films) for a shared iconography of missile-shaped rockets, flying saucers, and the ubiquitous star field seen in films such as *Destination Moon* (1950), *Conquest of Space* (1955) or *Missile to the Moon* (1958). Equally, like the Western, many science fiction films are fascinated with the idea of a frontier (the

'final' frontier of space would become a common generic reference) and contain a similar thematic opposition between wilderness (desert) and civilization (urban city): it appears in *Earth vs. the Flying Saucers* (1956), *Them!* (1954) and *The War of the Worlds* (1953). With recurring interest in the role of technology, and the figure of the alien/robotic/created 'Other', the genre would present fertile ground for such genre-based criticism from the 1970s on, but remained largely absent from this first moment of theory.

Many of these elements are, of course, situated within the film and assume more than a passing knowledge of a series of film texts. Challenging the belief that the film was the sole location of genre, Andrew Tudor demonstrated that most genre work actually assumed the pre-existence of a generic category, into which critics could place their favourite examples of iconography or thematic similarity. Isolating those films for detailed study required a list of characteristics that could only be discovered after the analysis has been carried out: 'we are caught in a circle that first requires that films be isolated, for which purposes a criterion is necessary, but the criterion is, in turn, meant to emerge from the empirically established common characteristics of the films' (Tudor, 1974, 136). Breaking with the established tenets of genre study, Tudor offered two solutions: accept *a priori* criteria (borrowed from literature, or other sources), or consider the 'cultural consensus' around individual genres (Tudor, 1974). While the former may offer a useful expansion of conventions and iconography, it simply replaces the circular logic of film criteria with earlier criteria from literature. The suggestion of activity outside of the generic film, in the wider culture and audiences, is a more compelling development, but genre theorists have subsequently struggled to quantify how to measure or identify this 'cultural consensus' effectively (indeed, the idea that there is a dominant consensus, rather than multiple positions, is also problematic).

More recent attempts to develop genre studies have investigated the industrial use of genre categories, particularly around production and promotional discourses (Altman 1999; Neale 2000). Films were being produced and specifically marketed as individual types or narratives from at least 1909: *Bioscope* trade posters from the time include the 'Selig Melodrama' *The Witch's Cavern*, Lubin's 'Trick Comic' *Rubber Man* (*Bioscope* 1909b, 22), the Cines-Films' 'Detective Story' *A Treacherous Maid* (*Bioscope* 1910c, 58) and Essanay's *A Western Girl's Sacrifice*, 'one of our best recent Western subjects' (*Bioscope* 1911b, 16). The pre-existence of such industrial and popular categories presents a unique challenge within genre theory. Unlike authorship, which stressed high cultural artistic merit, which stood in opposition to the studio system (and which was decoded by intellectual effort), genre study necessarily embraced the industrialized Hollywood system, populist films and the audience. Genre has often been the means by which Hollywood studios produce, and reproduce, successful products, and 'greenlight' new projects. Financial success brings more products in similar generic categories: the success of *Star Wars* can be linked to the production of *Battlestar Galactica* (1978), *Starcrash* (1979) or *Battle*

Beyond the Stars (1979), for instance: or the growth of family science fiction films in the 1980s after *E.T.: The Extra Terrestrial*. Popular, and recurring, genre success also suggests that audiences are aware of generic categories, and perhaps gain particular enjoyment from the presentation of known pleasures (be they visual or story based). Given the pre-existence of genre as a known quantity, popular mainstream success and the potential multiplicity of audience response are seemingly intrinsic to any understanding of how genre works.

This shift towards understanding genre as a larger cultural construct, not simply residing in the films (or television series, or books, or video games), is necessarily seen as a constantly adaptive process and one that foregrounds the historical nature of any generic claims. (Altman 1999; Neale 2000; Mittell 2002). Genres are not fixed, set categories; they are flexible, changing concepts that can be better understood by appreciation of the discursive network surrounding them. If genre is a nexus for culture, audience, and filmmakers, or how 'particular definitions, interpretations, and evaluations ... play out within the various realms of industry, audience, text, critics, policy makers, and broader social context' (Mittell 2002, 30) then the need for a specific 'X' factor is replaced by a fluid notion of a range of different influences, shifting and malleable. Science-fiction films cannot be understood simply as a series of films that feature rocketships; equally, they are about more than visual display and effects spectacle. Like every other genre, the science fiction film needs to be placed within a larger network of influences (including films from other genres). The move away from a strict definition of a genre film (with preconceived borders and conventions) has created a wider appreciation that genres almost always function as hybrids: the detective-science fiction films *Minority Report* (2002) or *Soylent Green* (1973); the war film-science fiction hybrids *Them!* or *Aliens* (1986); the animated science fictions *Wail-E* (2008) and *La planète sauvage/Fantastic Planet* (1973).

This discussion of academic genre theory, and the notion of genre as a wider cultural construct, where producers and audiences draw on a far greater (and diverse) range of influences, should not suggest that it is impossible to define a genre – simply that we need to be alert to the shifting nature of genre, particularly over different periods of time (Geraghty and Jancovich 2008; Geraghty 2009). There is now no assumption that such categories are set, or ahistorical. Genre is at once shaped by interactions with culture and society, and a force that can be applied within culture. Depictions of space travel on film were closely tied up with the 'real-world' science fact of NASA's Apollo and Gemini missions (as well as the USSR's own space achievements). Meanwhile, reports or commentary on recent scientific breakthroughs (for example, the large hadron supercollider) regularly use terms like 'mad scientist', or 'science fiction' to talk about 'real-world' science and scientists. There is no easy causal link here, but it is clear that generic conventions and developments draw from contemporary culture and feed back into it.

Adding this cultural-based perspective to genre analysis does not mean abandoning a text-based approach: it means finding a balance that borrows from the best

of both worlds. Textual work has defined the field of genre study since the 1970s and has provided many useful and challenging readings of films and television programmes. Genre films are as capable of challenging ideologies or belief systems as they are of supporting them, having offered potent explorations of contemporary culture, racism, gender politics and nationality. To present its discussion of the development of the science fiction film, and how such films interrelate with genre theory, this book will, of necessity, begin to map out and analyse the possible narrative, iconographic and thematic characteristics of science fiction films. Given that these films rely on intertextual references to each other, to other genres, and to influences drawn from literature, television and other media, understanding those textual characteristics is an essential stage in categorizing one element of how genre works. Yet other elements deserve equal analysis. Rather than see genre studies as beginning and ending with the viewing of a wide range of films, a broader discursive and cultural analysis demonstrates that science-fiction films do not reproduce generic meaning on their own. Instead, it is possible (and desirable) for analysis to illuminate a relationship between text, industry, culture and audience: a relationship that promulgates and promotes genre.

The very notion of a term like 'science fiction' in everyday language demonstrates that genre remains an essential tool for communicating something about a series of films (and other media). Hollywood has always relied on visual imagery, rhetoric and reference to known pleasures as key generic triggers within film marketing. The continued success of many such films, and the ability of other national cinemas to claim or subvert such triggers for their own productions, supports a wider industrial and cultural importance of genre. The very dominance of genre in so many avenues of criticism, audience choice, academic research and institutional work supports the continuing desire to explore it, understand it and investigate how individual films make use of that cultural knowledge. The rest of this chapter, and the next two chapters, will begin that exploration, with specific examples from the science fiction genre that will unpack what that term implies, what assumptions underlie its use, and what associations it might be constructing.

Defining the Science Fiction Genre: *Moon* (2009)

Genre can be a contested arena because producers, audience members and academics all have variations on what a genre should contain, either visually or thematically. Investigating a modern genre film demonstrates how the cultural and textual components of one science fiction film can raise debates around other generic examples, expanding out to encompass both historic and modern conventions. *Moon* (2009) was produced as science fiction (director Duncan Jones described it as 'grown up science-fiction,' a deliberate homage to 1970s genre films *Silent Running* (1970) and *Alien* (1979), advertised as science fiction (posters focused on

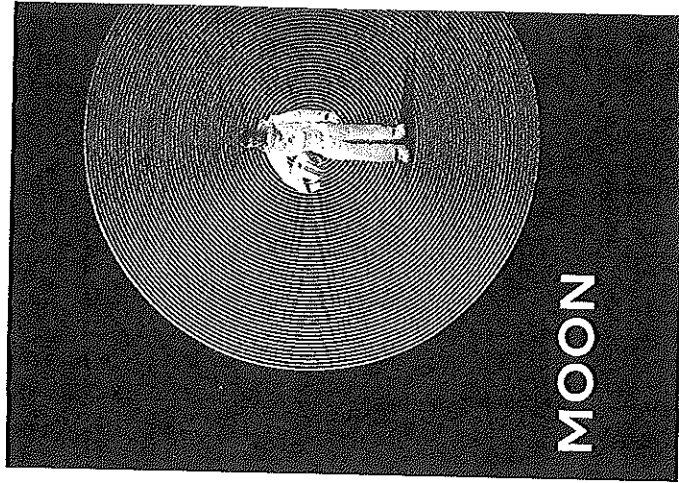


Figure 1.1 The teaser poster for *Moon* (2009) suggests generic status through elements such as Sam Rockwell's astronaut costume (Sony Pictures Classics/PhotoFest)

Sam Rockwell in astronaut outfit (Figure 1.1); trailers displayed the moon landscape and technology), and reviewed as science fiction (Roger Ebert talked about it as 'hard sci-fi'; MTV noted it was a 'terrific sci-fi space film' – *Moon* website 2009). This discourse will inevitably play some part in shaping audience expectations and definitions of *Moon* as belonging to the science fiction genre. An investigation of the film's *mise en scène* (including, but not limited to the notion of iconography) and narrative structure (including themes and characters) also point towards its place within the science fiction genre.

Moon is set in the mostly automated lunar mining base Sarang, where one human astronaut, Sam Bell (played by Sam Rockwell), and a robot servant-cum-administrator (Gerty, voiced by Kevin Spacey) maintain a series of huge harvesting machines that roam the Moon's surface, collecting and processing moon rock into a clean source of energy for Earth. Injured towards the end of his three-year contract, Sam spends several days in Sarang's sickbay before tricking a seemingly sinister Gerty into letting him back out onto the lunar surface. There he finds the body of another Sam, battered but alive. After a period of distrust and conflict, the two Sams

discover they are simply the latest corporation-designed clones to operate this base, that their memories are implanted rather than real and that they will be killed after three years. The discovery that the family of the real Sam Bell lives on Earth, though much older than their memories or the video messages they've been watching, leads them to plan an escape from the Moon before corporate hit-men arrive to restart the programme.

There are certain textual elements of *Moon* that might be identified as science fiction. The narrative fulfils both (literal) requirements of that term: it is a fiction based around scientific or technological advances, though one that is firmly rooted in contemporary understanding. Spacesuits are required on the Moon, robots are only a few steps removed from current industrial machinery, travel to and from the Moon is by rocket propelled vehicles, while working on the moon is akin to long shifts on oil rigs or some equally remote Earth-bound outpost. This desire for a possible realism is not a requirement of science fiction, but most genre films relate aspects of their *mise en scène* to realistic traits. Although early filmed science fiction made guesses about what a trip to the Moon would be like (in *Frau im Mond*, 1929, the astronauts walked around the lunar surface with no suits on), many films show the absence of gravity in space travel, or make reference to artificial gravity and air (2001: A Space Odyssey is the obvious example here but similar ideas can be seen in *Phantom Planet*, 1961, and *Rocketship X-M*, 1951). Even those films set in a distant part of the universe (often described as 'space opera') rely on certain realistic or naturalistic traits that audiences can relate to: most of *Star Wars*' characters speak English, breathe oxygen, have families, build houses, fight wars and fall in love. While much filmed science fiction may be predicated on scientific advances (or change brought about by alien technology), there are few films that do not make some claim to a recognizable verisimilitude.

Set design is a key element in any science fiction film that ties in to these notions of near future realism. In *Moon*, Sarang base is a combination of smooth sleek interiors and human presence, advanced technology but with the sheen of human use and habitation. Away from the sterile corridors, there are Post-It notes stuck to surfaces, Sam counts down the days by drawing smiley faces on the bathroom wall, his bedroom is a mess of clothes and papers. The outside of the base is utilitarian, grey, sunk into the surrounding rock; the harvesters are large machines, squat boxes that trundle across the lunar surface like giant trucks or threshers. Designing such near (or far) future habitats, vehicles and weaponry is an important way that fantastic science fiction concepts can be at once iconographic and rooted in the familiar, the known. *Minority Report* portrayed a fantastic yet familiar world where cars had become oblong pods, security systems (and advertising) relied on iris identification, and jet-packs were in use; yet those pods continued to move along freeways, CCTV cameras remained fallible, and helicopter-style vehicles were still more efficient than rocket-packs. Set design also has strong ties to the genre's claims for iconography. Design elements can become iconic in themselves, from the bullet-shaped rocket of

Le Voyage dans la lune (A Trip to the Moon (1902) to the svelte Art Deco-inspired robotic figure of Maria in *Metropolis*. Science fiction is also visualized on a larger scale than many generic films. The immense skyscraper cities of *Blade Runner* and *Kôkaku kidôtai/Ghost in the Shell* (1994); the sweeping desert plains of Tatooine (*Star Wars*) and Arrakis (*Dune*, 1984); the dystopian future Earths of *The Terminator* (1984) and *Wall-E*; despite the varied cinematic technologies involved in creating them, these all contribute to the epic, fantastic spaces of science fiction. Yet set design is as intimately involved in the small design elements of the future as the large: the communicator from *Star Trek*, the moving video pages of the newspapers in *Minority Report*, or the BFG from *Doom* (2006). These contribute to a fantastic iconographic view of the future while linking such futurity to existing devices as the radio, the newspaper and the gun.

Closely linked to set design is costume, the idea of what future clothing and apparel might look like. In *Moon*, Sam's costumes match the lived-in look of the base, from the basic scruffier clothes he wears around the base to the bulkier spacesuit (similar to existing astronaut design) he dons to go out on the surface. Audience knowledge of Sam is partly guided by what he wears and how he looks in those clothes. The spacesuit links him to existing knowledge of the space programme, but also acts as his uniform, a reminder of his job.² As in *Moon*, costume in science-fiction films is a marker for character; for all the technological set design elements of *Minority Report*, for example, people still shopped in Gap for khakis and shirts. Equally, the uniforms of that film's Pre-Crime Unit mimic many science fiction films in their focus on a professional, often military, group: the colour-coordinated crew costumes of *Star Trek*; the utilitarian combat outfits of the future soldiers of *Aliens* or *Soldier* (1998); even the matching clothes of superhero teams the *Fantastic Four* (2005) and the *X-Men* (2000). In two early examples of this trend, both *High Treason* (1929) and *Things to Come* (1936) depict future societies through a simple, cohesive fashion statement. While the application of one costume to the whole of human culture is unusual in science fiction it is more common with the creation of alien societies (the warlike Klingons of the *Star Trek* universe are almost always seen in battered leather and armour). It is more common to find a scattering of different costumes for different purposes: to create the rambling culturally chaotic future of *Blade Runner*, or to suggest the varied personalities of the *Nostramo* crew in *Alien* (where the crew, while asleep, are in matching outfits, but quickly choose their own, disparate, clothing styles). Costume functions to suggest the future but also remains tied to the known, creating a world that is different but familiar enough to be recognizable.

Costume and set design in many science fiction films are often enhanced by special effects techniques. *Moon*'s self-contained moon base is an impressive practical set inside, with its exterior and the surrounding lunar landscape all computer generated. Equally, when Sam discovers an immense chamber of clone capsules beneath the base, only the first few pods are practical, the rest of the background is added

digitally. Matte paintings, stop-motion animation, miniatures, back-screen projection and computer-generated imagery all add new elements to existing material. This can range from the creation of entire digital worlds and characters in the more recent *Star Wars* trilogy to simple background work to add dimension or remove elements in *Children of Men* (2006). Special effects in science fiction films again tread the line between realism and fantasy, wanting to create amazing vistas but often attempting to make them appear possible. While early cinema was content with the tricks that could be achieved through effects, by the time of *The Lost World* (1925) the filmmakers wanted to root the special effect (stop-motion dinosaurs) in relation to live action elements, either actors or locations. The combination of real and unreal can be seen in films as diverse as *Earth vs the Flying Saucers*, *Jurassic Park* (1993) and *Transformers* (2007); a desire for photo-realistic shots that aim to fool the audience into believing in such fantastic imagery. This complicates the creation of generic iconography (flying saucers, spaceships, robots, etc.) and the use of visual effects to suggest a potential reality for such imagined technology.

Set design and effects are combined to create these future technologies and to make them appear plausible, but the narrative meaning behind such technology has shifted over the years. The technology of *Moon* includes the robotic Gerty – a combination of squat rectangular bodies and related appendages that moves around the base on roof-mounted rails: it contains all the necessary tools to help run the base and its main ‘face’ is a screen on which a series of smiley faces are displayed, ostensibly to match his mood or message (the masculine pronoun is suggested by Gerty’s voice). Like many future SF technologies Gerty is not always a positive presence, functioning instead as generic reference and narrative puzzle. From his initial appearance, Gerty echoes another space-based computer, HAL 9000 (2001: *A Space Odyssey*): flat, inflectionless voice; slow, deliberate statements; an obsession with his human co-worker; and the suggestion that he is hiding something sinister. The film playfully baits any viewer who brings this generic knowledge to the film, ultimately taking Gerty in another narrative direction, but the presence of a potentially unreliable computer does tie the film in with larger genre depictions of technology.

Robots and computers often bear the brunt of science fiction’s uncertainty about new technology. Gerty is simply the latest in a line that stretches from *The Mechanical Mary Anne* (1910) through Robby the Robot in *Forbidden Planet* to the super computer networks of *The Terminator* and *The Matrix*. The issue with technology is often human control – the underlying belief that technology will either go wrong (of its own accord), be taken over, be misused by its creator, or become self-aware and want to destroy the human race. Although rooted in various non-cinematic stories (from the Jewish Golem legend to Mary Shelley’s *Frankenstein*), science fiction films have been able to visually depict this myth of automation and its destructive potential. There are few technologies in science fiction that are not ultimately used for negative purposes. New scientific formulas or machines to turn people invisible

(*Hollow Man*, 2000), increase their brain power (*The Lawnmower Man*, 1992), or to induce an evolutionary leap (*Altered States*, 1980), inevitably lead to the test subject going mad or indulging in a god complex. The creation of more advanced computers causes them to turn against their creator, attempt to reproduce, and either enslave or destroy humanity (*The Invisible Boy*, 1957; *Colossus: The Forbin Project*, 1970; *Demon Seed*, 1977). Robotics, as suggested with the example of Gerty in *Moon*, can be seen as a more optimistic field. While many automations are destructive (*Devil Girl From Mars*, 1954; *Westworld*, 1973; *Eve of Destruction*, 1991) there are cases where the humans are untrustworthy compared to their creation (*The Stepford Wives*, 1975; *Android*, 1982) or where the robotic figure is as heroic as the humans (*Wall-E*, *Silent Running*; *Cherry 2000*, 1987). Machines such as the robot in *Metropolis* have become iconic within the genre, becoming attractive images that are the source of visual pleasure outside of their destructive narrative role. Several have even achieved a star status, with posters, models and guest appearances for Robby the Robot (Figure 1.2), C3-PO and the Transformers. These robotic stars offer a balance of technology and reliability, they can be comic as well as a source of narrative tension and this balance works to complicate their appeal. Even counting these latter illustrations, however, technology in science fiction film narratives is often an active force within the diegesis.

Technology is also a key narrative element of Sam’s mission and job at Sarang base. Technology literally keeps him alive, allows him out to travel across the

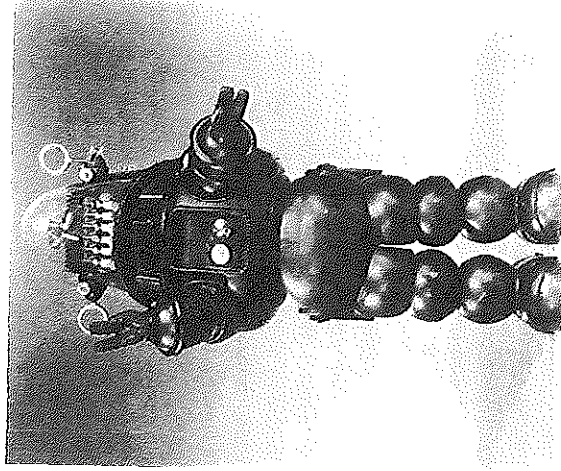


Figure 1.2 Robby the Robot, one of the science fiction genre’s first robotic stars (MGM/Photofest)

moon's surface and to escape the satellite and journey to Earth. Unlike Gerty, many of these technologies are inherently neutral and the film makes little or no effort to present them as destructive (although the chamber where clones are atomized does contain echoes of that notion). This is one of the contradictions within science fiction films. Exploration narratives necessarily rely on such background technologies: spaceships, space stations, advanced habitats. Such spaces are traditionally coded as positive/negative or simply neutral, a mode of travel (Sobchack 1988). Ships such as the *Millennium Falcon* and the starship *Enterprise* are seen as positive, slicing through space, fighting battles and (notably) controlled by human (or humanoid) pilots. The *Nostromo*, by contrast, is a neutral space at the beginning of *Alien* but is increasingly infected by its alien intruder (or the robotic traitor among the crew) into a dark, unsafe space. Between these poles, many genre films use their ships simply as neutral transport options. The construction of ships such as the *Excelsior* (*Himmelskibet*, 1919) or the *Luna* (*Destination Moon*) suggests a central dramatic status, yet once they have launched the drama is external (normally from space phenomenon such as meteor showers). Events happen to, or around, the ship, not because of anything inherent to it, or its structuring technology. Space stations or colonies have similar fates: the mining base of *Ouïland* (1981) moves from neutral to dangerous, again because of the arrival of outside influences; while the space station of *Marooned* (1969) is neutral, simply another working environment.

Not all technologies are based around computers, automatons or habitats, however. Many science fiction films contain a desire to portray new screen technology. In *Moon*, computer and video screens are the only interfaces Sam has available for communication and interaction: he watches videos from his wife on a screen, he receives instructions via a screen; his conversations with Gerty are directed at a screen. Like the viewing audience, he only receives information via this visual interface. The reflexive nature of the science fiction film towards future screen technologies has been described as film vividly imagining 'the technologies that would outdo it' (Stewart 1998, 129). Cinema has been fascinated with cinema projection and exhibition since its earliest days (*The Countryman* and *the Cinematograph*, 1901, showed film clips on its screen within a screen). Proto-science fiction films between 1910 and 1940 investigated the possibilities of new visual technologies such as the television (*Murder by Television*, 1935) and the videophone (*Love and Science*, 1912), while *Videodrome* (1982) painted a horrific vision around the proliferation of television and video technology. The emphasis on mechanical vision recurs throughout the genre: viewcreens are used for communication in films from *Barbarella* (1968) to *The Hitch-Hiker's Guide to the Galaxy* (2005); surveillance cameras record and display activity in *THX 1138* (1971) and *The Truman Show* (1998). Several films also discuss the next generation of visual entertainment, the technologies that threaten to replace cinema: virtual reality in *Tron* (1982), *The Lawnmower Man* and *The Matrix*, or the addition caused by downloading and experiencing other people's memories and emotions

in *Strange Days* (1997). This fascination with interfaces and screens has fuelled science-fiction films for almost a century and seems set to continue, with *Inception* (2010) suggesting a technological way to enter and change people's dreams.

Screen technologies have been relied upon to structure narratives and present special effects, and represent one way in which cinematography can be represented within the science fiction genre. Camerawork is an essential part of *mise en scène*, but is often overlooked within science fiction films because of the emphasis on the creation of special effects, or the impressive set design being filmed. While there is not enough room here to cover all science fiction camerawork techniques, it is worth pointing out several useful recurring devices. Mobile and agile cameras are frequently utilized, often exploring sets, areas or effects images that would be impossible for normal human sight. *2001: A Space Odyssey* initiated one element of this trend, with slow methodical camerawork that tracked round, past or through spaceships. *Alien* and *The Empire Strikes Back* (1980) developed this work: a mobile camera creeps through the *Nostromo* while its crew sleeps, and then later sweeps through those self-same corridors and hatches; while the kinetic camera of *The Empire Strikes Back* twists and follows the *Millennium Falcon* through an asteroid field. This latter example, putting the camera in the midst of a special effects sequence, has become more dominant in genre films, particularly CGI effects-based blockbusters such as *Armageddon* (1998) and *Iron Man* (2008). The rootless, mobile camera has also become a recent signifier of reality across many Hollywood films: within the genre, *Gloverfield* (2008) and *Children of Men* offer compelling examples of mobile camerawork, while *Moon* returns to the more contemplative option of *Alien* or *2001*. Much science fiction necessarily relies on shot-reverse shot structures, particularly to introduce narrative information, but the reliance on, and interest in, new technology, means it is also the genre most likely to take chances or experiment with new camera techniques: for example, the motion control system for special effects in *2001: A Space Odyssey* or the development of 'bullet time' for *The Matrix*.

All of these elements of *mise en scène* largely focus on the settings and trappings of the science-fiction universe being created, and how that world is captured on film. There are two further aspects of the science fiction film that are often overlooked: performance and soundtrack. One of the key elements in the technology of Gerty in *Moon* is the vocal performance of Kevin Spacey, yet performative issues are rarely discussed in relation to genre studies (De Cordova 1995, 129). Within science fiction, this may be related to the genre's relationship with both popular cinema, and modern Hollywood blockbusters (and their ancillary products): areas not commonly discussed in relation to acting or performance styles. Science fiction is rarely described as an actor's cinema, despite the genre being host to performances from actors as diverse as Robert Duvall, Kate Winslet, Charlton Heston, Sigourney Weaver and Ralph Fiennes. Critics often focus on how such actors escape the conventions of science fiction acting – the repetition of words such as melodramatic,

cold, or stiff, alongside an expectation of wooden or robotic acting styles, most commonly associated with genre stars such as Arnold Schwarzenegger ('about as well suited to movie acting as he would be to ballet': Maslin 1984) or Keanu Reeves (a 'wooden talent ... does some of his most interesting acting with a piece of latex covering his mouth' – Morris 1999). This tendency to diminish the work of genre actors, however, can overlook the more subtle work done by actors such as Sam Rockwell in *Moon*, who ultimately performs three different versions of Sam and keeps them distinct and identifiable. Performance styles in science fiction cannot be reduced to simple notions of melodramatic gestures and wooden acting: further work on this area of the genre would, of necessity, need to engage with the different requirements that generic production places on performance styles, not least the ability to act with, and in relation to, special effects technologies (Cornea 2007 offers a compelling move in this direction).

The science fiction soundtrack is also something that can be overlooked by critics. It is never subject to the kind of analysis that visual information regularly receives. Soundtrack refers to more than simply the style of music being used in the film, but covers everything from the sound effects of the technology (robots, spaceships, ray guns) to effects applied to dialogue or alien languages (Sobchack 1988, 146–222; Whittington 2007). In *Moon*, music and silence counterpoint Sam's initial loneliness; the lack of silence and the change in music once his clone appears matches the more dissonant tone of the character's relationships. Music is perhaps the strongest signifier of a particular kind of science fiction film: 2001: *A Space Odyssey* set a strong example of how orchestral classical music could be used to suggest grandeur and awe to special effects imagery. *Star Wars*, *Stargate* (1994), and *Predator* (1987) offer variations on that theme, although with music by composers such as John Williams, Danny Elfman and Alan Silvestri, which recalls a particularly ornate period of classical music. A more science-fiction-specific soundtrack element occurs in the use of the theremin, an early electronic instrument that presaged the now commonplace use of musical motifs or themes for particular characters. Many 1950s genre films (including *The Day the Earth Stood Still* and *Forbidden Planet*) used the theremin only when alien figures were on screen, creating an indelible association between the theremin and the 'voice of the extraterrestrial Other' (Wierzbicki 2002, 130). The importance of the aural element – of creating alien language, music, or performance cannot be underestimated: *Close Encounters of the Third Kind* (1977), for one, would be reduced in impact without John Williams's score and the now infamous five musical notes used as a basic communication system.

Set design, costume, special effects, screen technologies, camerawork, performance and soundtrack are all aspects of the science fiction *mise en scène* that are essential to understand how a film such as *Moon* can be seen, purely on a textual basis, as part of the science-fiction genre. Its interest in technology as part of its narrative progression also links it to existing traits from other generic products in film, television and literature. Yet none of those examples exist in a vacuum: each

one depends on an intertextual relay of existing conventions, ideas and recurring motifs from within the discursive strategies of science fiction media more generally, and the wider cultural sphere. It is important to acknowledge the textual basis of science fiction film when analysing individual cases, but any understanding of how the films function as generic texts necessarily involves linking the genre to wider cultural debates, industrial discourse and popular knowledge. Such discourse can be seen as an influence on genre films: German interest in rocket technology in the 1920s fuelled the production of *Frau im Mond*; the series of Mars-based films in 2000–1 can be read as a reaction to the successful Pathfinder mission of 1997 (the first robot probe to land on Mars since 1976), and the images that were beamed back. Yet real-world science is only one of the ways in which genre can be affected by contemporary events, particularly when it comes to how audiences perceive genre and are guided towards specific popular definitions of generic knowledge.

Popular Definitions of Genre

Whether it's a flying saucer whirling through space or a gleaming city on a distant planet, at the core of all science fiction is the provocative question, 'What if ...?' Science fiction represents stories and situations that tap our brightest hopes and darkest fears about what might, one day, turn out to be true. (AFI 2008c, 35)

To demonstrate how genre reproduction can occur through discourse and across multiple connections, the chapter will move on to consider several non-textual perspectives on the science fiction genre. Rather than the textual elements that may appear in a science fiction film, this approach considers other discursive networks that influence definitions of science fiction that circulate within culture. Many extratextual sources of genre information have a close relationship with the genre text: the marketing that aims to lure in new viewers to see new genre films, the critical reviews that appear when they are released, or the exhibition sites for viewing them. Yet these are not the only external influences that impact on definitions of the term 'science fiction'. Since the advent of home video, DVDs, and the Internet, the multimedia landscape has expanded the range of locations where audiences are exposed to definitions of what 'science fiction' is: not least, shelving systems at video stores such as Blockbuster, descriptions on television electronic programme guides, and Internet Web pages ranging from shopping sites (Amazon), encyclopaedia (Wikipedia) and social network (Facebook quizzes that rank science fiction films, or reveal what *Star Wars* character contributors are). Societal changes also expand the definitions of this genre: advances in science and technology appear to mimic earlier science 'fictions' (heart transplants, genetic manipulation, mobile phones, space travel), and new scientific discoveries are often referred to in generic terms. These different stimuli help shape modern definitions of what genre is, what

is meant by the term 'science fiction' and what films and television programmes can be conveniently categorized within that genre.

Identification of films as science fiction occurs within sites for video and DVD viewing and purchasing. Genre films are grouped together either physically (in a Blockbuster store) or electronically (Amazon, Lovefilm): a commercial-based approach to genre definition that contributes to a popularization of film and television titles in specific categories. These conglomerates do not act alone, of course. The promotion of genre definitions is shaped both institutionally and industrially, by film societies and production companies, through press releases, events and marketing. The promotion of the science fiction genre will be covered in more detail in section three, but a recent example of institutional genre definition will help clarify some of the points being made here. In 2008, the American Film Institute published 'AFI's 10 Top 10', a series of Top Ten lists described as 'America's 10 Greatest Films in 10 Classic Genres' (AFI 2008a). The ten 'classic' genres selected by this institution were: animated, fantasy, gangster, science fiction, western, sports, mystery, romantic comedy, courtroom drama and epic.³ The AFI explained that the films that made the final list were judged on their critical recognition, award achievement, popularity over time, cultural impact and historical significance ('A film's mark on the history of the moving images through visionary narrative devices, technical innovation, or other groundbreaking achievements' – AFI 2008b, 4).⁴ Yet nowhere in the publicity material surrounding this event is there ever any questioning of why genre is a suitable form in which to present a list of classic films: genre is presented as a *fait accompli*, a term audiences are comfortable with, producers work within, critics acknowledge, and everyone accepts as a useful classification system. As such, the list represents an institutional approach to genre definition: a 'top down' selection process of generic canon; a continued focus on texts (and textual content) as the purveyor of generic information; and a relegation of popular audience response in favour of production and critical opinion. Such choices mirror the academic frameworks covered earlier in this chapter, suggesting similar shaping policies at work in the larger cultural field.

These policies are clearly seen in the AFI definition, and selection, of science-fiction genre films. The list continues many of the long-running debates over what a science-fiction film is, what it should contain, what themes it should explore, and how it should look. The AFI definition of SF is 'a genre that marries a scientific or technological premise with imaginative speculation' – distinct from their definition of 'fantasy' as 'a genre where live action characters inhabit imagined settings and/or experience situations that transcend the rules of the natural world' (AFI 2008b, 3).⁵ As we have seen, critics and academics have been trying to create and impose strict genre demarcations for decades, and these two sentences fall prey to the same problems: many of science fiction's technological premises 'transcend the rules of the natural world'; equally, live action characters can inhabit 'imagined settings' in animated films – *Avatar* (2009) is an obvious example here; while the marriage of

scientific premise and imaginative speculation can provide the basis of true stories such as *Apollo 13* or *The Right Stuff*. The pitfalls of such attempts to categorize films into one genre can also be seen by the AFI 'fantasy' top ten containing *King Kong* (1933), *The Wizard of Oz* (1939) and *Groundhog Day* (1996); films that other writers/institutions/audiences might want to claim for the action-adventure, children's, romantic comedy, or science fiction genres. Rather than open up debate, it is possible to see the AFI list as policing specific generic borders.

The AFI top ten of science fiction films reveals other issues. The list comprises 2001: *A Space Odyssey*, *Star Wars IV: A New Hope*, *E.T.: The Extra Terrestrial*, *A Clockwork Orange* (1971), *The Day the Earth Stood Still*, *Blade Runner*, *Alien*, *Terminator 2: Judgment Day* (1991), *Invasion of the Body Snatchers* (1956) and *Back to the Future* (1985). Representing a specific definition of what the SF genre is, this list reveals the current cultural value of the genre in the early twenty-first century and its canonization within the American film establishment. Some narrative similarities can be seen: six of the ten films feature extraterrestrial threats or visitors, six films deal with future societies, while two films directly involve time travel. Historically, the list privileges the years 1968–82, ahead of the 1950s (a key era in academic writing) or the recent past (only one entry from the last two decades). This potential institutional or critical revisionism repositions the science fiction genre away from 1950s black-and-white science fiction towards more recent contributions to the genre, both artistic (directors Stanley Kubrick and Ridley Scott feature twice in the list, suggesting a preference for auteurist-tinged visual stylistics) and commercial (films from popular directors George Lucas, Steven Spielberg, Robert Zemeckis and James Cameron). The two pre-1968 films that make the list are already culturally regarded, canonized within histories of the science fiction genre and (perhaps importantly) recently remade within the current Hollywood production system. The inclusion of these older films fulfils the AFI's interest in presenting a diverse range of American film but equally distracts attention from the popular 'creature features' of the 1950s that are unlikely to feature on such a Top Ten list.

The AFI list is problematic but it is also useful. Like the Amazon or Blockbuster examples listed above, it is an attempt by an institution to impose a particular generic identity on a series of films. There is no compulsion for audiences to agree with the choices, or the definition, but such large institutions do have a role to play in boundary setting. The list also throws open the issue of generic hybridity: *Groundhog Day* could be seen as both romantic comedy and science fiction (reliving the same day has a tangential link to time travel narratives), while *Frankenstein* (1931) represents an early Hollywood studio attempt to marry a scientific or technological premise (the reanimation of dead tissue) with an imaginative speculation (would such a reanimated creature be monster or man). The AFI, in placing *Frankenstein* within the science fiction genre, also appears to challenge the dominant generic identity that Universal Studios promotes for the film. Universal began the process of defining *Frankenstein* within the horror pantheon in the 1930s (linking it with *Dracula*, 1931;

The Invisible Man and *The Mummy*, 1933) and continued to do so with recent DVD releases of these films (and their sequels). Packaged as 'The Legacy Collection,' each DVD set had matching shiny metallic green covers, clear plastic panels that placed an image of the central 'monster' in relation to a generic image (a mountaintop castle for *Dracula*, a laboratory for *The Invisible Man*, pyramids for *The Mummy*, a tower struck by lightning-bolts for *Frankenstein*), and a black-and-white Universal 'seal' that used an image of the Boris Karloff 'Frankenstein's Monster' and the legend 'Universal Studios Home of the Original Monsters.'

Claims for *Frankenstein* as a horror film, like many genre studies, rest on textual and thematic issues: specifically how the film fits within the Universal horror style (traditionally seen as a combination of European talent and stylistic approaches borrowed from German Expressionism). Yet the textual evidence of *Frankenstein* could be equally applied to make an argument for its science fiction status: the film dramatizes the story of a scientist's experimentation with the reanimating properties of electricity, and contains an overt focus on Dr Frankenstein's laboratory and scientific equipment. Discursively, like other proto-science fiction films that owed a debt to Shelley's story, the film fits within contemporary cultural concerns about scientific progress within medicine, including artificial replacement of limbs and the possibility of organ transplants. Yet cultural knowledge of Frankenstein tends to revolve around the classic Boris Karloff makeup, and the intertextual relationship that Universal has set up around its horror classics. Here, genre is a contested borderland, with no clear-cut division. Indeed, horror has been described as science fiction's 'evil twin', both genres interested in 'the question of difference, typically posed as that of the difference between human and non-human' (Penley 1991a, vii). Despite this claim that the science fiction and horror films are closely interrelated, the examples from the AFI and Universal suggest that institutional and industrial efforts are attempting to separate them out into strict and distinct genre camps.

As this chapter has argued, it is more useful to think about science fiction as a flexible, potent genre that borrows and utilizes other generic corpuses when needed, yet contains enough similarities to remain distinct in its own right. If we reconsider the AFI list of the Top Ten genres, it is possible to pick out science fiction films that crossover with all but one of the selected genres: science fiction-animation (*Fantastic Planet*, *Wall-E*), science fiction-fantasy (*Avatar*, *The Fountain*, 2006), science fiction-gangster film (*Sky Racket*, 1936; *The Adventures of Pluto Nash*, 2002), science fiction-Western (*Wild Wild West*, 1999; *Serenity*, 2005), science fiction-sports (*Rollerball*, 1975; *Space Jam*, 1996), science fiction-mystery (*Soylent Green*, *Minority Report*), science fiction-romantic comedy (*Eternal Sunshine of the Spotless Mind*, 2004; *Multiplicity*, 1996), and science fiction epic (2001: *A Space Odyssey*, *Dune*).⁶ There are equally strong options if the list expands to other genres not covered by the AFI: science fiction-comedy (*Men in Black*, 1997; *The Hitchhiker's Guide to the Galaxy*), the science fiction-drama (*Contact*, 1997; *Gattaca*, 1997), the science-fiction musical (*Just Imagine*, 1930; *The Rocky Horror Picture*

Show, 1975), the science fiction-film noir (*Blade Runner*, *Dark City*, 1998), or the science fiction-war film (*Enemy Mine*, 1985; *Wing Commander*, 1999). This all confirms J.P. Telotte's claim that 'broadening the potential field for ... films in the genre ... [is] an instructive and valuable experience for the larger practice of genre thinking' (Telotte 2001, 10). Setting a strict definition for the science fiction film works to limit the possibilities of the genre: not because the films do not draw from a common set of similarities and ideas, or even because audiences have differing opinions on what a science fiction film is, but because the genre is constantly shifting and adapting. Genre cannot be collected, sealed in amber, and admired as a never-changing entity. It is flexible, hybrid, and multiple: to move forward genre theory must necessarily engage with this tendency towards variation and mutation, to understand genre both as a historically distinct entity, and a volatile contemporary discourse.

In that vein, the following two chapters of this book are attempts to position and understand the theoretical claims that have been made for science fiction films, being alert to their assumptions around generic conventions, themes and iconography. That work begins with a consideration of science fiction as a masculine genre, and feminist responses to science fiction films, before exploring academic criticism around the genre as revelling in special effects-fuelled destruction. Many such approaches move beyond textual detail to consider the social or cultural role that science fiction films might play. As this chapter has demonstrated, the science fiction genre comes with a set of expectations, assumptions, and conventions. Understanding those elements will enhance any analysis done on textual characteristics of the various films identified as science fiction: fusing those together offers the strongest route to examine and understand the aesthetic, thematic and critical development of the science fiction genre throughout the last hundred years.

considering how consumer technologies might portray capitalist ideology (the Gap advertisements in *Minority Report*; fashion in *High Treason*), or using spaceship-based exploration to investigate repressed areas of human consciousness (*Event Horizon*, 1997; *Sunshine*, 2007). On the level of production, technology has been key to how films are able to depict these science fictions and, in terms of dissemination and exhibition, new devices have fuelled an interest in how viewers use technology and how media technologies have fuelled theories around intertextuality. While Chapter 1 made reference to the narrative role of technology, Chapter 3 will move on from these different approaches to consider a production element that appears across multiple analyses of the science fiction film. From the genre's first theorist to work in the early twenty-first century, the place of the special effects spectacle and its function within these films has continued to fuel debates over the content and influence of the science fiction genre.

-3-

Science Fiction and Technology

The science fiction film has long been discussed in terms of its role as the main producer and purveyor of special effects imagery. From the first depiction of cinematic space travel in *Le Voyage dans la lune* through stop motion alien invaders in *Earth vs the Flying Saucers* to computer generated robots in *Transformers*, new technology has fuelled the genre's ability to display new worlds, new life-forms, and new spectacles of destruction. Despite the place of computer-generated imagery in almost all branches and genres of modern filmmaking, the science fiction genre continues to be a nexus where effects technology and spectacular visual imagery interact (Pierson 2002). Given the international success and dominance of Hollywood blockbusters such as *Iron Man*, *GI Joe: The Rise of Cobra* (2009) and *Inception*, films that feature a high proportion of special effects and at least a partial science fiction premise, the link between the genre and visual effects seems unlikely to recede. Yet the critical dismissal of effects as 'empty' (Allon, Cullen and Patterson 2002, 542) or 'stupefyingly silly' (Ropfkopf 2009) suggests that spectacular imagery remains a controversial element of modern filmmaking practice, particularly the recurring (and limiting) claims that spectacle stands in opposition to and disrupts (or diminishes) narrative. With audiences seemingly eager to embrace spectacular images, and worldwide film and television production engaged in producing (and marketing) computer-generated and three-dimensional imagery, the debate remains central to any understanding of generic spectacle past, present and future.

Spectacle, Technology and Narrative

'We are merely spectators: we watch' (Sontag 1965, 45). Susan Sontag's description of the role of the viewer in relation to science fiction spectacles has been mirrored in later academic commentary that links spectacle and special effects technologies. It is echoed in the description of such films as a 'showcase ... [for] innovations in production design and special effects' (Thompson and Bordwell 1994, 715) and the identification of special effects as 'grand displays of "industrial light and magic"' (Sobchack 1988, 282). Spectators or watchers of a showcase or a grand display: the emphasis here suggests a gap between viewer and image, an urge to spectate rather than participate. The science fiction film has been at the centre of discussions around the place of spectacle in cinema, with visual spectacle described

as a medium-specific element of its success, particularly in comparison to science fiction television (Pearson and Messenger-Davies 2003, 103) or science-fiction literature (Kuhn 1990, 6). Indeed, the ability of the genre film to visualize the alien, the unusual or the nonexistent is seen as a central tenet of its continued success (Sobchack 1988; Kuhn 1990).

This emphasis on spectacle as a medium-defining quality is problematic, not least because it states that the dominant purpose of such spectacle is simply to be gazed at, looked upon or admired. This suggests a reduction in the variety of viewer positions towards such spectacle but also separates spectacle (something to be observed) from narrative (something to be drawn into, immersed within). Film narrative is traditionally seen as inclusive, pulling viewers into (and leading them through) a coherent diegetic world. Spectacle, in the terms used above, is not immersive, it is obvious, overt, something audiences are aware of watching, a spectacular visual element that exists in its own right, possibly separate from narrative. Generic spectacles that fulfil such a criteria might include the dinosaurs of *Jurassic Park*, the superpowers of the *Fantastic Four*, or the natural disasters of *2012* (2009). In all these cases, though, the generic spectacle exists within a narrative structure and cannot be separated from it easily. Rather than limit this debate to a simple narrative/spectacle dichotomy (which is ultimately self-defeating), this chapter will argue that any understanding of such films needs to engage with a wider understanding of what audiences find spectacular in these generic texts. This necessarily involves an awareness of the shifting balance of *mise en scène*-based visual spectacle and film narrative in individual films, the contribution of technology, soundtrack and star performance to definitions of spectacle, and a greater appreciation of the role of critical reviews, marketing materials and (more recently) DVD special features within the larger discourse around spectacle and special-effects technologies.

This debate is also the latest iteration of a larger historical and cultural discourse that links film history, spectatorship, technologies of vision and science fiction with spectacular visual display. Spectacle, spectator and spectatorship are all linked by a root Latin word, *spectare*, meaning 'to watch'. A spectacle is, therefore, something that is out of the ordinary, impressive in some unusual or unexpected way. Watching a spectacle is normally to view an event designed for mass spectatorship, not for individual pleasure; it exists to affect a wide range of viewers. The presentation of visual spectacle through technological means has never been a purely film-based phenomenon. Architecture and art have created spectacle for millennia and technologies that replicated moving, or changing, vision (the likes of magic lantern shows, or camera obscura) have existed for hundreds of years. The nineteenth century featured an intensification of interest in using new technologies to capture movement and reality: the thaumatope and phaniscopescope animated static drawings into a sequence of movement and various photographic processes from the 1840s onwards successfully froze images of street scenes, people and still lives. The road from photography to motion-picture cinematography has been covered elsewhere (see,

for example, Chanan 1996) but the changing nature of visual spectacle in Victorian culture is a crucial element in the convergence of such technologies.

In the nineteenth century, the simple act of photography was considered spectacular, but viewing photographs was an individual (or small group) experience. Visual spectacle in the Victorian era was developed by a series of artistic, cultural and economic factors, most notably the panorama and diorama, and the series of Great Exhibitions, Expositions, and Worlds Fairs. Panoramas and dioramas were huge painted and staged canvases and scenes erected in specially constructed buildings in city centres across Europe and the US. Designed to dwarf the viewers, people were ushered in, through darkened passages, to emerge in the middle of a circular room where the immense painting had been hung and specially lit. The scenes being pictured could be a contemporary local scene or an historical event (an exciting or famous battle, the might of Rome during Caesar's reign) (Comment 1999, 7–8).¹ Creating a visual spectacle, these vistas were something to be gazed at, explored visually, and experienced viscerally.² With their emphasis on large audiences, specially constructed communal viewing rooms and immersive widescreen spectacle, the panoramas offer compelling connections to later notions of spectacular cinema presentation. They also presented a different world, or a different view of a known world, similar to the unique visual perspectives offered by cinematic special effects such as matte painting, miniatures or CGI landscapes. Popular throughout the nineteenth century, both panoramas and dioramas existed well after the advent of cinema: as Tom Gunning points out, they remained a key attraction at Expositions into the twentieth century (Gunning 1994).

From London's Great Exhibition of 1851 to the 1904 St Louis World Exposition (and beyond), such shows conformed to similar, spectacular patterns. They were designed to be modern, technologically advanced and futuristic: small cities that sprang up on vast tracts of land either in the centre of capital cities (Hyde Park in London) or on the outskirts (as in the case of St Louis). These immense projects were sites of visual fakery and illusion, an impermanent hyper-real landscape that was constructed quickly, lasted six to nine months, and was then gone again (a useful correlation with the futuristic world building and set construction seen in genre films such as *Blade Runner* and *Batman* (1989), or the movie-based theme parks at Disneyland and Universal Studios). Essential to any understanding of the growth of visual spectacle, these exposition sites encouraged people to gaze at spectacular images and illusions, to enjoy and immerse themselves within the activity of watching and looking and to acknowledge that activity (therefore preventing any notion of 'total' immersion). Such fairs were 'one of the great training grounds and laboratories for a new community-based visual culture ... [they] raised the act of spectating to a civic duty and technological art' (Gunning 1994, 423).

These expositions merged early consumer culture, an interest in visual communication (early moving pictures were shown at expositions from 1893 on), the possibilities of new transport, and technological advances. The later expositions

also offered compelling links between this visual spectacle and early attempts to visualize the spectacle of futuristic science, technology and travel. The 1901 Pan-American Exposition, held in Buffalo, New York, included a simulated voyage to the moon. One of the main attractions on the Midway (the popular commercialized entertainment sector), 'The Trip to the Moon' offered its paying customers an experience that claimed to recreate a fantastic trip into space. Relying on moving panoramas, purpose built sets, and costumed actors, the ride placed viewers in a large 'ship' that flew to the moon (the ship remained largely static, as painted and photographic backdrops of the exposition, the sky above Buffalo, and the vacuum of space moved past it to create the illusion of movement). On reaching the lunar landscape, people would walk through specially constructed moon caves, meet the Selenites (the moon inhabitants of H. G. Wells' recent story *The First Men in the Moon*), attend a pageant at the Palace of the Man in the Moon, and sample 'moon cheese' before departing. Although similar to other shows at expositions (recreations of earthquakes, river rides, foreign street scenes) the 'Trip to the Moon' ties together the nineteenth-century interests in spectacle, vision, new forms of transport and a growing fascination with the fantastic possibilities of technology (all equally prevalent in the 'scientific romances' of novelists such as Wells and Verne). The advent of a moving picture industry between the 1890s and the 1910s can be seen as an extension of such elements, as they coalesced around a form of mass entertainment that foregrounded visual spectacle and encouraged spectatorship.

The Victorian obsession with spectacle and vision seen in these exhibitions, also informed the creation and expansion of early film, particularly what Tom Gunning has identified as the 'cinema of attractions': from the initial spectacle of visually recording movement, to capturing reality, and the increasing interest in cinema trickery. Crucially for the debate over genre and spectacle, this cinema of attractions highlighted a 'conscious awareness of the film image engaging the viewer's curiosity. The spectator does not get lost in a fictional world and its drama, but remains aware of the act of looking' (Gunning 1994, 121). This historical example is an essential step in understanding how the cultural interest with visual spectacle first interacted with cinematic narratives. George Méliès' discovery and utilization of trick effects developed a particular brand of spectacular cinema, one that would prove influential for later generic filmmakers. Often described as the first science fiction filmmaker (for his work on *Le Voyage dans la lune*, among others), Méliès is more accurately described as a filmmaker who relied upon visual spectacle across a variety of genres. His most famous work, a trip to the moon that borrows liberally from Wells and Verne (and may be a satire of their narratives – Cornea 2007, 13), features a series of spectacular images: a bullet-shaped rocket exploding off a ramp, flying through space and crashing into the eye of the moon; umbrellas planted in the soil grow into space plants; the hostile natives explode on contact. Here, narrative progression (takeoff, landing, exploration, return home) is balanced with attractions and special effects. This collection of spectacular fantastic images, effects work (including

miniatures, stop motion, and double exposures) and nascent generic ideas around futuristic travel, exploration and destruction would fuel not only later proto-science fiction but also the first serious academic work on the science fiction film.

Susan Sontag's 'The Imagination of Disaster' has, in many ways, been as influential theoretically as Méliès' film was generically. The article offers a breakdown of several recurring narrative traits of the 1950s and early 1960s science fiction film, and describes the genre's reliance on special effects-derived destruction in phrases and words that resonate to this day. Science fiction films are not about science, they are about 'disaster ... the aesthetics of destruction ... the peculiar beauties to be found in wreaking havoc, making a mess' (Sontag 1965, 44). Sontag's discussion of moments of special effects-fuelled disaster and destruction is largely focused on wide-screen Technicolor genre entries such as *War of the Worlds* and *Sora no daikaitō Radon* (Rodan, 1956) but can also be applied to *The Day the Earth Caught Fire* (1961), where miniatures and matte effects show the impact of earthquakes and global warming on the cities of the world, or the stop-motion demolitions of New York, Washington DC and Rome, in (respectively) *The Beast From 20,000 Fathoms* (1953), *Earth vs the Flying Saucers* and *20 Million Miles to Earth* (1957). Yet these potent moments of destruction, admittedly spectacular in their own right, are about more than the reflection of 'world-wide anxieties ... about contemporary existence ... [or] the individual psyche' (Sontag 1965, 42–7). By not engaging with the issue of how such moments of spectacle exist within each film's narrative structure, and by assuming that they all represent a common (global) audience perception, Sontag does not reflect on the specificity and the unique attributes of such images and films.

Sontag's work also struggles when covering lower budget genre examples, where the widescreen special effects spectacle is less overt, if featured at all. Given the relative scarcity of colour and widescreen in science fiction films of this time period, the theory needs to apply to smaller projects to retain its potency. Here, Sontag refines the notion of disaster so that it moves away from the spectacle of large-scale physical destruction to smaller notions of mutation and deformity. This move allows her to consider a film such as *Invasion of the Body Snatchers*, but without the sense of destructive spectacle the argument is less well defined. Sontag regards this film, and others with a similar narrative, as the physical destruction of self and the imposition of regimented order: but the argument does not engage with the very lack of the effects spectacle that had been so important in earlier examples. *Invasion of the Body Snatchers* is a potent illustration of a film that relies on tone, mood and performance over any effects-created visual spectacle: this treatment matches its narrative of an insidious takeover, where people do look exactly the same, not visually different, unusual or spectacular. Sontag does not explore this visual element and, despite a convincing argument around how such films may represent contemporary ideas around depersonalization ('the very model of technocratic man, purged of emotions, volitionless, tranquil ... turned into a machine' – Sontag 1965, 47), the reliance on

destruction as a central visual motif is never convincingly applied beyond the initial strong examples.

Sontag does, however, make explicit that such visual spectacle works within a narrative framework: her examples are all about locations, monsters or model work, elements that contribute to a particular narrative effect. Here, visual spectacle plays a psychological role for the audience, a release that allows them to fantasize about worldwide destruction, or the ability of special effects to tame the sublime and produce 'cognitive mastery' of the panoramic and visually spectacular (Bukatman 1999, 250). While Sontag offers a brief comparison between spectacle in science fiction and spectacle in horror and Biblical epics, it might be more illuminating to consider the difference between the spectacle offered in non-genre and genre films, and whether it 'lies in their "excuses," the narratives they employ' (Rickman 2004, xv). What Rickman suggests here is that the difference between all special effects spectacles, whether in genre films or otherwise, may be located not simply in their narratives, but in their larger use (thematic, aesthetic, ideological) within the film being viewed. Rather than follow Sontag's initial notion of an effects spectacle fulfilling the same function across a whole genre (the idea of destruction, fuelled by contemporary fears of actual nuclear disaster), it may be more useful to think about how spectacle functions within an individual film.

Geoff King has offered a move in this direction, part of a project that also criticizes a series of academic assumptions that claimed an increased special effects spectacle would lead to an imminent demise in Hollywood cinema (King 2000, 2). King usefully historicizes elements of this move towards the spectacular within culture and cinema, correctly placing cinematic spectacle not as a modern development but as a result of studio strategies to retain (or regain) audiences, then a more recent cross-platform convergence around computer games and theme park rides (King 2000, 2). The recent reintroduction of 3-D and the continued push towards IMAX cinemas within genre filmmaking would support the necessity to understand the industrial context of spectacle-led sequences within generic films. This understanding of the roots and uses of spectacle deepens the examination of specific case studies where there is an interplay of spectacle, narrative, aesthetics, and production history: most notably, *2001: A Space Odyssey* and *Star Wars*. Unfortunately, the identification of *2001* as more spectacle than narrative, and *Star Wars* as an example where special effects are relied upon to visualize narrative events, not be spectacular in their own right, raise the concern that *Star Wars* is somehow the benchmark and that *2001* is incorrect or unusual in its approach.

In fact, many science fiction films fit somewhere between these two poles of *2001* and *Star Wars*, even with the genre's increased use of CGI and the expansion into blockbuster filmmaking. Some sequences of *Blade Runner*, for example, linger on the effects work (most notably the ziggurats that loom over the future city) while other uses (the police hover cars) are driven by narrative or hybrid generic requirements; in *The Day After Tomorrow* (2004) the CG storms, tidal waves and

vast frozen landscapes look spectacular but are essential ingredients to illustrate the disaster-laden story of extreme global warming. Unlike the early cinema of attractions, genre narratives remain coherent and largely work within established 'three-act' structures that are familiar from notions of the classical Hollywood cinema and screenwriting classes. When special effect sequences appear within such a structure, they rarely dominate to the detriment of the narrative (indeed, there is a potent industrial argument around the use of CG to create realism: the epic images of films such as *Gladiator* (2000) and *Alexander* (2005) utilize special effects to suggest the historically 'real'). While audiences may be aware of the special effects image (largely because of the marketing of such imagery, as Chapter 9 will investigate), modern Hollywood spectacle, to borrow King's language, appears more interested in visualizing narrative events than overwhelming them.

Part of this concern over the placement of spectacle and narrative is a cultural worry over films 'dumbing down' of Hollywood (and, to a lesser extent, other world cinemas) offering lesser products that cater to (and encourage) a less intelligent audience. This is a key reason why certain genre texts become canonical, while others are often overlooked or, as in chapter one, why bodies such as the AFI choose to focus attention on *The Day the Earth Stood Still* rather than *Them!*, or *Blade Runner* over *Spacehunter: Adventures in the Forbidden Zone* (1983). This creation of a cultural hierarchy within genres (and within audiences, who are equally likely to create and enforce their own generic conventions) has led many science fiction blockbusters of the 1980s and 1990s to be derided as 'rides ... less narrative than they used to be and more spectacular, with their spectacles more compressed one atop another ... [while] theme park rides and attractions became more narrative than, say, roller coasters had been' (Bukatman 1998, 266). Yet, it is equally clear that such concerns are equally about what audiences will make of such films amid fears that entertainment is outpacing artistic innovation: *2001* is acceptable spectacle, because it is artistic and led by a recognized auteur, while more recent blockbuster spectacle is commercialized and led by populist producers such as Jerry Bruckheimer.

This discussion of spectacular special effects imagery is necessarily limited if it only sees such effects as the sole source of possible spectacle; it is important to recognize that effects work is simply one aspect of how spectacle can function within film. Film studies often expands (and necessarily complicates) the term beyond the industrial technology that has created special effects such as stop-motion animation, motion control cameras, matte paintings, optical effects, or computer-generated elements. The very notion of what individuals find spectacular can vary – a particular star image, for instance, a musical sequence, or an array of fantastic costumes – suggests a range of imagery that different audience members might choose to linger over (and be aware of the joy of looking that such spectatorship implies). Star images may be less common in the science fiction genre (partly due to actors reluctant to be typecast in one particular role or genre) but Charlton Heston in *The Omega Man* (1971) and Soylent Green, or Will Smith in *Independence Day*

(1996), *Men in Black* (1997), *I, Robot* (2004) and *I Am Legend* (2007) suggests a certain spectacle around masculine performance may be at work in such generic texts. Other films, such as *Helboy: The Golden Army* (2008), *Brazil* (1985) or *The Fountain* (2006) feature complex set design or costumes that lure the eye away from the narrative: these elements have the potential for spectacle, existing as areas that may attract audience attention. Equally, although the genre offers a much smaller sample, musical sequences can be found in science fiction films and offer a different pleasure and opportunity to the spectacle of special effect-based visuals. The musical sequences in *Just Imagine* are relatively staid, but generic films such as *The Rocky Horror Picture Show*, *Spaceballs* (1987) and *The Hitchhiker's Guide to the Galaxy* feature musical numbers that arguably stand out from (or pause) the narrative flow. The growth of aesthetic influences from music videos could also signify another source of viewer pleasure; visual and musical editing techniques contribute to spectacular sequences in *Thunderbirds* (2004) and *Aeon Flux* (2005), while science fiction imagery has been used to add spectacle to music videos for Jamiroquai, Michael Jackson and Queen.

There are, of course, cinematic technologies other than special effects that have been used by Hollywood (and other film industries) to enhance spectacular elements of the screen. The coming of synchronized sound offered a new audio spectacle of dialogue, soundtrack and sound effects; the crackle and hum of electrical equipment in the scientific labs of *Frankenstein* and *The Invisible Ray*; or the deafening roar of creatures from Gojira to the Predator. Colour cinematography offered new pictorial opportunities to the *mise en scène* of genre films *Destination Moon* (where primary-coloured spacesuits were set against the barren rock of the Moon), *War of the Worlds* (the pulsating green Martian war machines) and *Dr Who and the Daleks* (an array of coloured Daleks as opposed to the black-and-white options of the BBC television show). The latter film also made use of the new widescreen formats developed in the 1950s, which introduced the longer, thinner screens that the flying saucer of *Forbidden Planet* flew across, which opened up the vast scale of the Krell civilization in the same film, or which were filled with the post-apocalyptic scenes of *On the Beach* (1959). In each case, the technological innovation offered new visual or aural aspects to the genre, which were used to enhance both spectacle and narrative.

The reappearance of three-dimensional photography within Hollywood films has become an important intersection in this discourse around spectacular imagery. Yet the discourse around 3-D has tended to privilege claims around realism and verisimilitude as much as spectacle: a discourse that recalls the short-lived 3-D bubble of the 1950s which, according to film posters of the time, offered not spectacle, but 'startling realism, dazzling depth, life-like action, and excitement.' Despite posters that stressed the visual excitement of elements that leapt off the screen (a lion erupts from the screen in *Bwana Devil*'s 1953 poster; a chorus-line high kicks off screen in *House of Wax*'s, 1953); the competing discourses around

3-D (whether in the 1950s, 1980s or the 21st century) revolve around claims of realism and immersion as much as spectacle. The tagline for *Second Chance* (1953) emphasized it was 'SO REAL – every girl will feel like she's in the arms of Robert Mitchum' while adverts for the 3-D short of a 1953 Rocky Marciano fight noted that 3-D was 'better than ringside'. Realism and immersion are as important as the spectacle of images leaping off the screen. Meanwhile, one film critic described *It Came from Outer Space* as having '3-D dimensional photography ... [that] gave impressions of depth and true vastness ... the over-all illusion seemed natural and unobtrusive' (A.W. 1953). Depth as illusion and natural, spectacle and realism but also working in support of the narrative, with 3-D elements of *It Came from Outer Space* stressing the size of the interior of the alien spacecraft, and presenting alien and human characters on individual layers of the image (Johnston 2008b).

The recent return of 3-D production and exhibition, first through IMAX cinemas and then in more mainstream digital conversions, has been helped by genre successes such as *Monsters vs Aliens* (2009) and *Avatar*. The critical reaction to the latter film, given its (uncertain) claims to live action status (rather than the now accepted computer animated world of *Monsters vs Aliens*) has conformed to the earlier discourse around realism, immersion, solidity and nature. Some British newspaper critics described the film as 'immersive ... approaching the organic' (Romney 2009); 'the crystal clear 3-D makes it feel as if you could simply reach out and let your hand brush against a fern or catch a floating firefly' (Hunter 2009); or described the film's characters as 'reach-out-and-squeeze-'em real' (Collin, 2009). Not all British film critics made such claims, with Peter Bradshaw and Tom Huddleston defining the film in relation to visual spectacle rather than realism or immersion. Yet it is clear that the discourse around spectacle and realism, and the ability of special effects and cinematic technology to provide elements of both, is a central tenet to current (and potentially future) discussions of new developments in filmmaking.

Stars, sound, colour, widescreen and 3-D: the expansion of elements that are capable of offering generic spectacle appears to confirm that spectacle can offer 'a range of pleasures associated with the enjoyment of "larger than life" representations, more luminous or intense than daily reality' (King 2000, 4). In this respect, spectacle is not a fixed or easily transferable set of expectations. Critical reviews of science fiction films will traditionally focus on special effects as the source of spectacle and audience research does seem (at least in part) to support the belief that viewer expectation of spectacle is also located around those technologies and processes (Barker and Brooks 1998). Despite historical and more recent examples of spectacle in other branches of visual entertainment (the availability of cheaper special effects technologies has increased the level of effects-based spectacle that can be utilized in genre television: most notably in twenty-first century revisions of *Battlestar Galactica* (2004–9) and *Doctor Who*, 1963–present) there remains an assumption that spectacle remains a factor of cinema itself, something that only the big screen experience can truly offer (Pearson and Messenger-Davies 2003). Despite DVD,

television and mobile media technologies changing the average screen size for film viewing, the association of spectacle (particularly special-effects-created spectacle) with the blockbuster cinematic experience seems unlikely to disappear. Spectacle (in whatever form) remains a moment of cinematic excess, a popular draw among audiences, and is as potent now as it was in the Victorian era, the early years of film, or the 1950s.

Given the prevalence of effects work within most science fiction films and the increasing presence of science fiction narratives within modern blockbusters, this discourse around spectacle, narrative and realism will continue to develop. As the book moves on to consider genre history, however, it will become even clearer that this is not a new debate. It occurs and recurs at various points in the historical periods that will be covered in Part II, and has continually impacted on popular conceptions of what the genre was, what it looked like, and what form it could take next. The reliance of film studios on the latest technology, be it wider screens or home video, computer games or the Internet, stop-motion animation or computer-generated imagery, is always at the heart of science fiction filmmaking and narratives. As the following chapters will demonstrate, however, modern technology may be used to create such compelling visual images, but technology and scientists are rarely neutral or positive elements of these science fiction narratives.

Part II Genre History