Movies and Meaning
An Introduction to Film
Stephen Prince
Sixth Edition

Pearson New International Edition

Movies and Meaning
An Introduction to Film
Stephen Prince
Sixth Edition

moonlight in the matte, however, was better looking than what the cinematographer could achieve with the live-action elements. The digital artists had to redo their lighting, making the light harder and more directional so that it would match the cinematography.

Similar to a matte painting, a **translite** is another common way of creating a distant background for a scene or set. A translite is a photograph, blown up to huge proportions, mounted on a translucent screen, and then lit from behind. A translite provides the dramatic skyline in the background of the set at the climax of *Fight Club* (1999). The translite was composed of several 8 × 10 inch photographs, combined and blown up to a size measuring 130 feet wide by 36 feet tall. This is a very common method for creating landscapes or city views glimpsed outside the windows of indoor sets. The views of the city outside the windows of the Nakatomi Plaza building in *Die Hard* (1988) are translites, as are the views of rural countryside surrounding the home in the first section of *A.I.: Artificial Intelligence* (2001).

Throughout most of cinema history, matte paintings—whether painted traditionally or digitally—have been flat, unmoving components of a scene, typically placed in the background, behind actors, props, and sets. Actors and the camera could not interact with them. Today, by contrast, **3D digital mattes** can be manipulated to simulate the perspective of a moving camera, as in the David Fincher film, *Zodiac* (2007).

NORTH BY NORTHWEST (MGM, 1959)

Roger Thornhill (Cary Grant) carefully approaches the luxurious mansion of arch-villain Philip Vandamm in Alfred Hitchcock's popular thriller. Hitchcock never hesitated to wink at the audience. The house is a matte painting. Frame enlargement.

FIGHT CLUB (20TH CENTURY FOX, 1999)

The dramatic skyline in this scene at the climax is a translite, an enormous photographic image mounted on a translucent screen. A thin netting hung in front of the translite, and as it moved in the air currents on the set, the distant lights of the city seemed to twinkle. Frame enlargement.

Case Study   ZODIAC

Digital tools enable filmmakers to place actors inside virtual sets that look photographically real. *Zodiac* featured extensive digital effects work, but most of this was quite subliminal and subtle. Most viewers do not experience this movie as a showcase for effects. The film is a historical portrait of the Zodiac killer's rampage in the San Francisco area beginning in 1969 and of police efforts to apprehend him. Because the film chronicles true events, Fincher wanted to be as faithful as possible in visually portraying the San Francisco Bay area as it existed in that period.

But the city has changed a great deal, and many of the crime scenes no longer look as they did in the late sixties. So when a location could not be photographed so as to represent this earlier period, the filmmakers used digital methods of creating their locations. A prominent establishing shot of the harbor, showing the ferry terminal, which has the camera flying in over the water as if on a helicopter, was entirely computer generated. Photographs of the area taken from a U-2 spy plane in the early 1970s provided information about buildings in the area that no longer existed, and using methods of **photogrammetry** the filmmakers were able to construct a three-dimensional environment from these photographs. Photogrammetry is a process of tracing lines of sight from the cameras in several photographs and then mathematically plotting their intersections to yield the 3D landscape.

ZODIAC (WARNER BROS., 2007)

A spectacular establishing shot of the San Francisco harbor was entirely computer generated, with the 3D models built from archival photographs to achieve historical accuracy. Frame enlargement.

ZODIAC (WARNER BROS, 2007)

The crime scene at Washington and Cherry Streets was recreated on a studio set, with actors and a few props against a bluescreen. The distant buildings are a 3D digital matte, capable of being rotated to simulate the view of a moving camera. The near police car is a real prop, while the distant one is a CGI element. Frame enlargement.

Such information can assist in **camera mapping** a virtual 3D environment. A good example of this occurs later in the film when the police investigate one of Zodiac's killings at the intersection of Washington and Cherry Streets. The area looks wealthier today than it did in 1969, and so parts of the scene were shot in a studio with actors and a few props against a bluescreen. The surrounding buildings were added through camera mapping as a 3D digital matte. Camera mapping involves projecting a matte painting or photograph onto a 3D wireframe geometry built in the computer that corresponds with the objects in the matte. Period photographs of buildings in the area were projected onto a geometrical rendition of the area. Because the wireframe geometry of the virtual set can be rotated and moved in the computer, once the photographic information has been projected onto this geometry, the digital matte can then be moved and rotated to simulate such things as camera movement. When the camera follows Inspector David Toschi (Mark Ruffalo) as he walks down the street at the intersection (Ruffalo is actually on the bluescreen set), the digital matte background moves according to the camera's changing line of sight. This creates a convincing 3D illusion and enables the actors to credibly interact with a virtual set that is dynamic.

3D digital mattes are used extensively in films today. In earlier periods of filmmaking matte paintings were static and flat. They were two-dimensional areas added to the background of a set. By contrast, the dynamic properties of 3D mattes enable the camera and the actors to credibly interact with them and can make virtual sets seem photographically real and authentic. ◾

THE DESIGN CONCEPT

Production designers typically work from a detailed visual concept that organizes the way that sets and costumes are built, dressed, and photographed. Let's examine two examples of this.

Case Study   THE LORD OF THE RINGS: THE RETURN OF THE KING

Director Peter Jackson and his team of filmmakers used set and costume design with great care and intelligence to convey the illusion that the fanciful locations in the story were real and authentic. To accomplish this, although the film involved a considerable amount of digital effects, the filmmakers relied on traditional tools of production design—hand-built sets, miniatures, props, and costumes. They believed that these hand-built sets and costumes would establish the reality of the film's fictional worlds and help to anchor the digital effects. As a result, the film achieves a careful and successful balance of digital and traditional design methods. This helps to avoid the cartoonish quality that sometimes results when a film goes overboard on digital effects.

As visual-effects cinematographer Alex Funke noted, "At some subconscious level, viewers can tell when they're seeing real photography."

The size of the film (actually, it was three films because the entire trilogy was shot at once—principal photography lasted over 15 months, and total production time was 4 years!) was unusually large. Three hundred and fifty sets were constructed, plus 68 miniatures, and each of the Middle Earth civilizations visited by the characters required an average of 150 costumes. Forty-two tailors, cobblers, jewelers, and embroiderers worked on these.

The most complicated sets and miniatures were those for the seven-tiered city of Minas Tirith. A lot of the film's action takes place in that city, including a long siege and battle. The art department's conceptual designer, Alan Lee, first visualized the city's design in a series of pencil sketches, in which he pictured the city's culture and its architecture. These were meant to be reminiscent of medieval Europe. The pencil sketches furnished the basis for set and model construction.

The entire city could be constructed only as a miniature model, which would be used in long shots such as the one where Gandalf approaches it on horseback. Before building it, the miniatures unit consulted with cinematographer Andrew Lesnie to work out lighting

(*continued*)

THE LORD OF THE RINGS: THE RETURN OF THE KING (NEW LINE, 2004)

The city of Minas Tirith is a principal setting of the third film in the trilogy. It appears as a miniature model, as in the scene where Gandalf approaches it on horseback. It also appears as a series of full-scale sets inhabited by live actors, accentuating the authenticity of the setting. Frame enlargements.

design, color, and texture so that shots of the miniature (not photographed by Lesnie) would match with his footage of other scenes.

Miniatures of the city and its selected parts were then built at 1/72 scale, with exacting detail. More than 1000 houses populated the city, with fine detailing in the architecture, yards, and even the interiors. This was necessary because director Peter Jackson wanted elaborate camera moves, swooping across the rooftops, between the buildings, and down through the streets, especially in the battle scene.

These moves were accomplished with a **snorkel lens**. Attached to a camera at the end of a long flexible tube, or snorkel, the lens can be maneuvered through the very small and tight spaces of a miniature model, and it has a pitch-and-roll mechanism that enables it to move in an acrobatic fashion, as if the camera were mounted in an airplane. This produces a convincing illusion of elaborate and extended camera moves. In many of the shots, the lens passed so close to the miniature that it almost scraped the paint on its surfaces.

Other sequences in the film—Faramir and his men riding out of the city to their deaths, Gandalf and Pippin galloping through the streets—required that live actors interact with their surroundings. Therefore, portions of Minas Tirith also were built as full-scale sets. These were constructed at the huge Dry Creek Quarry (also used for the Helms Deep Castle sets in *The Two Towers*). Building these sets required six months because Jackson wanted the size and scale of a true city and wanted it captured in real photography rather than as a digital effect.

Director Peter Jackson said that he wanted viewers to feel like the film had been shot on actual locations in Middle Earth. He wanted everything on screen to seem real. He knew that digital effects alone could not achieve this. Thus traditional methods of production design became key ingredients in this strategy of visiting Middle Earth "for real." ■

Case Study   THE EVOLUTION OF DESIGN IN CONTEMPORARY SCIENCE FICTION FILMS

Stanley Kubrick's *2001: A Space Odyssey* (1968) had special effects far more sophisticated than any film of its time, and even today they remain impressive. Kubrick's model spaceships were remarkably detailed and three-dimensional, and he used mattes to insert moving images of people into their interiors, glimpsed behind windows. Inside the spacecraft, the production design emphasized blank, white, controlled, and regulated environments that suggested an antiseptic future, in which human behavior was rational and orderly rather than unpredictable and impulsive. The designs spoke to control and authority rather than decay and chaos. Doing so, they embodied the central irony of the film, namely, the way in which people had ceded control over their lives to the mechanical systems and synthetic environments they created. The pessimism inherent in this view would inspire the next generation of science fiction film and give rise to an alternative way of visualizing the future. *Alien* (1979) initiated this alternative visual design.

Ridley Scott, director of *Alien* and *Blade Runner*, has acknowledged the importance and influence of Kubrick's film. *Alien* replicated the antiseptic Kubrick design in selected sets of the spaceship, Nostromo, but in other ways it established a new design template for the next decade and a half of science fiction filmmaking. The Nostromo has two faces. The control rooms and science bays upstairs are gleaming and antiseptic. By contrast, sets in the bowels of the ship—its engine rooms and storage areas—were grimy, dark, and dank. These established a mise-en-scène that became the norm not just for the *Alien* series but for subsequent science fiction films in general,

including such pictures as *Blade Runner* (1982), *Escape from New York* (1981), *Robocop* (1987), and *Dark City* (1998). Locales are dirty and dimly illuminated, with rain- and smoke-filled air. This mise-en-scène might be termed future noir because of its similarity to the gloomy and oppressive look of classic film noir. It has another root in Fritz Lang's *Metropolis* (1927), specifically that film's underground city where the workers reside and labor, a place of enormous machinery, darkness, and congestion.

Alien's future noir transitioned film away from the antiseptic *2001* look, and *Blade Runner*'s landmark production design reinforced this shift with its dark vision of a future city. Production designer Lawrence G. Paull based his design concept on the social realities evoked in the film's script and the novel from which it derived. The film is set in a futuristic society where the middle class has relocated to pleasurable off-world colonies, leaving the cities to choke in urban decay, architectural collapse, and overpopulation. The visual design of the film creates a world of clutter, a ghettoized alley environment in which transient, jobless, urban poor jostle together in a mix of nationalities and languages, whereas, far overhead, video monitors and electronic billboards carry corporate advertisements and media messages. High-rise buildings of high-tech opulence coexist with the crumbling alley environment, creating a striking mix of contrasting architectural and social styles and realities. Paull's production design is a stunning translation of the social realities of the story into extremely powerful visual environments.

2001: A SPACE ODYSSEY (MGM, 1968)

Human figures against a sterile, white environment. The production design evokes an antiseptic, sterile future in which human beings have ceded authority to the technological systems they have created. Frame enlargement.

(continued)

ALIEN, ALIENS (20TH CENTURY FOX, 1979, 1986)

Production design of the space-craft Nostromo evoked two sharply contrasting environ-ments. The sterile, antiseptic sci-ence bays and computer rooms showed the influence of Kubrick's *2001*. But it was the dark, grimy interior of the Nostromo, and its low-key lighting, that helped establish "future noir" in science fiction films for years to come. Frame enlargements.

BLADE RUNNER (THE LADD COMPANY, 1982)

Blade Runner's influential design concept followed the social realities depicted in script and novel. The visual clutter evokes a ghettoized urban future marked by social breakdown. The film's production design brilliantly embodies the novel's themes of entropy and decay.

The noirish, pessimistic mise-en-scène established by *Alien* and *Blade Runner* predominated in science fiction films for the next 15 years. Even fantasies such as the *Batman* series visualize a noir environment. So prevalent had it become that when director Luc Besson and de-signer Dan Weil were planning *The Fifth Element* (1997), they felt it imperative to break with this style and define an alternative. Accordingly, *The Fifth Element*'s city is seen mostly by day, and has a recognizable Manhattan skyline, and in place of the tangled and shadowy architectural

styles in sci-fi noir, it was built on a grid pattern, like Manhattan, with vanishing single-point perspective. This design connects this futuristic cityscape with the recog-nizable metropolis of today. Innovative and startling in its time, the future noir look had become conventional, a mise-en-scène to avoid for *The Fifth Element*'s filmmakers, interested in creating new imagery. Like cinematogra-phers, production designers study and borrow from the work of their peers, and really successful design concepts in time can become obstacles to fresh creation. ■