

3 STORYBOARDS

Maurice Zuberano, one of the most respected production illustrators and art directors in the trade, has called the storyboard the "diary of the film." If so, it is a diary written about future events. What he was getting at, though, is that the storyboard is the private record of the visualization process, one of the reasons so few of them survive intact. Frequently, it is the evidence that the look of a film was the work of someone other than the director. For directors without a strong visual sense the storyboard illustrator is the shot-flow designer, essential to the structuring, staging and composition of shots and sequences.

Of course, there are directors who are as visually sophisticated as any member of the production staff and, in the narrative sense, perhaps more so. Hitchcock, who is probably associated with storyboarding more than any other director, used elaborate boards to refine his vision and control the filmmaking process, ensuring that his original intention was translated to the screen.

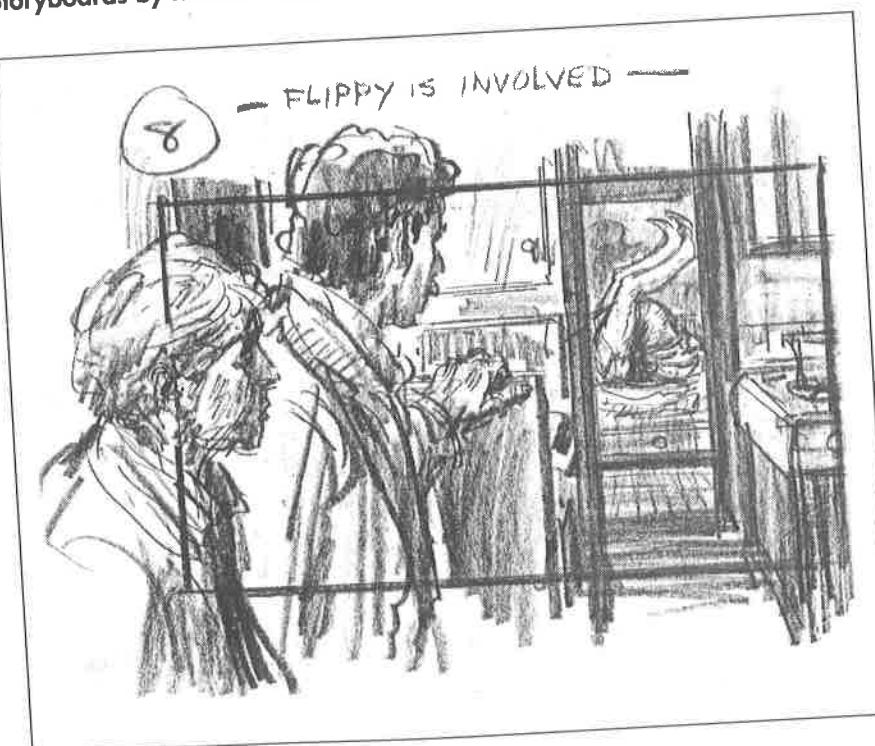
For Hitchcock, who began in films as an art director, it was also a way of making sure that he was credited with the design of his films. He liked to say that his movies were finished before they were ever made, before the cinematographer or editor touched a piece of film. This is confirmed by the fact that he rarely looked through the camera viewfinder on the set, since it was merely a photographic equivalent of a storyboard that had been finalized earlier.

Hitchcock influenced a whole generation of filmmakers in the '60s who already had affection for continuity graphics in the comics, which, like jazz and the blues, were beginning to be recognized as an American art form at that time. The most famous filmmaker of that generation, Steven Spielberg, generally recognized as the premier visualizer of the entertainment directors, has published collections of production art from his collaborations with George Lucas, bringing further attention to the use of storyboards and production illustration. Without storyboards, Spielberg's complex staging and kinetic effects would not have the lapidary polish that has become the hallmark of his work and the goal of many young filmmakers.

It would be easy to dismiss the current interest in storyboarding as further proof that today's Hollywood filmmakers have little knowledge of fiction outside comic books and that they are more comfortable with storyboards and action than ideas. But the truth is that many films are storyboarded regardless of subject matter. It may even be that films without a great deal of action benefit more from storyboards than kinetic subjects. Even Jean-Luc Godard, who throughout his career discarded or subverted the continuity devices shared by comic strip illustrators and classical Hollywood films, used storyboards at times to work out the connections between shots. Storyboards are merely a tool and need not reflect



Storyboards by Mentor Huebner for *Her Alibi*.



any style or content besides that which the individual filmmaker cares to show.

Storyboards serve two purposes: First, they allow a filmmaker to pre-visualize his ideas and refine them in the same way a writer develops ideas through successive drafts; secondly, they serve as the clearest language to communicate ideas to the entire production team. Admittedly, the communication value of storyboards grows with the complexity of the production, but storyboards are not restricted to action scenes and big-budget productions. Even small, dramatic films can benefit from storyboards, helping the director to refine mood and dialogue.

The Director's Role in Storyboarding

Every film is a unique blend of talents and personalities, and the responsibility for the look of a film is shared in varying degrees by the production designer, director, cinematographer and editor. In recent years, the trend has been for the director to work directly with a sketch artist, shifting some of the responsibility for continuity away from the production designer. It's important to remember, however, that a highly visual director has always been able to take charge of a picture despite the working system of the studio. Now that there are no longer studios to impose a house style, this is even more true.

Directors with some training in the graphic arts or a penchant for drawing—Hitchcock and Ridley Scott are two examples—may furnish rough storyboards of their own to be refined by the regular storyboard artist. Sherman Labby, a production illustrator much in demand, worked with Ridley Scott on the film *Blade Runner* and spoke of the evocative line drawings (affectionately named ridleygrams) he received for many scenes from director Scott. Director/artists have also included such stylists as Eisenstein, Fellini and Kurosawa, all of whom have storyboarded sequences or contributed elaborate conceptual sketches to their films. Even directors without a particular skill in drafting, such as Steven Spielberg and George Miller, occasionally make stick figure drawings to explain a specific composition or staging. Even when the director has a clear plan in mind, however, he will encourage the storyboard artist to contribute ideas.

Paul Power, one of the newer production illustrators with experience in comics and film, enjoys collaborating with the director working out each scene in long brainstorming sessions. Sometimes this includes reading the dialogue and acting out scenes page by page from the script with the director stopping only to make rough sketches. Later, these will be turned into more refined drawings for further discussion. His involvement in the staging and dramatic concept of a film has led Power to describe the type of illustration he does in the panels as "acting with a pencil." Power's defines the production illustrator's responsibility as helping the director find the means to express his vision. In fact, the primacy of the director was a consistent theme with all the production illustrators I spoke with. In a way, the very craft of storyboarding teaches an illustrator to be flexible. Since they are accustomed to refining a sequence through constant revisions, production illustrators recognize that

there are many solutions to any problem. The challenge of collaboration is interpreting the director's view of the script.

Schedules

Production illustrators may work on a film for 2 weeks or for more than a year, depending on the complexity of the production and the needs of the director. While it is hard to pin down an average schedule, the thorough storyboarding of an entire film, as opposed to select action sequences, usually requires a minimum of 3-4 months. For large productions with elaborate sets and effects several sketch artists may be needed and in some cases, the production designer contributes continuity sketches as well. Even when more than one artist is at work, a complex film may require a year to storyboard. It should be mentioned, however, that this longer schedule does not reflect drawing time as much as the necessity of waiting for each element of the production (locations and sets) to be designed before storyboarding work can proceed.

Skills Required by Storyboard Artists

A production illustrator must understand staging, editing and composition and be thoroughly familiar with the use of lenses in cinematography. He should be a facile draftsman adept at drawing the human figure in a variety of poses without resorting to models or photographs. He also needs to be able to work quickly under the pressure of deadlines and to adapt to the look and feel of different historical periods and exotic locations. This doesn't mean research material isn't used. A sketch artist isn't expected to know period clothing or what the interior of a submarine or the skyline of Nepal looks like. But a good visual memory is invaluable since he will have limited time to find references for any series of sketches.

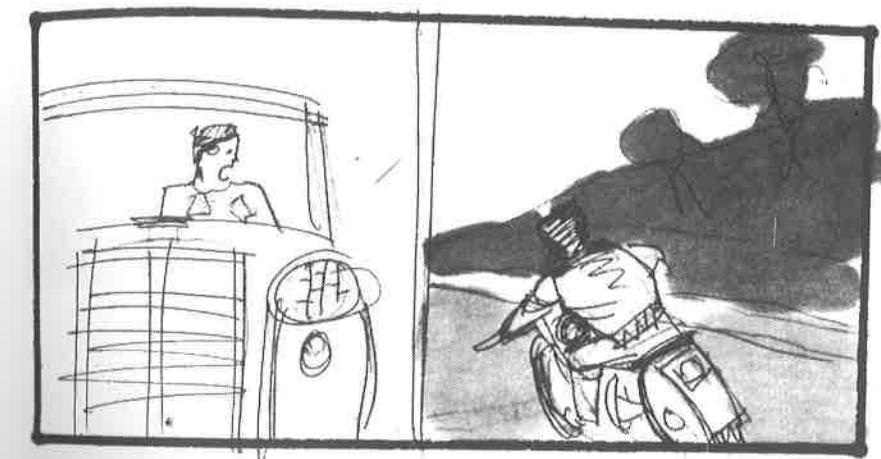
Reference and Research

In the later stages of design, the sketch artist will base his illustrations on photographs of the actual locations chosen by the director, production designer and cinematographer, or he may visit the location in person and photograph his own reference shots. In the case of the film *La Bamba*, the biography of rock and roll musician Ritchie Vallens, storyboarder Paul Power immersed himself in Mexican culture, visiting the locations where Vallens actually lived and meeting with members of his family. Power worked on the boards for several months before shooting and stayed with the production during actual shooting to make adjustments to the boards as filming progressed. An excerpt from Paul Power's opening storyboard for *La Bamba* begins on page 26.

For a relatively low budget film, Power's experience on *La Bamba* was enviable. In general, the storyboard illustrators in today's moviemaking environment have less time to refine their boards than in the past. Perversely, this excellent tool, which can save producers a great deal of time and money, is one of the first items in the budget to be reduced or



Storyboard for *La Bamba* by Paul Power.



Storyboard for *La Bamba* by Paul Power.

eliminated. Several production illustrators have told me that there is a general tendency to use less refined boards for fewer scenes, though the directors who know that this is penny-wise and pound-foolish demand the time for proper storyboarding.

In the days of the studio, when storyboard artists were on staff, the average level of execution in production illustration was probably higher. While there are illustrators today who are capable of producing work equal to the best of the past, the general shifting of money from below-the-line to above-the-line expenses has begun to adversely affect production illustration and ultimately the productions themselves.

Style

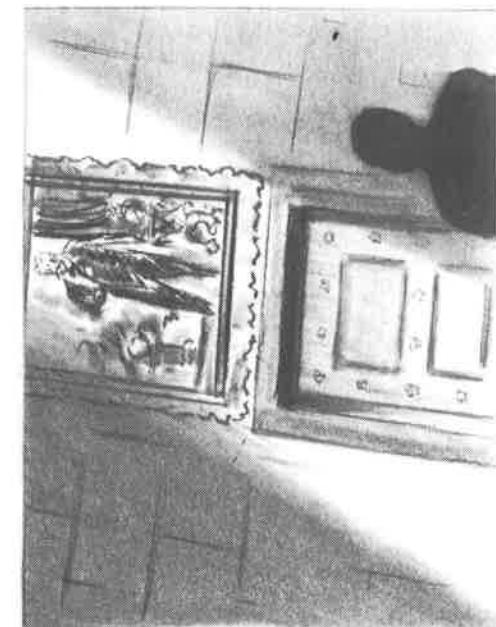
Beginning on page 29 are five storyboards from *Citizen Kane*. These are good examples of how continuity sketches can convey the visual flow and mood of a sequence and are typical of the type of work produced at the studios in the '30s and '40s. Credit is given at the bottom of one of the drawings to director Orson Welles, art director Van Nest Polglase and his associate Perry Ferguson. This is somewhat misleading and one of the many unattractive aspects of the studio system. In actuality, Ferguson was the art director on *Citizen Kane*, and Polglase was head of the entire RKO art department. Ferguson did the actual design work for *Citizen Kane* while Polglase's responsibility was largely managerial; he was not involved in most of the specific creative decisions. Unfortunately, under the studio system, production illustrators were not allowed to sign their work, making it difficult today to assign credit to individual drawings.

Ferguson worked in close collaboration with Welles on the conception of the scenes, which was then turned into sketches, set drawings and storyboards by illustrators in the RKO art department. According to credits listed in *The Making of Citizen Kane* by Robert C. Carringer, there were five illustrators on *Kane*: Charles Ohmann is listed as Principal Sketch Artist, while Al Abbott, Claude Gillingwater, Jr., Albert Pyke and Maurice Zuberano are listed under the heading, Sketches and Graphics. There may have been other artists who contributed sketches, and often times more than one artist would work on a drawing or storyboard. In the studio system it was not unusual for illustrators in the art department to work on projects they were not assigned to when the work needed to be done.

The first storyboard on page 29 is a four-panel sequence of the Thatcher Library. These charcoal sketches are a better example of set design and mood than of editing continuity, and the gothic lighting is very close to the way the scene appeared in the film.

The second sequence pictured is a more conventional continuity board and shows a scene deleted from the script. The sequence is a recollection by Kane's guardian, financier Walter Thatcher, of a trip to Rome to see Kane on his twenty-fifth birthday. Descriptions below each panel describe the basic action of the scene, transitions and camera movement.

In the next series Kane meets Susan Alexander for the first time outside a drugstore. The basic action of the scene is quite close to the



Storyboard for the Thatcher library scene in *Citizen Kane*.

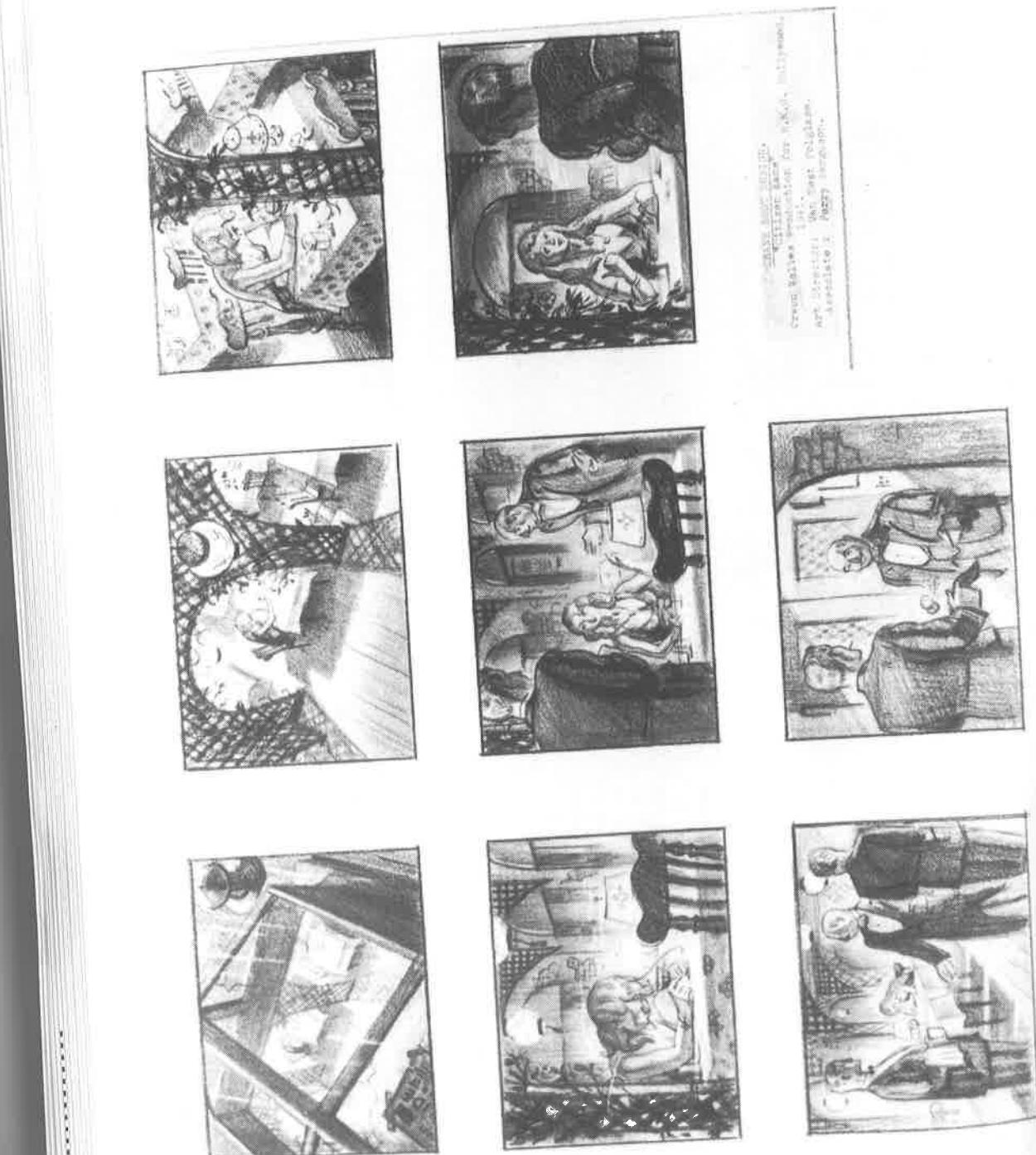
1ST ROMANCE SEQUENCE.



Storyboard of the Romance sequence deleted from Citizen Kane.



Kane meets Susan Alexander. Storyboard for Citizen Kane.



Storyboard of the El Rancho cabaret crane shot from *Citizen Kane*.

"EL RANCHO CABARET"

William READ "EL RANCHO"
↑ SO ON



UPSHOT ON ROOF OF BUILDING-
CAMERA - SIGN - RAIN-
THUNDER - CLOUDS - CAMERA



SHOT ANGLE ON SET AS
CAMERA CONTINUES TO CRANE -

WILLIAM THOMPSON AND MARY

MATTER



UPSHOT TO SIGN SKYLIGHT
IN RAIN - RAIN BEATING DOWN
ON THUNDER



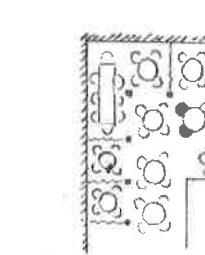
UPSHOT OF SIGN - THE BUSINESS
WITH THOMPSON AND MARY

MATTER

FAR SHOT -



AS WE GET VERY CLOSE TO
RAIN COVERED GLASS MATCH
BLURRED SHOT WITH



LEAVES AND HEADQUARTERS
DURING ANOTHER K. DRINK
FAR SHOT -

+

+

Storyboard of the El Rancho cabaret crane shot, including roof sign, from *Citizen Kane*.

filmed version, but the camera angles and staging are very different.

The last two storyboards show how a scene develops through successive drafts. The sequence depicted is one of the most famous shots in *Citizen Kane*: the crane move through the skylight of the El Rancho cabaret down to Susan Alexander and Kane seated at a table. The shot is actually a combination of a miniature rooftop set and the full-scale interior of the nightclub joined by a dissolve as the camera moves through the rain-covered glass of the skylight.

The first treatment of the crane shot on page 32 is wonderfully rendered in a style of illustration evoking the lighting of the German Expressionists of the '20s, though the framing of the scene is quite different from the way the sequence eventually turned out.

The second version is virtually identical to the original sequence as the camera approaches the skylight. But as the camera descends to the floor the storyboard again diverges from the filmed version. There may have been other storyboards of the scene, but a look at just these two should indicate how valuable they are as a method of developing ideas.

Notice that the storyboard also includes a schematic diagram of the scene drawn on the right-hand side of the board. This is helpful for both the designer and the cinematographer to communicate the technical requirements of the scene. This clarifies the layout of the set when unusual or disorienting perspectives are illustrated.

Similarly moody are Harold Michelson's storyboards for Hitchcock's *The Birds*. The six panels featured show how the economical use of line can convey all the information the cinematographer needs to understand the framing continuity of a scene. Without spending a great deal of time on specific detail, these energetic sketches establish mood, locale, composition, staging of action and the selection of lens for each shot. The six frames on pages 35 and 36 depict the attack of the birds on the children running from the schoolhouse in Bodega Bay after the birds have gathered in force.

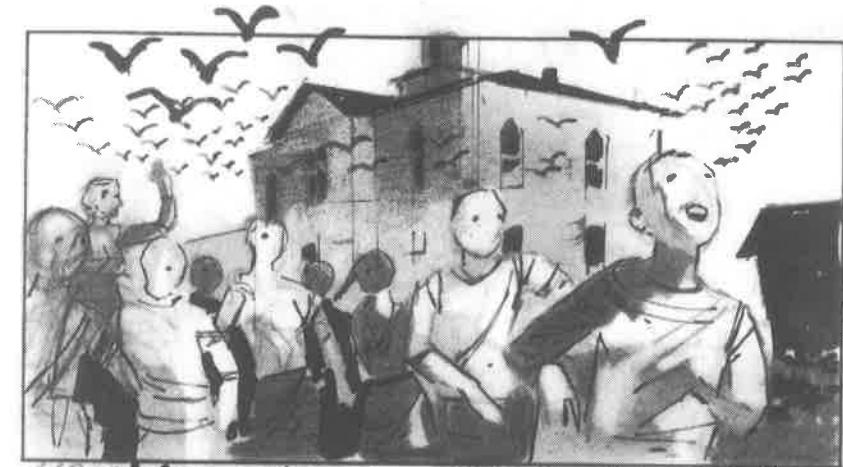
The production designer for *The Birds*, Robert Boyle, collaborated with Hitchcock on five films beginning in 1942: *Saboteur*, *Shadow of a Doubt*, *North by Northwest*, *The Birds* and *Marnie*. He reaffirms Hitchcock's reputation as a methodical planner, but also as a director who was interested in the ideas of the talented people with whom he worked. Their usual way of working together began with meetings early in the production schedule to go over each scene. Hitchcock might furnish rough thumbnail sketches to elaborate a sequence, but this process was also intended to allow his creative team to elaborate on each other's ideas. From these meetings a general plan was devised for each scene, some more detailed than others, and Boyle would begin to oversee the storyboards, set designs, costumes and special effects necessary to turn ideas into cinematic fact. Boyle would contribute some of his own drawings for the sets and storyboards, but much of this work was handed over to storyboard illustrators who would receive instructions based on Boyle and Hitchcock's meetings.

Following Michelson's drawings on page 38 is an extremely rare page

C-2



437 Melanie - Run - Run.

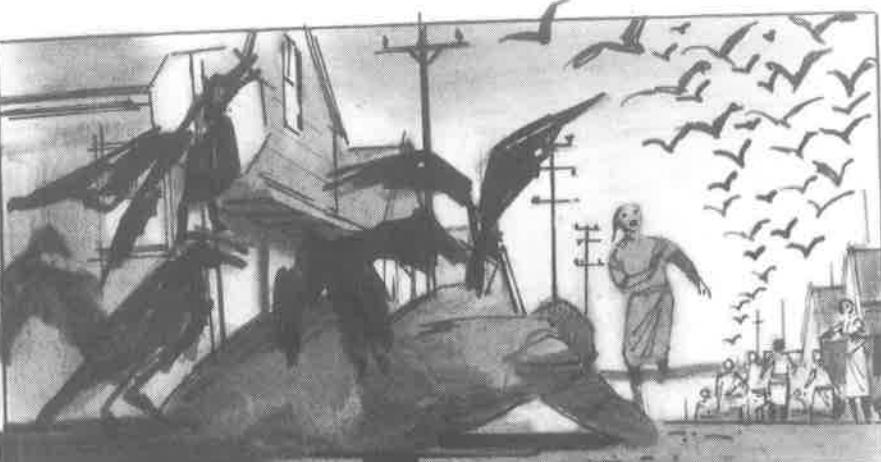


440 Children (foreground against Sodium Screen) Background Bodega school with middle and 2 or 3 children



440A continuation of 440. - Melanie runs past camera

Storyboards for *The Birds* by Harold Michelson. Production design by Robert Boyle.



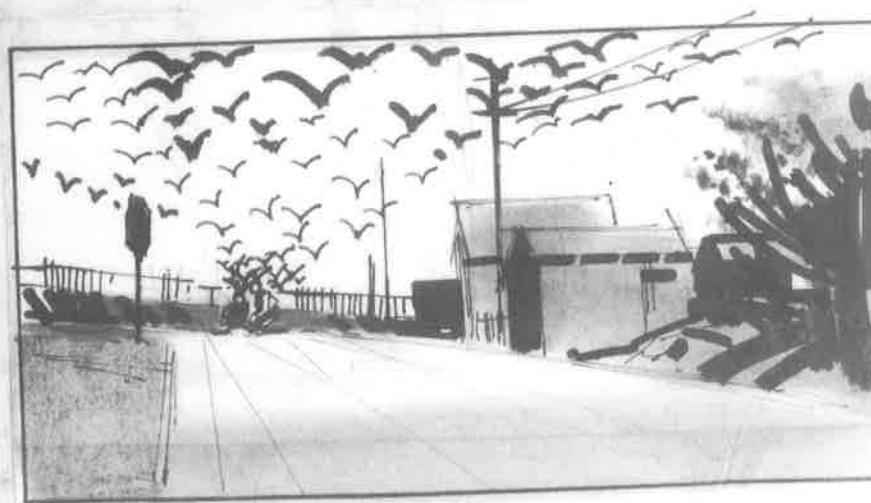
447 Michele & Cathy on foreground road - Background
children & birds on broken background plate.

traveling
matte



448 melanie - foreground - Birds - running children - Background

few.
matte



few.
matte

449 Storyboards for *The Birds* by Harold Michelson. Production design by Robert Boyle.

of notes and storyboard panels drawn by Hitchcock himself for the 1943 production of *Lifeboat*. The page is three-hole punched for use in a binder and includes notes describing action and the lines of dialogue that accompany the panels. The specific dialogue cues mean that Hitchcock was cutting in the camera, greatly limiting the manipulation possible during the editing process. The first panel shows that Hitchcock made a slight adjustment in the composition, moving closer and to camera left. Notice also that the direction "Repeat all with closer lens" appears on the far left of the second panel. This may refer to the dotted frame line around the oarsman, indicating that Hitchcock intended to get coverage of the same action, only closer.

Materials

Since the only criteria they must meet is ease of execution and reproducibility, most storyboards today are rendered with a fast, easily controlled medium such as pencil, ink and charcoal dust or dry markers for color work.

Pencil

The pencil, either graphite or charcoal, is one of the illustrator's basic tools, and even when a drawing is completed with ink, the undersketch is usually laid down in pencil. Photocopied, the contrast becomes sharper, though a tentative line tends to become scratchy. More than anything else the pencil's virtue is its erasability. It is the word processor for the artist. I used pencil for the storyboard demonstration of a crane shot in this chapter, and as you will see, the blacks are never quite as stunning as those possible in ink or charcoal.

Ink and Charcoal Dust

This seems to be a medium peculiar to storyboards. No other medium lays down a broad stroke of tone faster than a cotton ball dipped in charcoal dust, one that can be later erased with a kneaded eraser for corrections or creating highlights (see Harold Michelson's drawings, pages 35 and 36). It tends to reproduce better than pencil and is capable of deeper tones. It's probably the favorite medium of storyboard artists, and you will see it used by many of the illustrators featured in this book.

Markers

Madison Avenue has made the dry marker the medium of choice in the advertising art department. Dry markers are inexpensive, dry instantly and do not require the preparation or cleanup necessary with other color media. In the hands of a good comp artist they can produce remarkably realistic effects, though for finished conceptual drawings they are frequently combined with colored pencils, pastels and inks. They are virtually the standard comp material for studio artists, illustrators, product de-

signers, architects and interior designers—anyone who needs a brilliant, fast medium to communicate basic design concepts. Markers are not for timid sketchers and demand a bold touch. They do not blend easily and a misstroke can scar a delicate drawing. In most cases state-of-the-art marker technique is more elaborate than is necessary for feature storyboard work and a simple marker style is preferred. If you decide to use markers be sure to work in a well-ventilated studio—the solvents give off fumes, which many find unpleasant. One last point: Markers are not lightfast and will fade with time. The more ultraviolet light (primarily sunlight) they're exposed to, the faster they will fade. In prolonged bright sunlight noticeable deterioration will begin within a period of a few weeks. If you are saving your work for posterity keep this in mind.

Illustrating Camera Techniques

The most obvious limitation of the storyboard is its inability to show motion—not merely action within the frame, but more importantly, the movement of the camera. Optical effects like dissolves and fades are also beyond the scope of the illustrator, as are most manipulations of depth of field and focus. The most obvious solution is to use captions and schematic drawings to describe what cannot be drawn. There are also several techniques used by animators to show camera movement and extended space that can be adapted to live-action subjects.

The first element we need to consider is the border of the storyboard frame. Its purpose is to indicate a viewpoint, selected from the whole of space. Therefore it is permissible (and frequently valuable) to allow the drawing to extend beyond the edges of the frame. Actually, many artists begin a drawing without frame lines. After they have sketched in the basic elements of the drawing they use loose sheets of paper to mask off portions of the picture to find the exact composition they are looking for. Because both the camera and subject can move in film, the filmmaker will find that placing a storyboard frame within a larger drawing is a useful technique for illustrating the fluid compositional qualities of the medium.

In this next series of panels, I will use different drawing styles while showing several methods of illustrating camera movement and transitions.

The Pan Shot and the Tracking Shot

This first wide panel in Figure 3.1 illustrates a man running down a street in pursuit of a rooftop sniper. The man in the street is shown at important

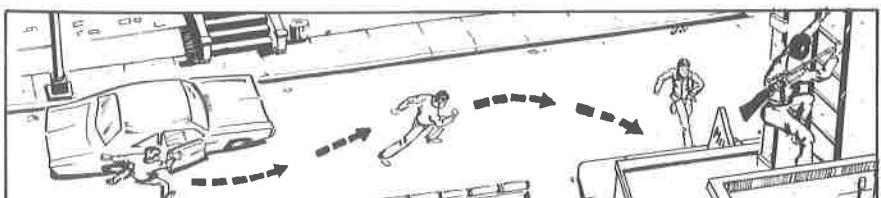
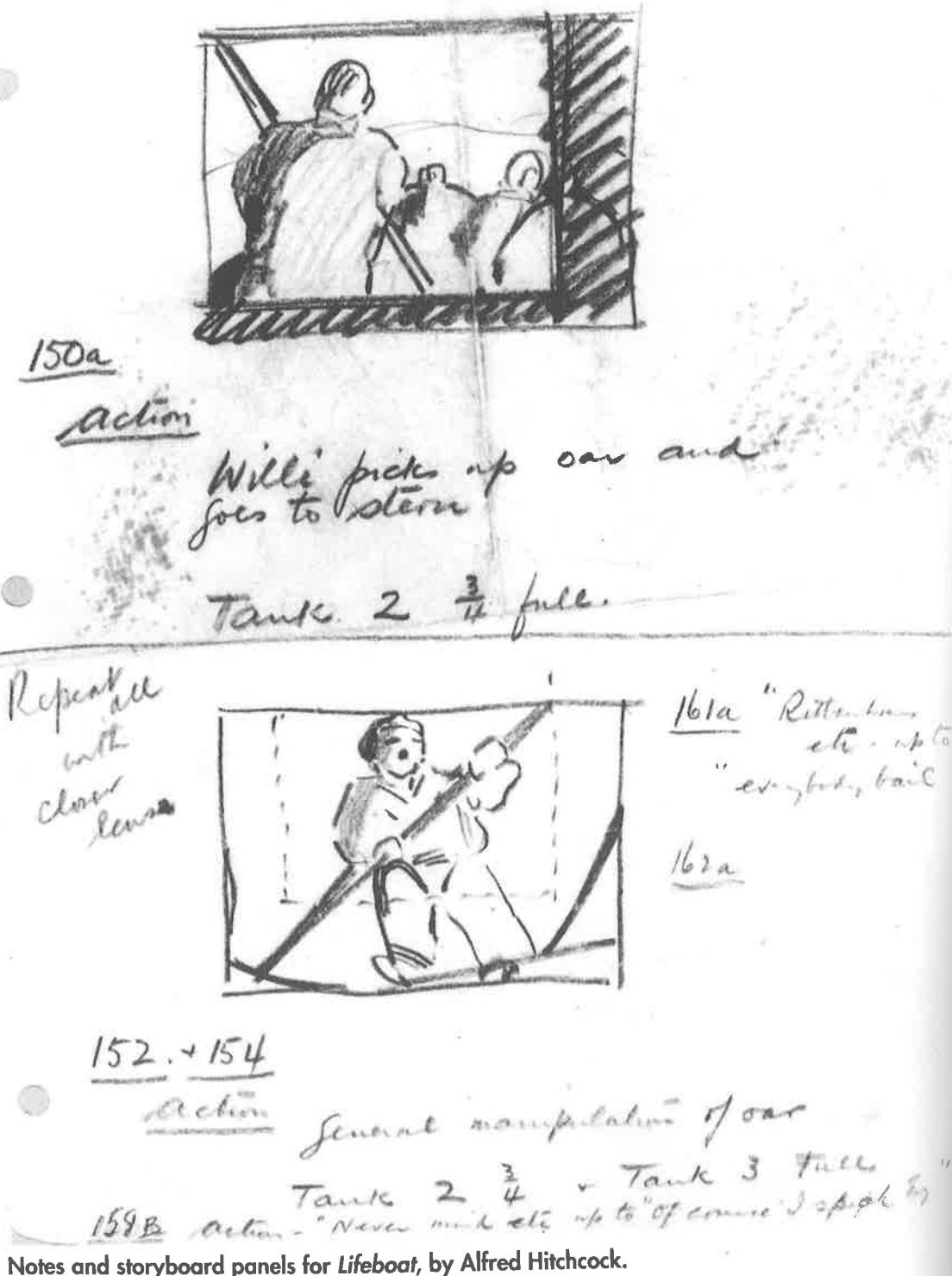


Figure 3.1



positions in the action with an arrow to show his path. This type of panel can be used to indicate a pan or a tracking shot. In this version, specific framing is not indicated, however, the camera position and staging of the action is quite clear.

It is possible to show actual framing, as in this next example of a car chase in Figure 3.2. A frame within the frame indicates the composition of the shot as the camera will see the action. In this case left-hand frame (A) is panned in with the car. The arrow below the frame indicates that the

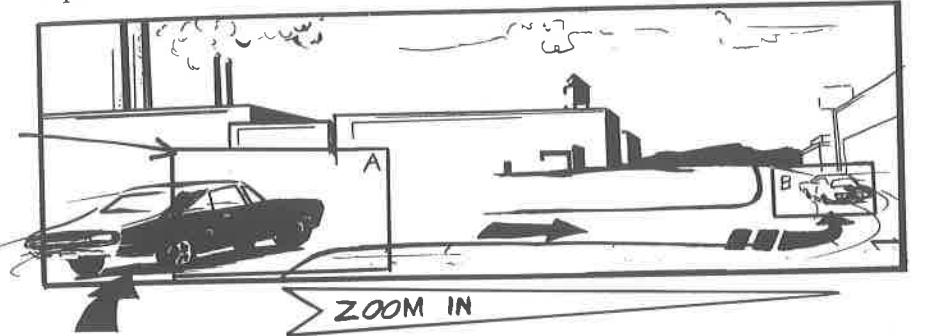


Figure 3.2: A storyboard pan shot.

camera zooms down to the size of the smaller right hand frame as the car moves right to left. There is no standardization in any of this iconography; you can pretty much design things the way you want as long as you get the idea across.

The third panoramic storyboard in Figure 3.3 is a vertical pan and shows how a multiperspective can indicate panning over a large expanse. The diver is seen first in an up shot and followed until the camera is tilted down to the pool.

Dolly and Zoom Shots

In animation it's possible to draw a large panel and then frame smaller portions of the whole picture to obtain medium shots, close-ups (CUs) and extreme close-ups. This is called a field cut in animation and is used to get the maximum number of shots from a single piece of artwork by photographing it in several frame sizes. A field cut is indicated as a frame within a frame, and the iconography is also used for live-action storyboards to indicate a dolly or zoom as shown in Figure 3.4. To indicate the direction of the dolly or zoom (in or out), arrows are added connecting the two squares. This shows that the change in shot size is obtained through movement rather than cutting.

A more conventional way of indicating an on-axis cut, dolly or zoom shot is shown in Figure 3.5. The problem, of course, is that the figure has to be drawn twice and requires additional explanation with captions. The advantage of the additional frame is that the impact of the CU is conveyed more effectively.

The frame within a frame can also be used to show erratic camera motion as in Figure 3.6.

Figure 3.3: Multiperspective views like this one are a good way to show a pan shot that pivots over a great distance. With this type of illustration it is hard to tell if the framing of the shot is a wide, medium or close-up shot. However, the alternative type of representation, which uses several individual frames of the diver's action, would not convey the main characteristic of the shot—smooth motion and the angle of view.

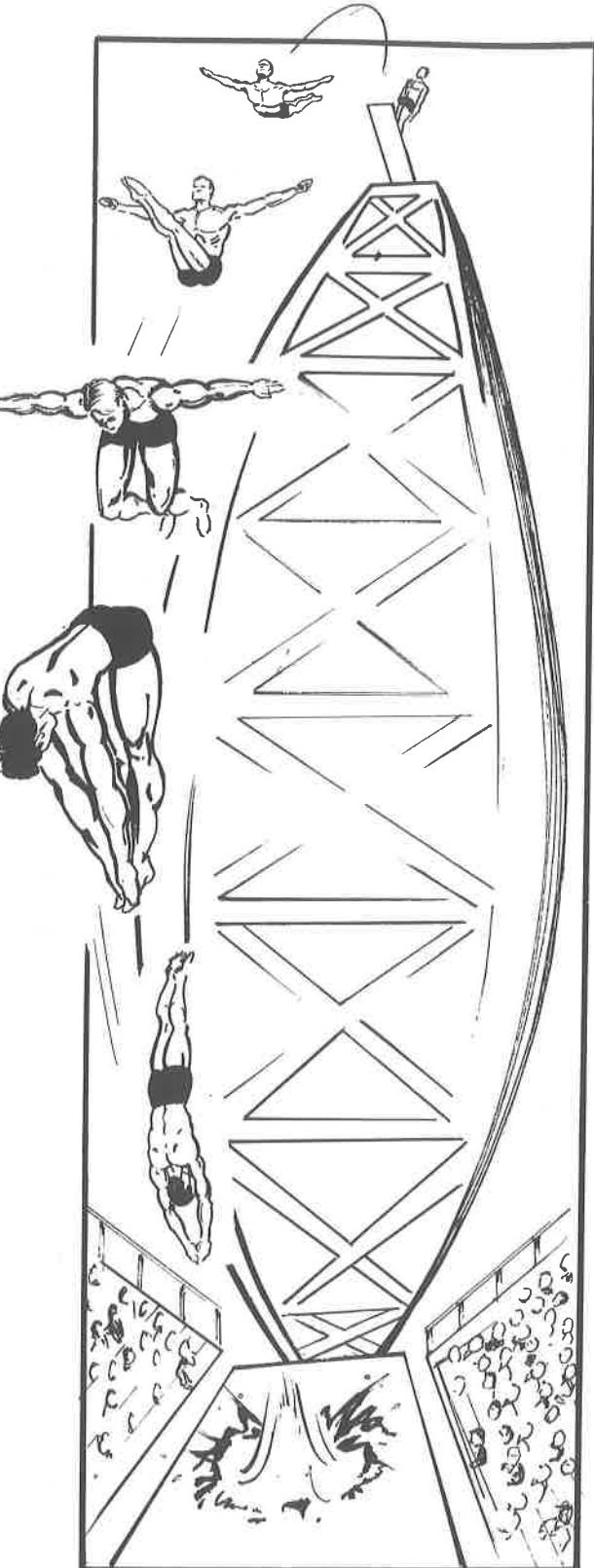




Figure 3.4: The drawing on the left uses a frame within a frame to indicate a zoom or dolly move. If the lines connecting the inner frame to the corners of the outer frame were removed this would mean that a change in shot size is accomplished with a cut to a new shot.

Transitions Between Shots

In the next few panels (Figure 3.7) we'll see how transitions like dissolves and fades can be handled. This particular type of layout is borrowed from animation storyboards. Styles vary slightly depending on the animation studio, but Figure 3.7 shows a typical use of the space between panels.

The Crane Shot

This last example of continuity and editing illustration techniques (Figure 3.8) is a full sequence shot using a crane move. Though there are 11 panels in the storyboard, it represents a single, unbroken shot.

Format and Presentation

There are several different ways to display storyboards, depending on the size of the individual panels. The average size is approximately 4 x 6 in., but this is largely a matter of the artist's preference. Some like to work on a larger scale if greater detail is required. Then the boards can either be used this way or reduced to a more convenient presentation size during duplication.

Storyboards are usually made available to several of the production departments during preproduction. The format of the presentation depends on how they will be used. Some production designers place the



Figure 3.5: This is a typical method of indicating a change in shot size.

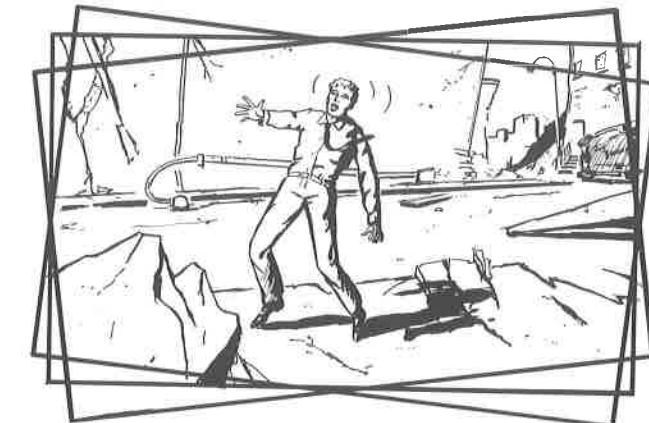


Figure 3.6: Camera movement used to simulate the movement of the ground, the pitching deck of a ship or any other movement of subject or space can be shown using a frame within a frame.

storyboards on a wall or bulletin board in the art department, following Disney's example, so that a great many panels can be seen in group meetings. This makes sense for getting a logistical overview of shooting requirements but is inconvenient for visualizing precise shot-to-shot flow and timing. Smaller boards containing 6 to 20 panels can be carried in a portfolio case, while some directors prefer seeing the panels book style, one large (8x10 in.) panel to a page in a loose-leaf binder. The advantage of the notebook-flip pad presentation is that each panel is seen individually as a page is turned into view. This allows the art director to preview how the completed sequence will look on the screen. He can vary the speed at which he turns the pages of the notebook to simulate editing rhythms. In addition, individual panels can be easily added, removed or

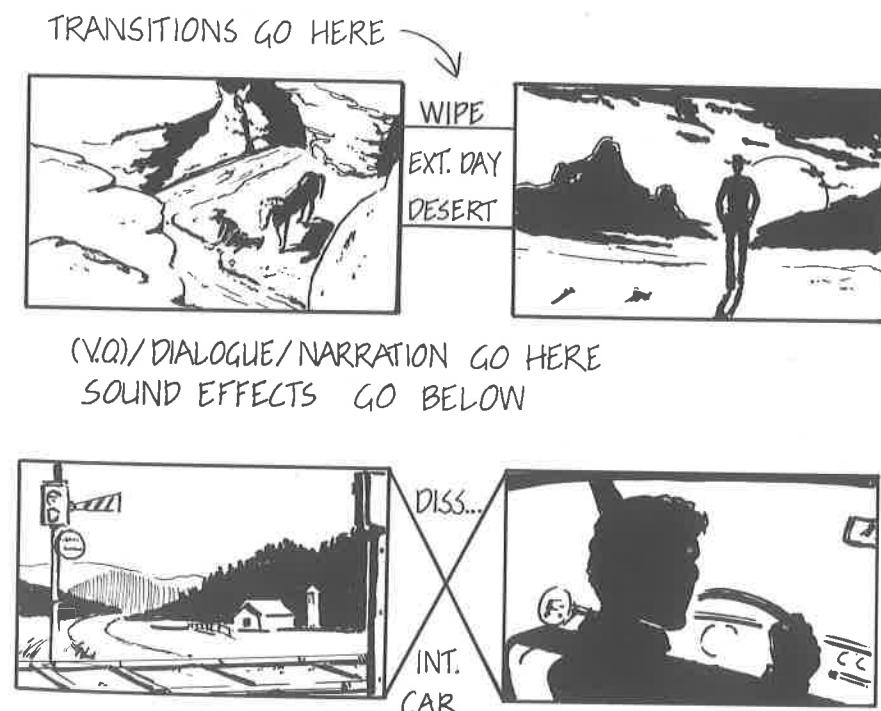


Figure 3.7: Animators use the space between frames to show transitions between shots.

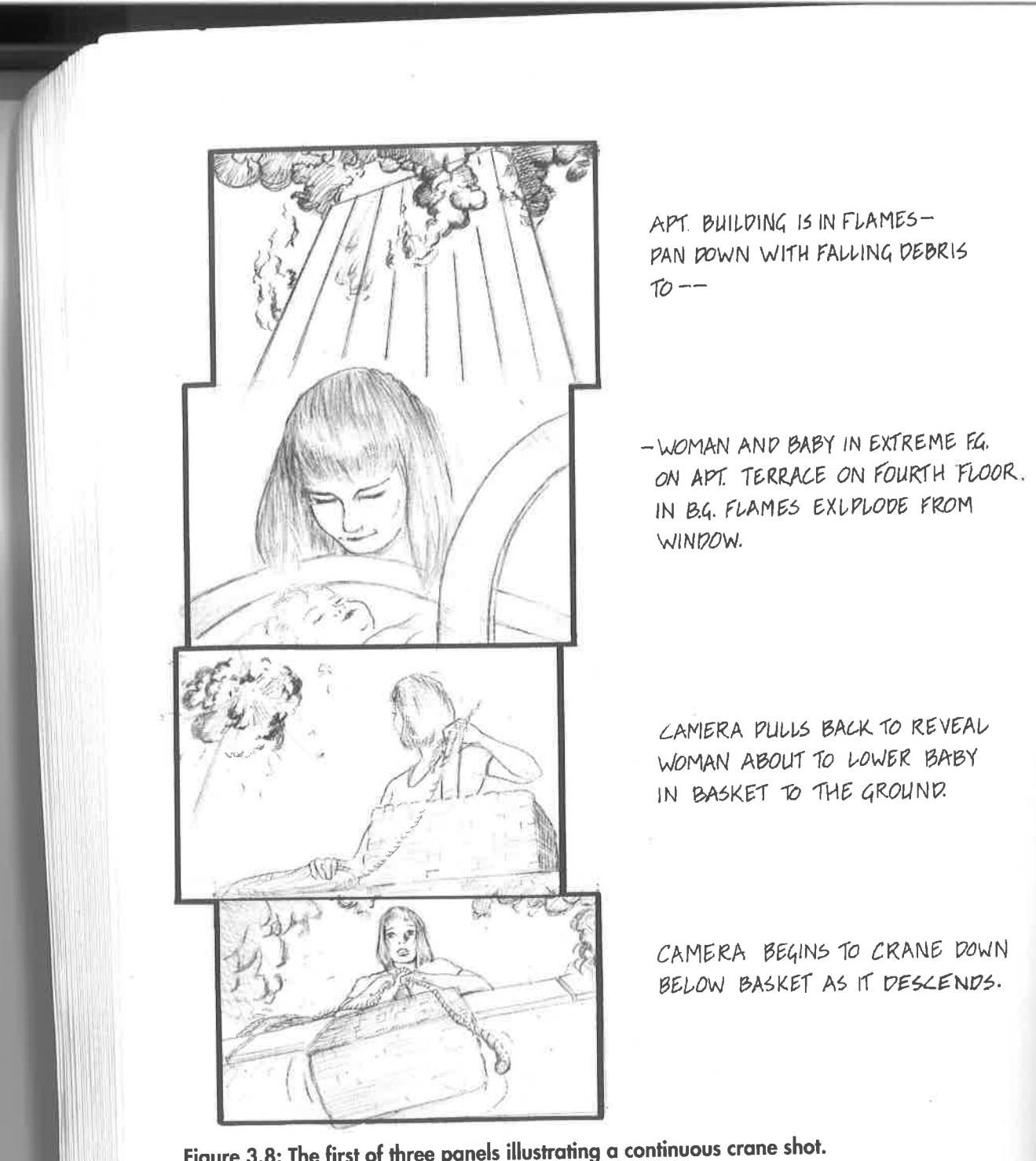


Figure 3.8: The first of three panels illustrating a continuous crane shot.

reordered in much the same way an editor makes changes in the actual film.

Simplified Storyboard Illustration

Storyboards basically convey two kinds of information: a description of the physical environment of the sequence (set design/location) and a de-



Figure 3.8: Second of three panels.

scription of the spatial quality of a sequence (staging, camera angle, lens and the movement of any elements in the shot). While a storyboard illustrator is expected to convey mood, lighting and other aspects of the environmental design, a director can convey his ideas for the basic setup of the camera with simpler drawing methods.

Shown next are several types of graphic representation that are fast and easily mastered. They can be combined in any way necessary to pre-



Figure 3.8: End of sequence.

sent the director's concept for a shot or scene. Our scene shows a woman running into the street and into the path of a car. In Figure 3.9 we begin with the most basic method of communication using written description and arrows to indicate screen direction of the subject of the shot or the movement of the camera. While this might seem so rudimentary as to be little help in designing a sequence, a director with editorial experience will be able to read the board and get a sense of the pacing.

Two types of schematic drawings are shown in Figure 3.10. First is an aerial plan that clearly shows the camera placement and the direction of action. The second pair of frames in Figure 3.10 are elevated schematics that show the height of the camera. Schematics are helpful in planning the order in which shots are photographed on the location, since many lo-

FRAME GOES BLACK WITH SMOKE.

CAMERA EMERGES FROM SMOKE
MOVING DOWN TO FATHER.

FATHER SHOUTS --
"KEEP THE BASKET COMING, I CAN'T
SEE IT!"

SMOKE BLOWS IN HIS EYES AND
HE CAN BARELY SEE.

FATHER'S EXPRESSION SLOWLY CHANGES
TO RELIEF AS BASKET SWINGS INTO EXT.
F.G.

HE TAKES HOLD OF BASKET.

WOMAN WALKS IN
FRONT OF CAR. WE
VIEW HER FROM BEHIND.



WIDE SHOT-WOMAN+CAR

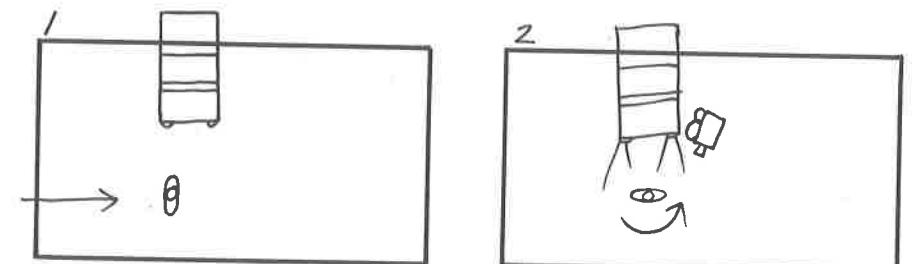
REVERSE ANGLE AS SHE'S
CAUGHT IN HEADLIGHTS.
CAMERA MOVES INTO
C.U.

M.C.U. - WOMAN

Figure 3.9: Written descriptions in boxes are the simplest type of storyboard.

gistical problems are revealed. Usually this has to do with finding the best way to move equipment and people. An aerial schematic might show that if dolly track is laid for the last shot before lunch break, it blocks the path for cars that must be moved at that time. While schematics describe camera placement exactly, they give little indication of shot size or the emotional or kinetic quality of a shot.

One alternative is to use stick figures that convey figure placement and the direction of action. Two versions of these are shown in Figure 3.11. What stick-figure illustrations do not show is the height of the camera, since perspective is not indicated. Still, for all their crudeness, these four panels are really quite informative. These panels can be drawn in less than a minute, and yet they tell us a great deal about how each pair of frames would cut together. A director could greatly refine the shot size



WOMAN ENTERS LEFT

WHEELS AROUND, STARTLED
BY HEADLIGHTS.

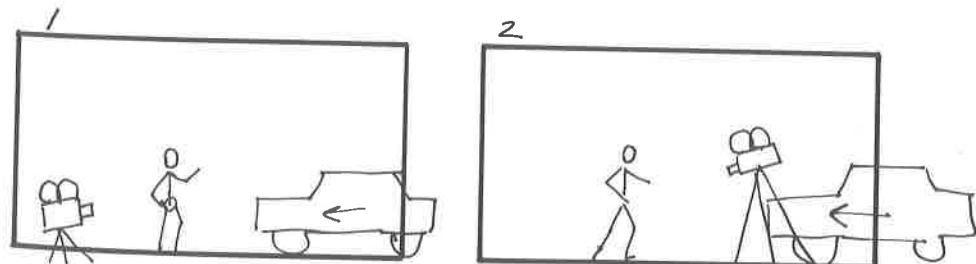


Figure 3.10: Schematic drawings.

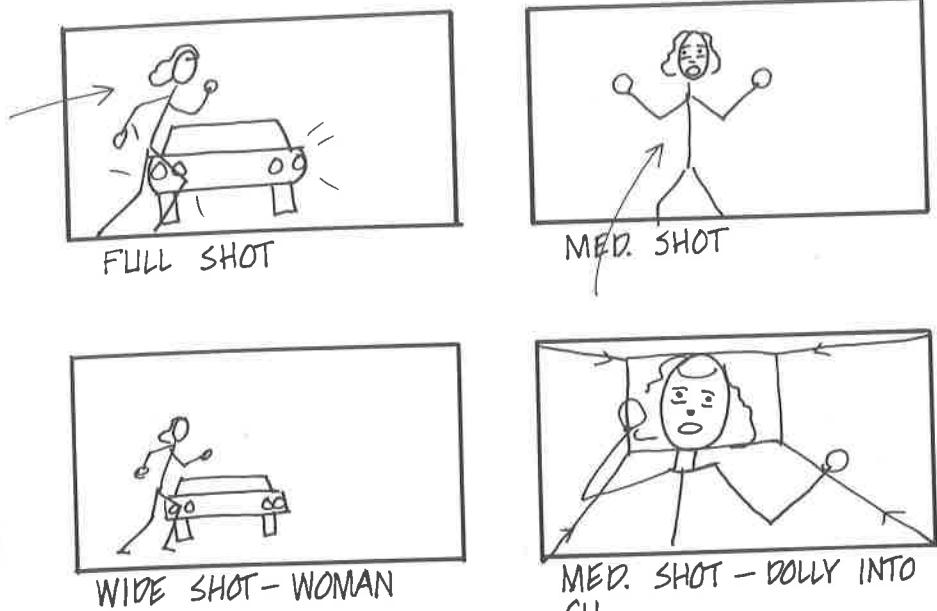


Figure 3.11: Stick-figures without perspective.

for a sequence using drawings no more complex than these. With a little extra work arrows drawn in perspective can tell a great deal about the angle of view the director would like to see, as shown in Figure 3.12.

Arrows are a versatile sign and easily mastered. A wide selection is shown in Figure 3.13. They can be used to illustrate the motion of the camera or the subject of a shot or both. Arrows can show the complex path of a runaway car or can be used in schematic drawings to show the path of the camera in a sequence shot.

Another variation is the arrowheads in Figure 3.14, describing a whole range of angles. To help visualize these quickly a director might keep a page of arrows like the ones here or have his art director supply him with an assortment that he could copy when drawing stick figures. This will save the director time when he tries to figure out the perspective.

The frame itself can be used as an arrow to show the path of the

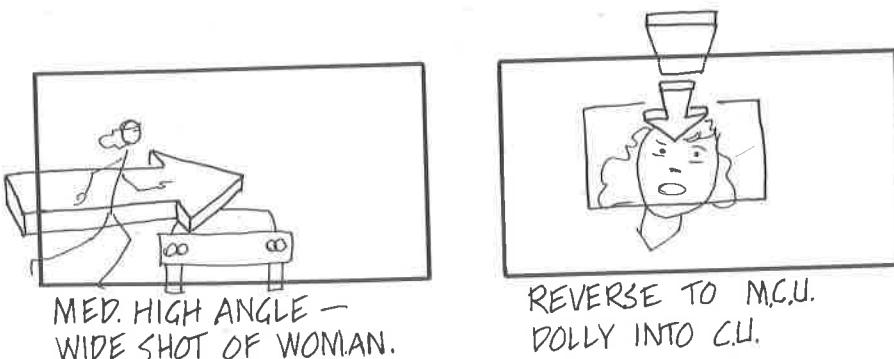


Figure 3.12: Arrows can be added to indicate perspective.

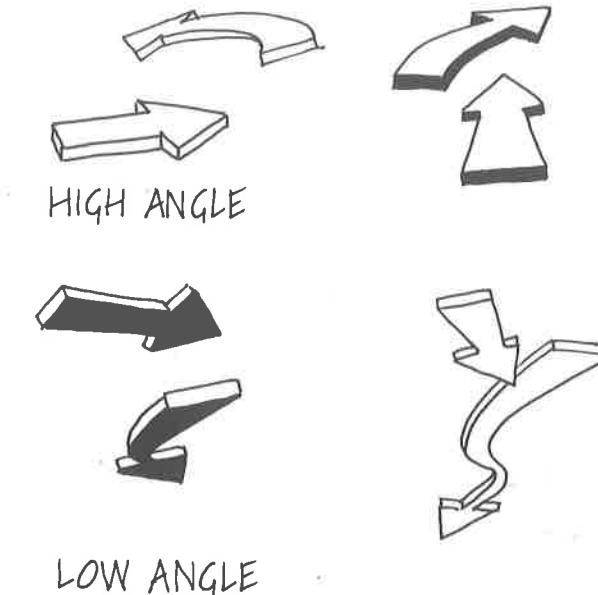


Figure 3.13: Arrows like these are an excellent way to indicate the camera angle and camera movement. With a little practice they can easily be mastered.

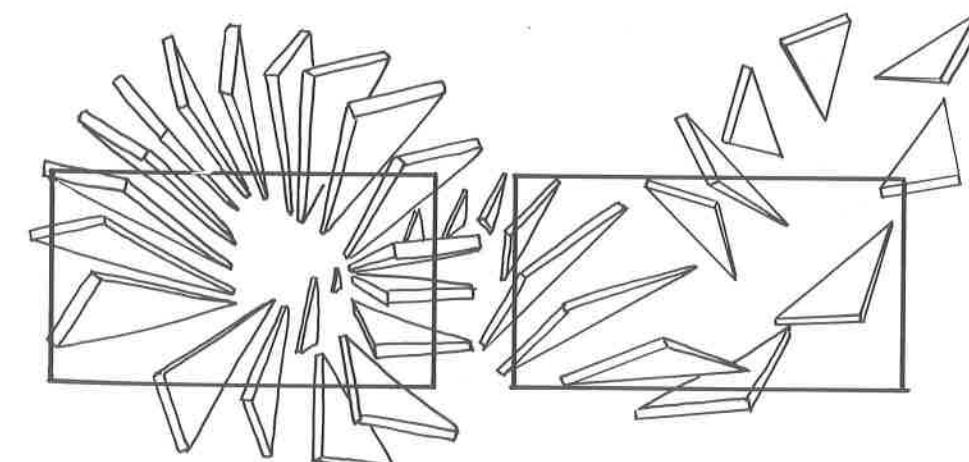


Figure 3.14: Keep a supply of arrows to trace onto storyboards.

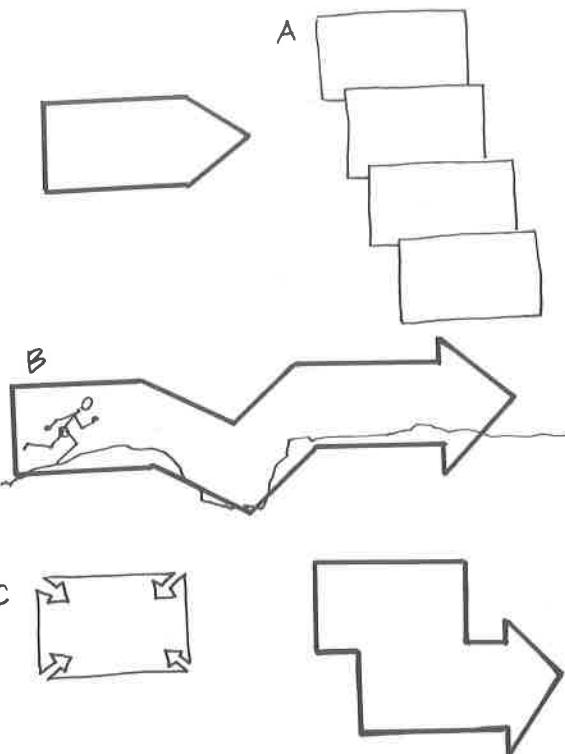


Figure 3.15: Overlapped panels can be used to indicate a moving shot (A). The entire frame can be drawn as an arrow to indicate the path of a moving subject (B). Illustrator uses the frame border for arrows to indicate a camera move to the subject (C).

learning to control the angle of a simple box like the ones used here is simple to master. Again, a single page of cubes in varying angles can be used for reference and can be provided by the production designer.

By adding form and volume to simple figures we get a better sense of spatial relationships. For instance, Figure 3.17 shows us how a director might try several versions until he was satisfied with the staging of the car and the woman in the frame.

The most important point to be made in this chapter is that storyboards are helpful to the director whether he follows them during shooting or not. For instance, after large portions of the script are boarded the director is able to see the dramatic flow of the story in a way that the screenplay fails to reveal. Moreover, the process of visualizing on paper is a technique for generating ideas, not just establishing the plan for the production team to follow on the set. This process is even more beneficial when the director works on his own drawings. There is really no way to overestimate the importance of rolling up your shirt-sleeves and working directly with images if you are directing a film. No matter how crude the drawings, the thought process and state of mind required to compose shots on paper is invaluable.

Director Brian DePalma draws his own stick-figure illustrations on a Macintosh computer using the software program Storyboarder®, but simple as the drawings are, it is likely that they serve as mnemonic devices, each frame an icon that brings to mind a familiar and detailed shot with all the perspective elements left out. Of course, what works for DePalma may not work for you. You may find a different type of representation that

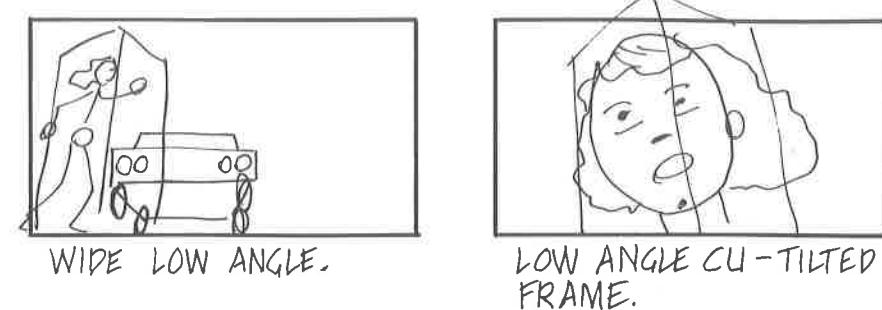


Figure 3.16a

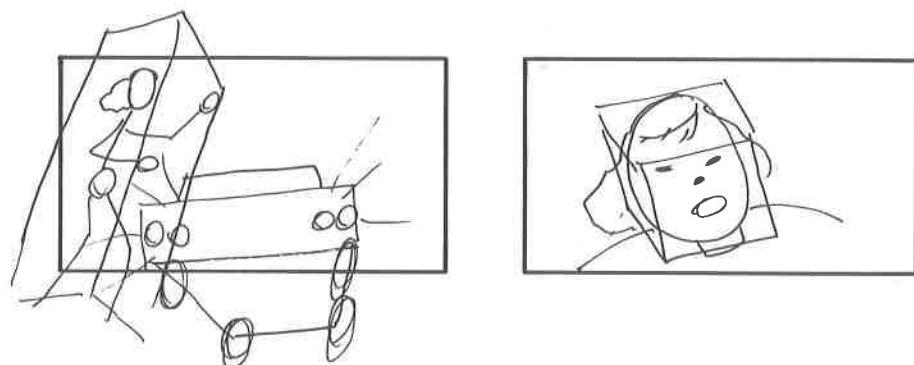


Figure 3.16b: Perspective boxes drawn over stick-figures help indicate camera angle.

suits your needs better. One of the pleasures in acquiring the storyboards for this book was discovering the many individual approaches to storyboarding that each illustrator developed.

Draftsmanship

If you can draw, there is no reason not to carry your storyboards to a higher degree of execution. While it is clearly beyond the scope of this book to teach drawing it is possible to convey one thought that is particularly valuable to storyboard artists: *It's what you leave out that counts*. Actually, I first heard this truism while playing music, and it seems to crop up whenever you're around seasoned artists of any kind. For a storyboard artist simplicity is more than a matter of taste. It is also a matter of necessity. Only in rare cases is the time available to make detailed drawings for every storyboard panel in a film.

Illustrator Noel Sickles' line work is a model of simplicity and is an object lesson in economical drawing. Though never a storyboard illustrator, his highly innovative work in the comics and later as a nationally recognized commercial illustrator is still an influence today. Appearing on page 53 are frame enlargements of his early work on the *Scorchy Smith* strip to show how only a few lines are needed to convey all types of

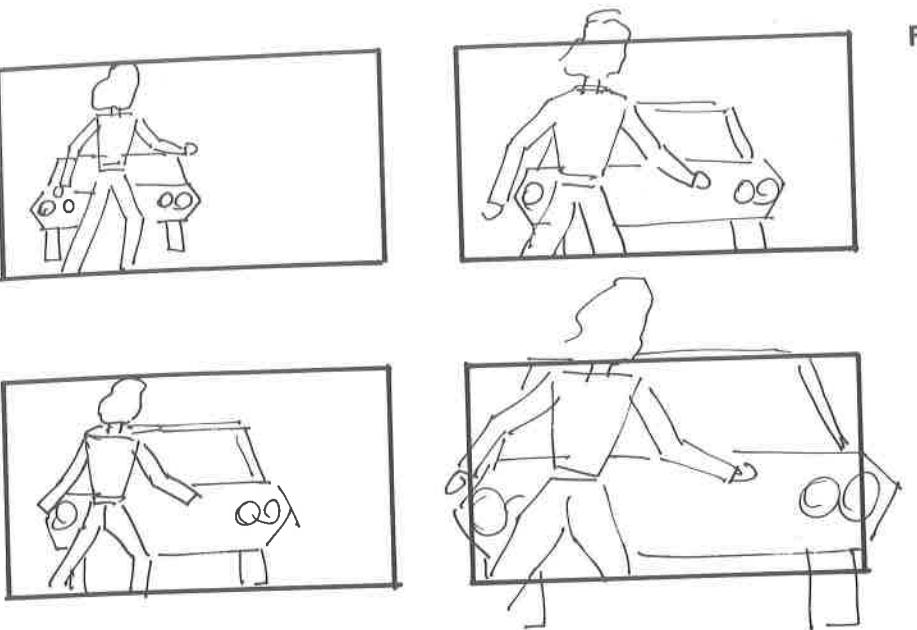


Figure 3.17: Adding volume to stick-figures conveys a great deal of compositional information.

Noel Sickles began drawing comic strips in 1933 at the age of 26 and quickly invented an impressionistic black and white inking style that achieved a highly realistic photographic look. After five years, Sickles left the comic field and went on to become one of the foremost illustrators of his generation in magazine and book illustration.

These frame enlargements from Sickles' strip, *Scorchy Smith*, show how a few well placed lines and shadows can convey a great deal of visual information. His work is filled with graphic solutions and innovations that are a storehouse of ideas for storyboard artists. A reprint of his work will soon be available from:
Kitchen Sink Press, Inc.
Number 2 Swamp Road
Princeton, WI 54968.



A BIG SEDAN DRIVES AWAY WITH BUNNY - THERE IS A STIFLED CRY - A MAN PASSING BY TURNS, BUT SHRUGS HIS SHOULDERS AND WALKS ON -
© 1934 THE A. F. ALL RIGHTS RESERVED



surfaces and locales. The background details are particularly useful to study if you're looking to develop a practical storyboard style.

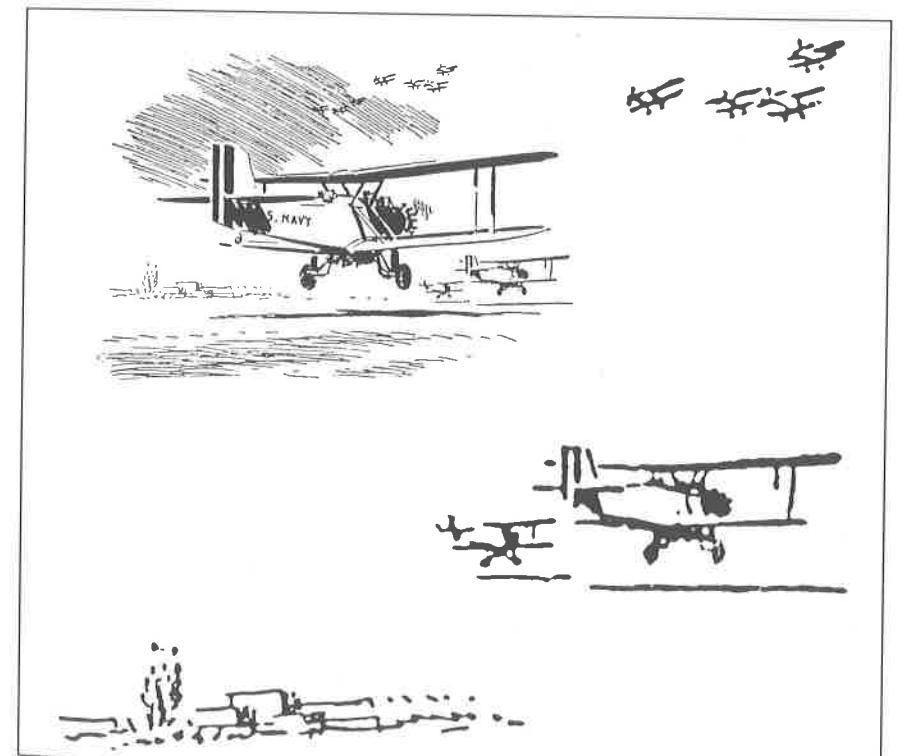
Even the simplest drawing style is useful to help the director shape a scene. Appearing on page 54 are very quick sketches drawn by Sherman Labby for *Beverly Hills Cop II*. These types of ink and tone thumbnail sketches are typically drawn in meetings with the director, each frame taking only 1-3 minutes. That means that an entire sequence can be talked out and drawn within an hour. However, it would be wrong to think of storyboarding solely in terms of the drawing. Actually, it is often the time spent working out the concept for a scene that determines how quickly a sequence is rendered on paper. Usually, drawings like the ones for *Beverly Hills Cop II* are used by the storyboard illustrator as notes for more finished renderings, which are submitted later.

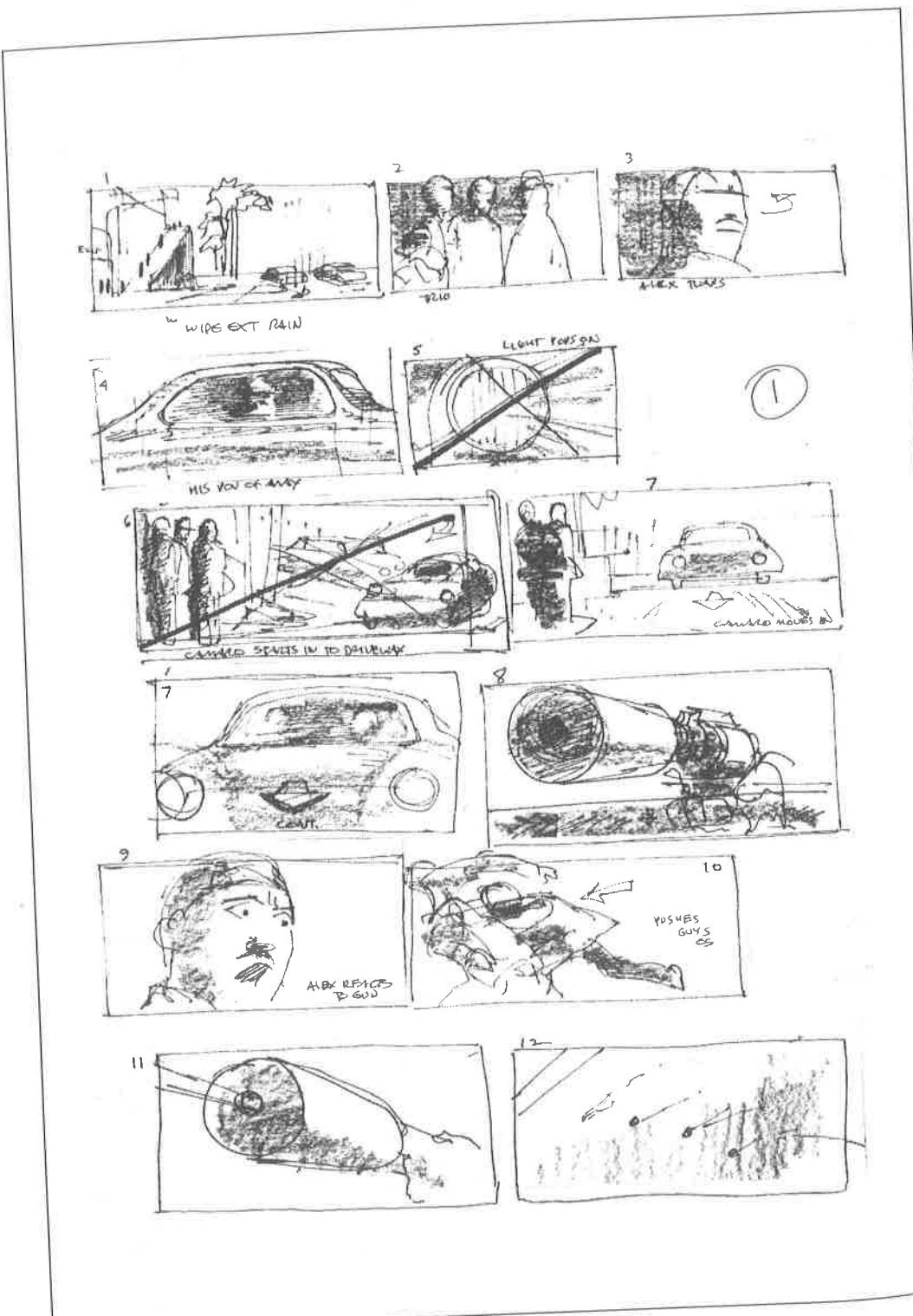
Mood

Another series of storyboard panels by Sherman Labby appears on pages 55 to 63 and shows his fine sense of pictorial narrative in an opening scene from *Blade Runner*, one of two scenes that was never filmed. This is a beautiful example of the use of mood to establish the tone of a film, in this case, the ironic use of a calm, pastoral setting. The opening shows the Harrison Ford character, Decker, landing his Spinner vehicle on a farm. These first few elegantly composed frames contain only a few simple shapes evoking a sense of wonder typical of '40s science fiction.

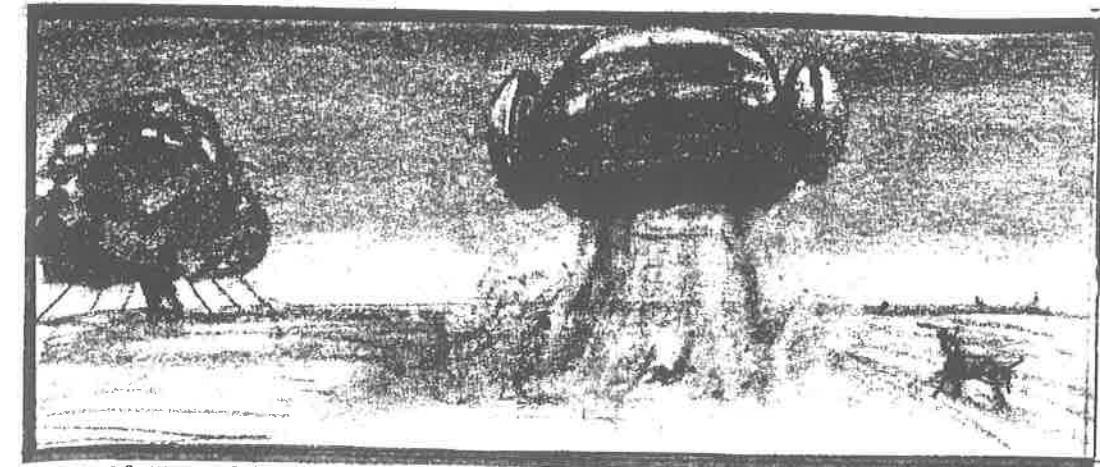
Character

The next storyboard panels by Fred Lucky show how expressive characters help to make the comedic intention for each setup clear. Fred refined

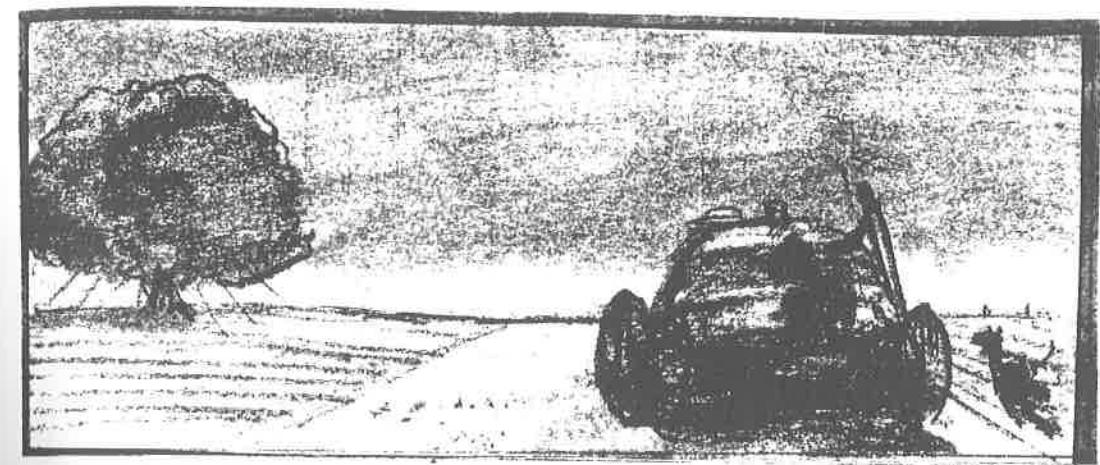




Sherman Labby's thumbnail sketches for a scene in *Beverly Hills Cop II*.



SPINNER KICKS UP DUST.

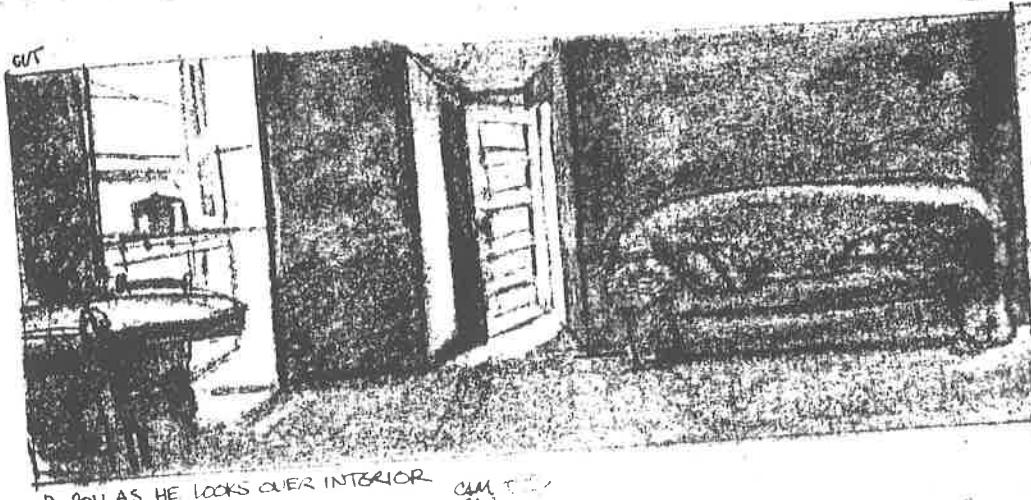
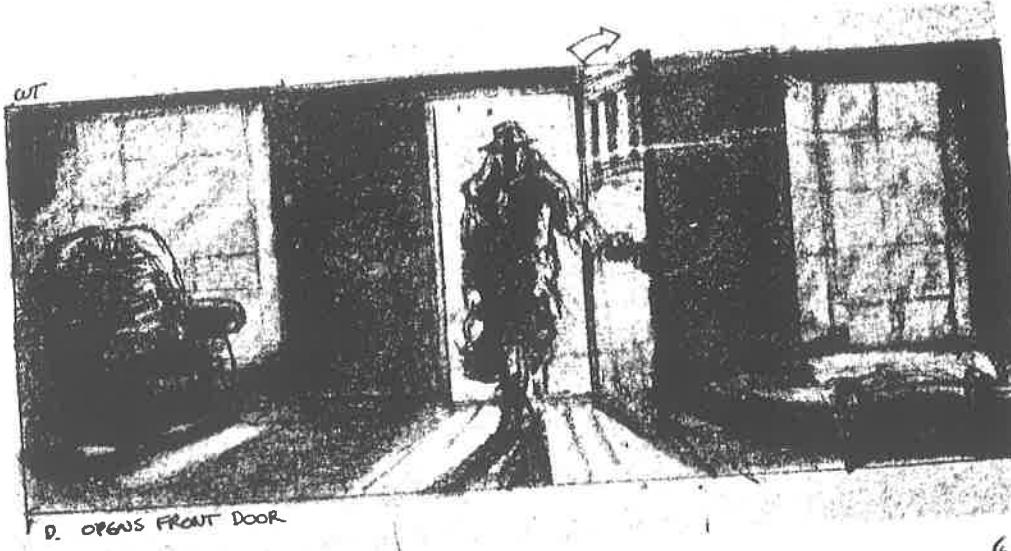


SPINNER LANDS - DOG BARKS AT IT AS D. RAISES HATCH

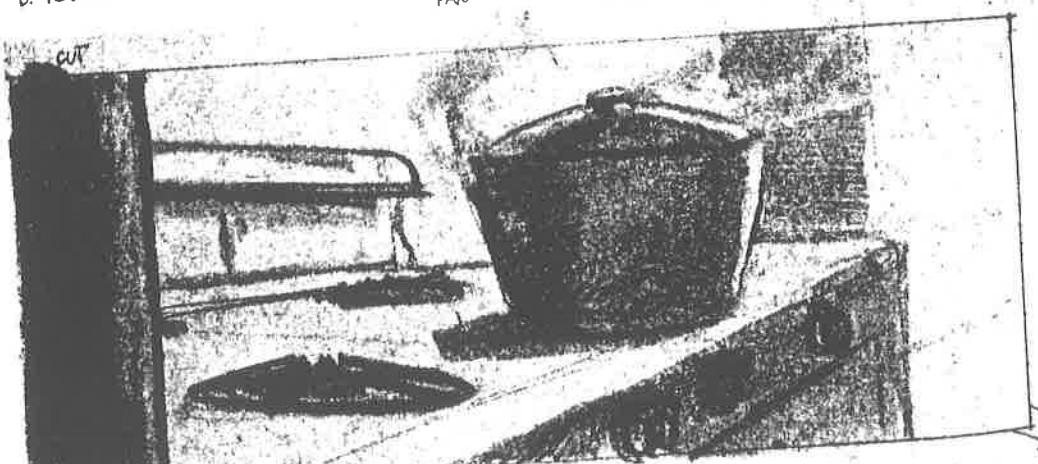


WIND BLOWS - D. WALKS TO FARMHOUSE - CMI PAN

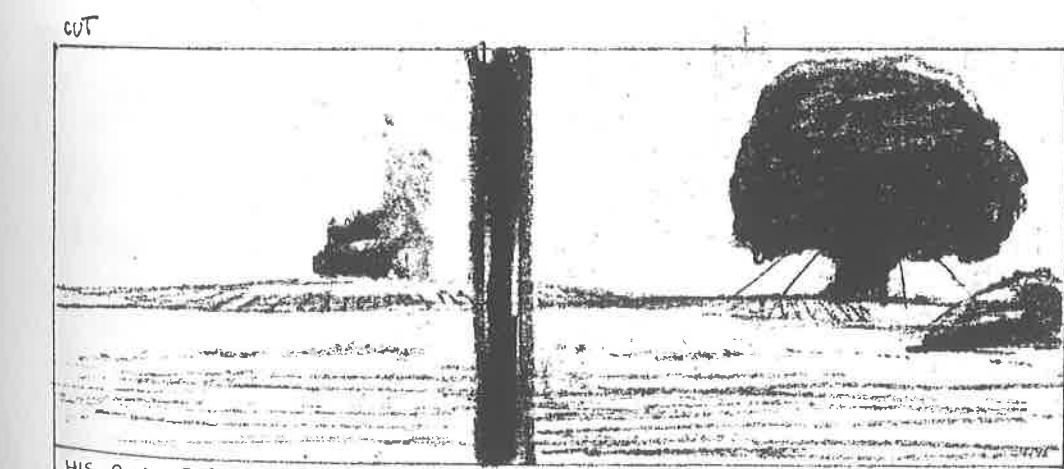
This version of the opening of *Blade Runner* was never shot. The beautifully conceived continuity is by Sherman Labby.



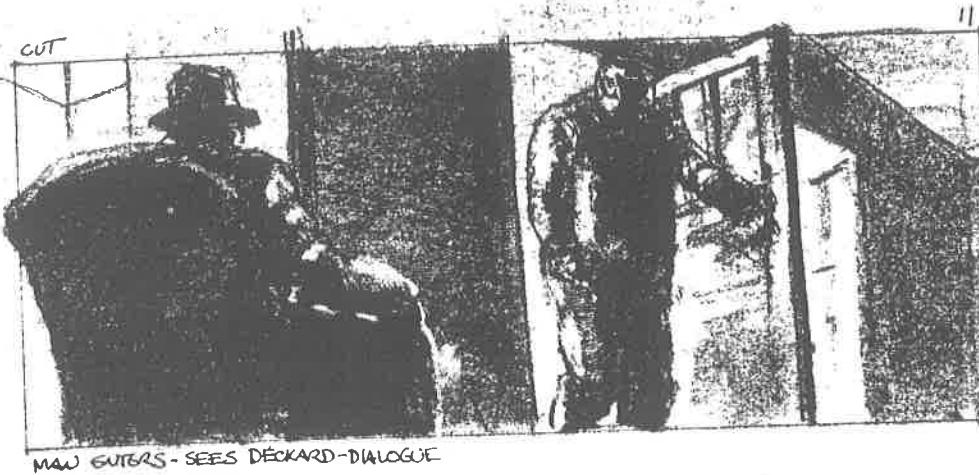
CAM T
PAN



Sherman Labby's storyboard for Blade Runner.



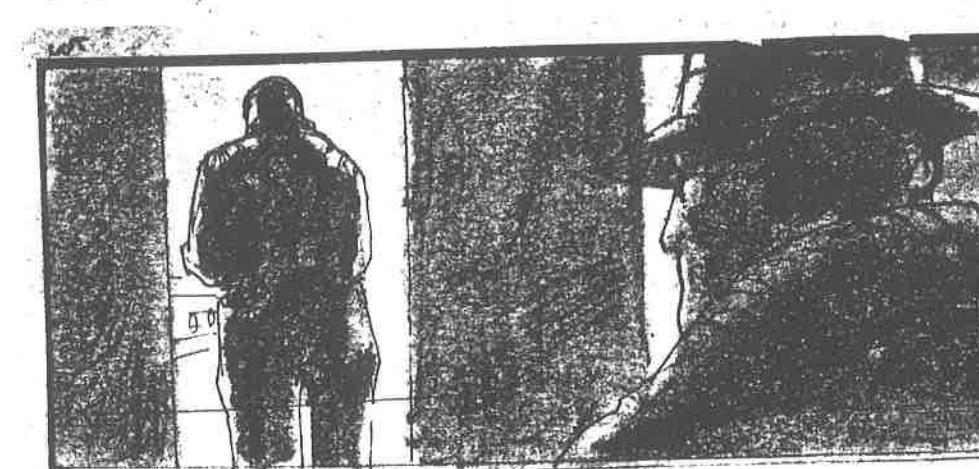
Sherman Labby's storyboard for Blade Runner.



MAN GUTS - SEES DECKARD - DIALOGUE



MAN TAKES OFF GOGGLES.



MAN MOVES TO KITCHEN - D. CROSSES FRAME (DIALOGUE)

Sherman Labby's storyboard for *Blade Runner*.



RESOLUTION COMES TO DECKARD'S FACE

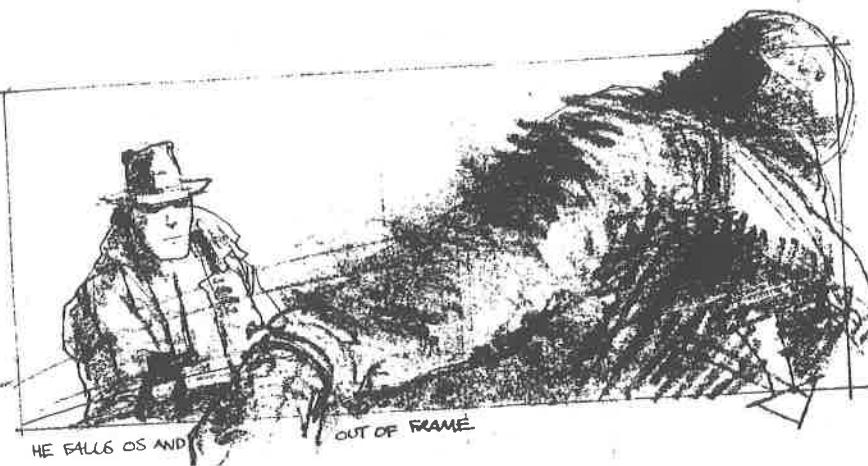
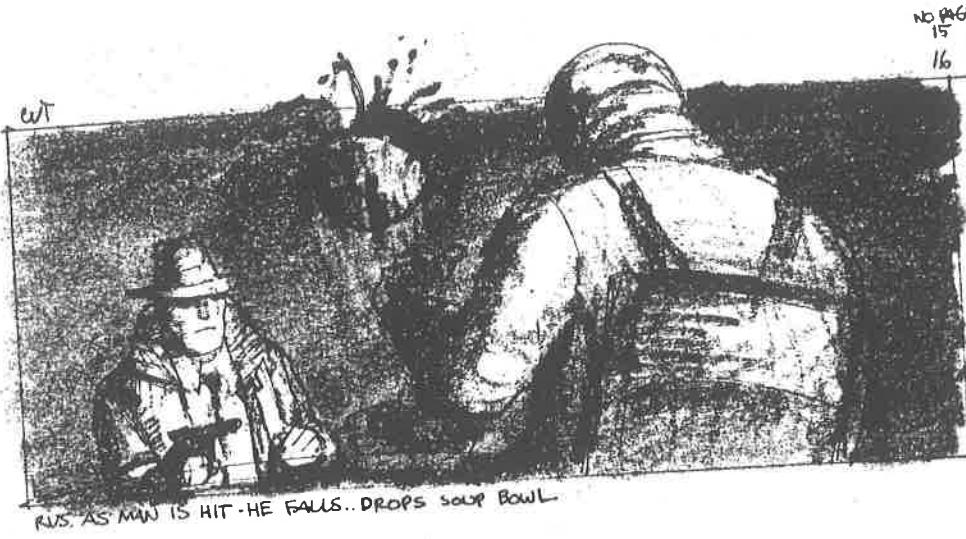


MAN COMES FROM KITCHEN WITH BOWL OF SOUP (DIALOGUE)

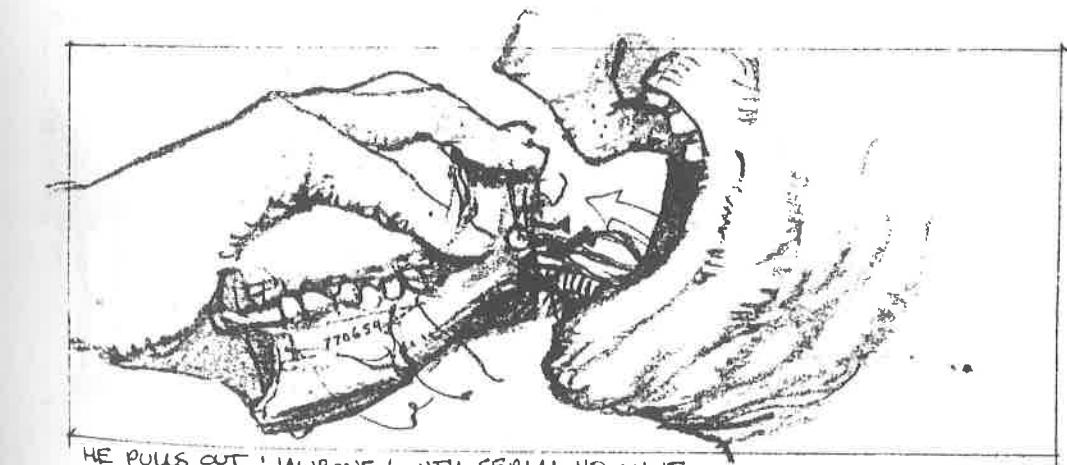


D. FIRES GUN AT MAN

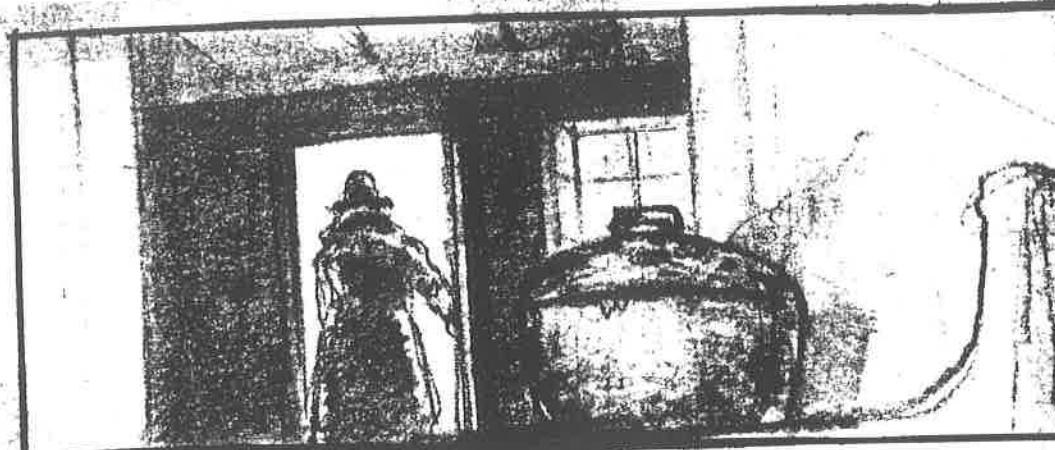
Sherman Labby's storyboard for *Blade Runner*.



Sherman Labby's storyboard for *Blade Runner*.



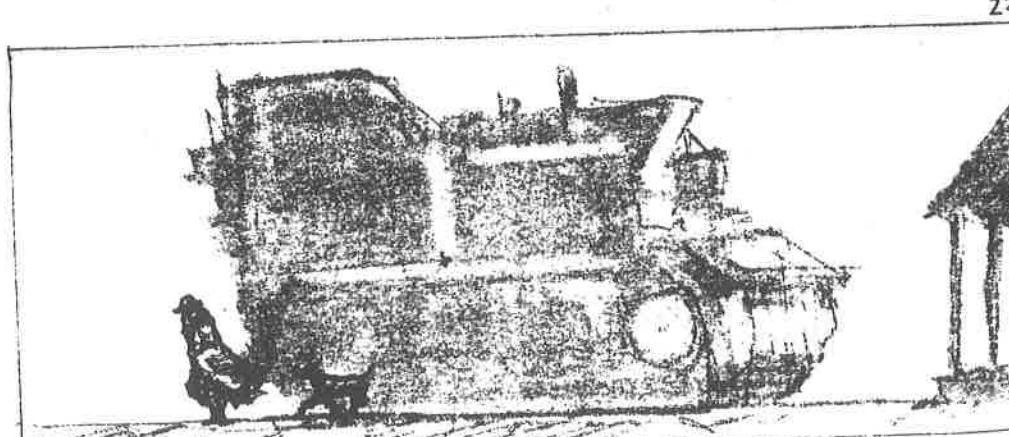
Sherman Labby's storyboard for *Blade Runner*.



HOLD AS HE TURNS - WALKS OUT OF HOUSE

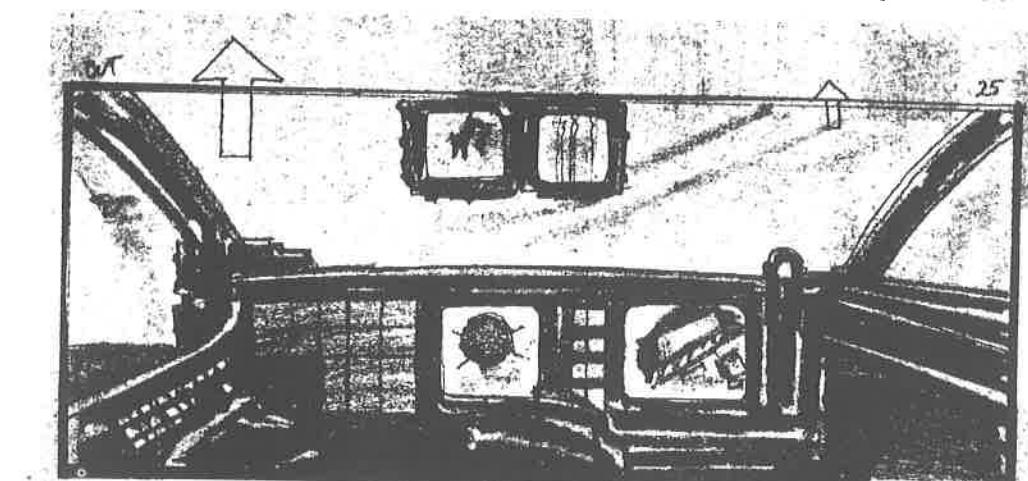
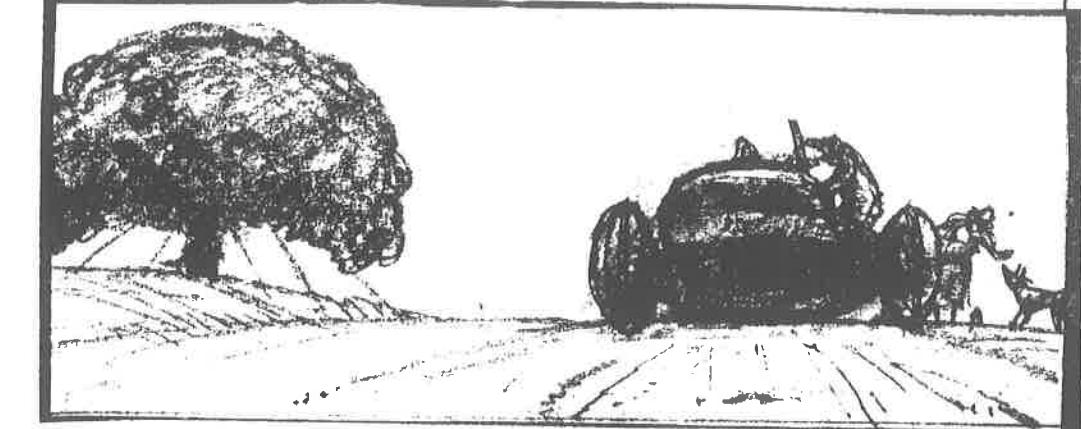


HE WALKS ACROSS YARD - DOG FOLLOWS

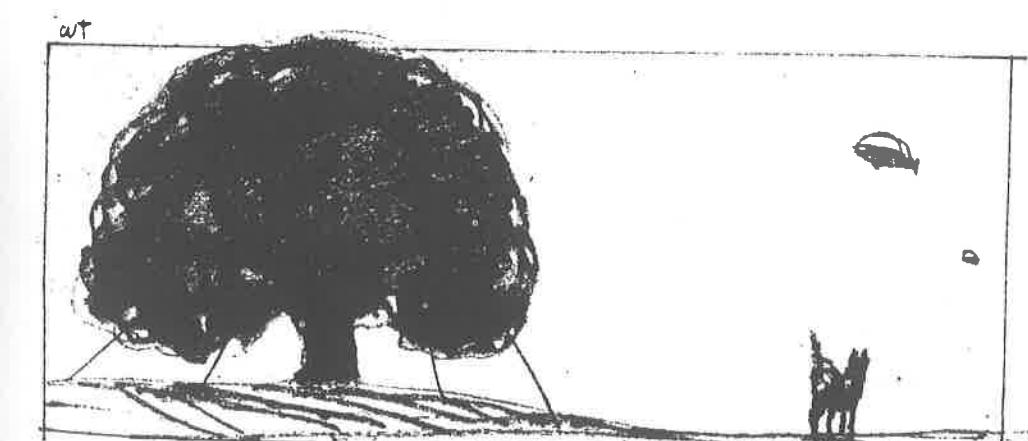


D. WALKS TOWARD SPINNER FOLLOWED BY DOG - GIANT TRACTOR STANDS SILENT

Sherman Labby's storyboard for *Blade Runner*.



POV DECKARD - SPINNER INT. RISES / MONITORS SHOW DOG TREE + FARM



SPINNER MOVES OFF - DOG WATCHES

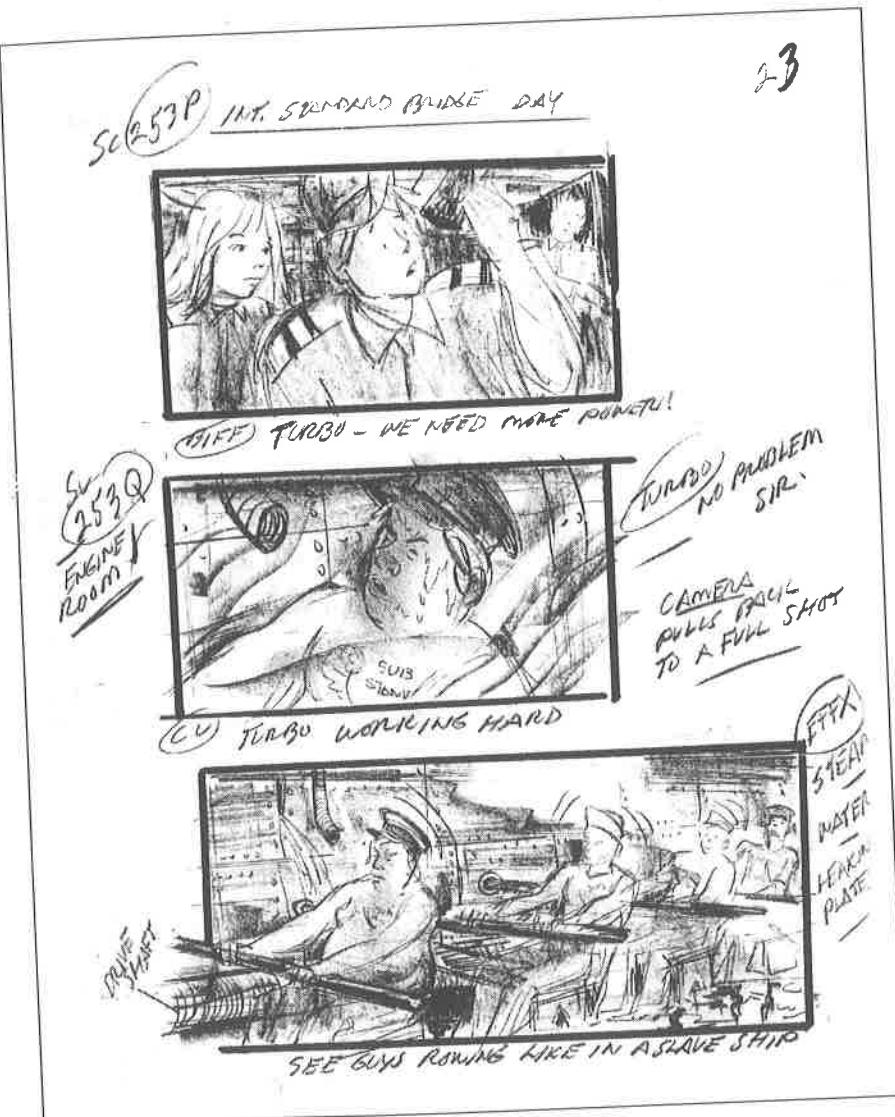
END SQ

Sherman Labby's storyboard for *Blade Runner*.

his drawing and cartooning skills in the animation department of Disney Studios before moving into their live-action division as a gag writer. For several years now Fred has been doing free-lance storyboarding on four or five films a year and is much in demand for his ability to interpret and write comedy and action sequences.

Interpretation

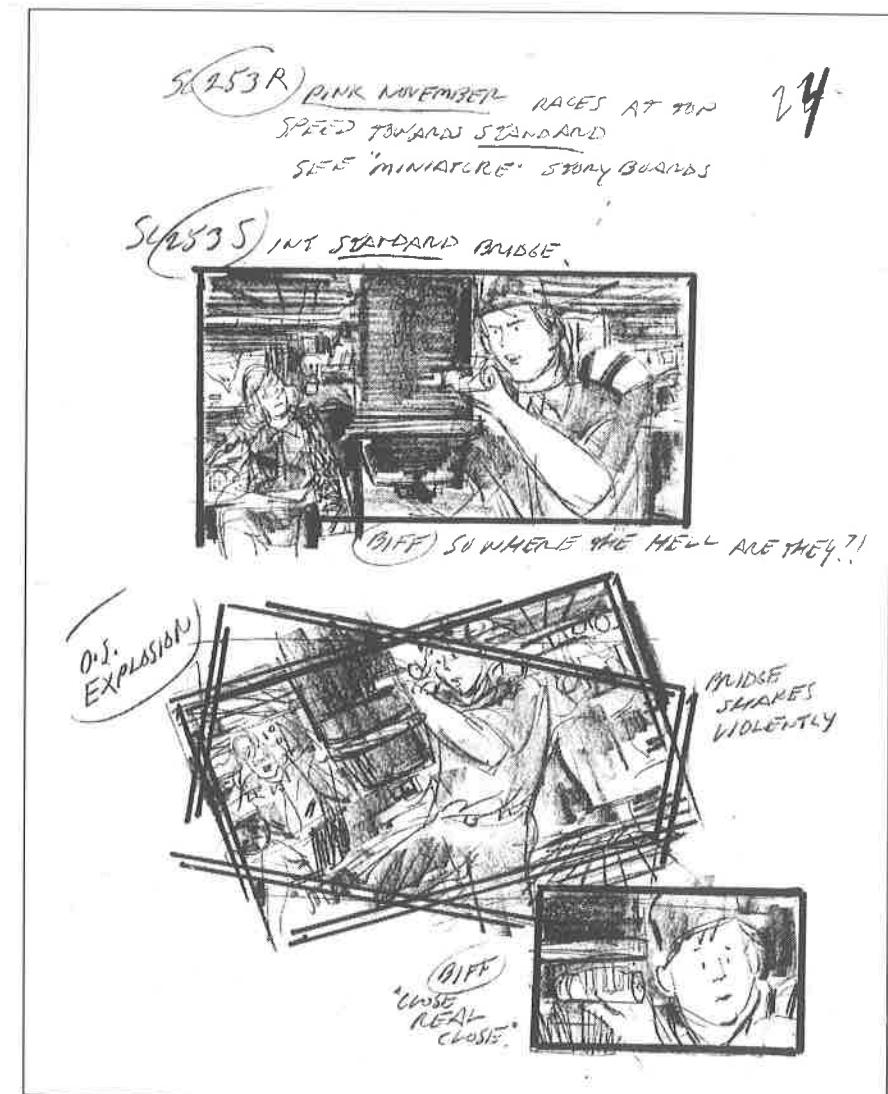
Above all, the storyboard conveys the shot flow of the scene, which is the combination of dramatic and graphic design. In the case of the best production illustrators it also conveys mood and tone, but practically speaking, the use of viewpoint, lens perspective and narrative motion are para-



A storyboard by Fred Lucky. First of three panels.

mount. An excellent example of all of these qualities is seen in Harold Michelson's storyboards for *The Graduate*, beginning on page 67. The production design is by Richard Sylbert.

Even without a knowledge of the story, the action of the boards is easy to read and the cutting rhythm is clearly established. The individual and continuity design of panels 7, 8 and 9 is particularly elegant, with several effects cooperating to determine our relationship to the characters and to express Ben's point of view and daydreaming. The angular use of the frame is subtle and fully motivated by the staging, as are the dramatic backlighting and shadow effect on the water. This is visual storytelling of a very high order. Declaration of line and compositional statement are never used as an end in themselves, but are in complete harmony with the

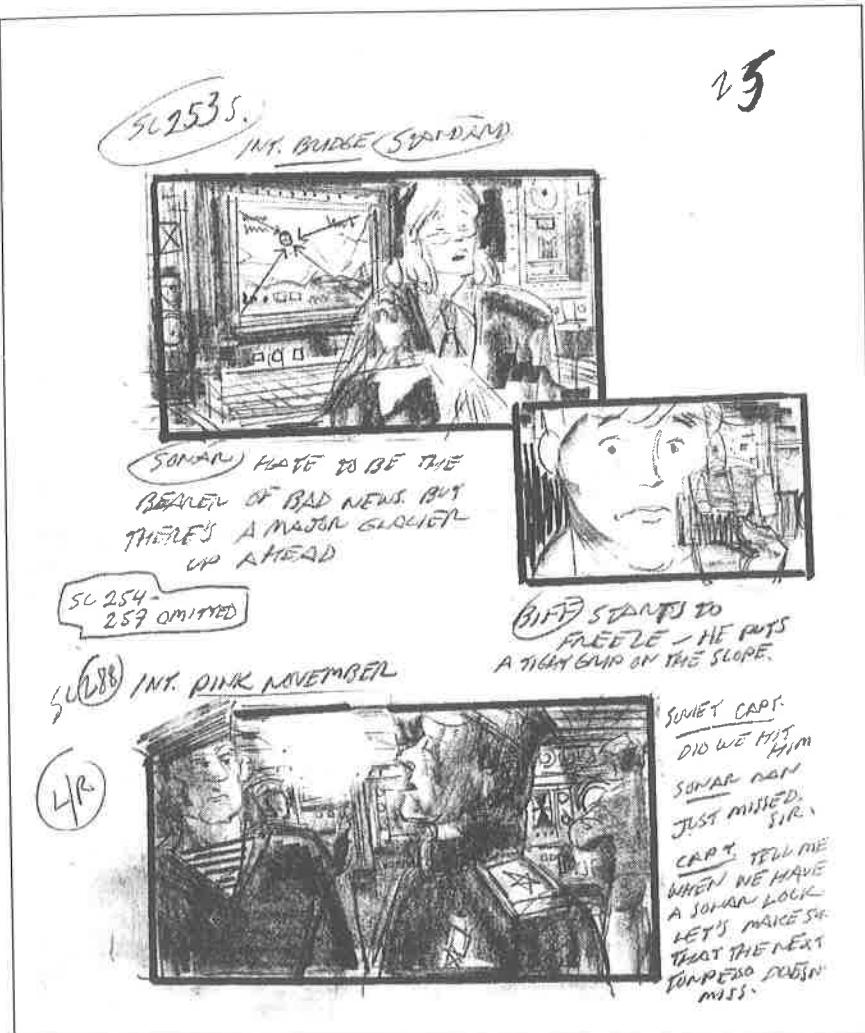


Second of three panels by Fred Lucky.

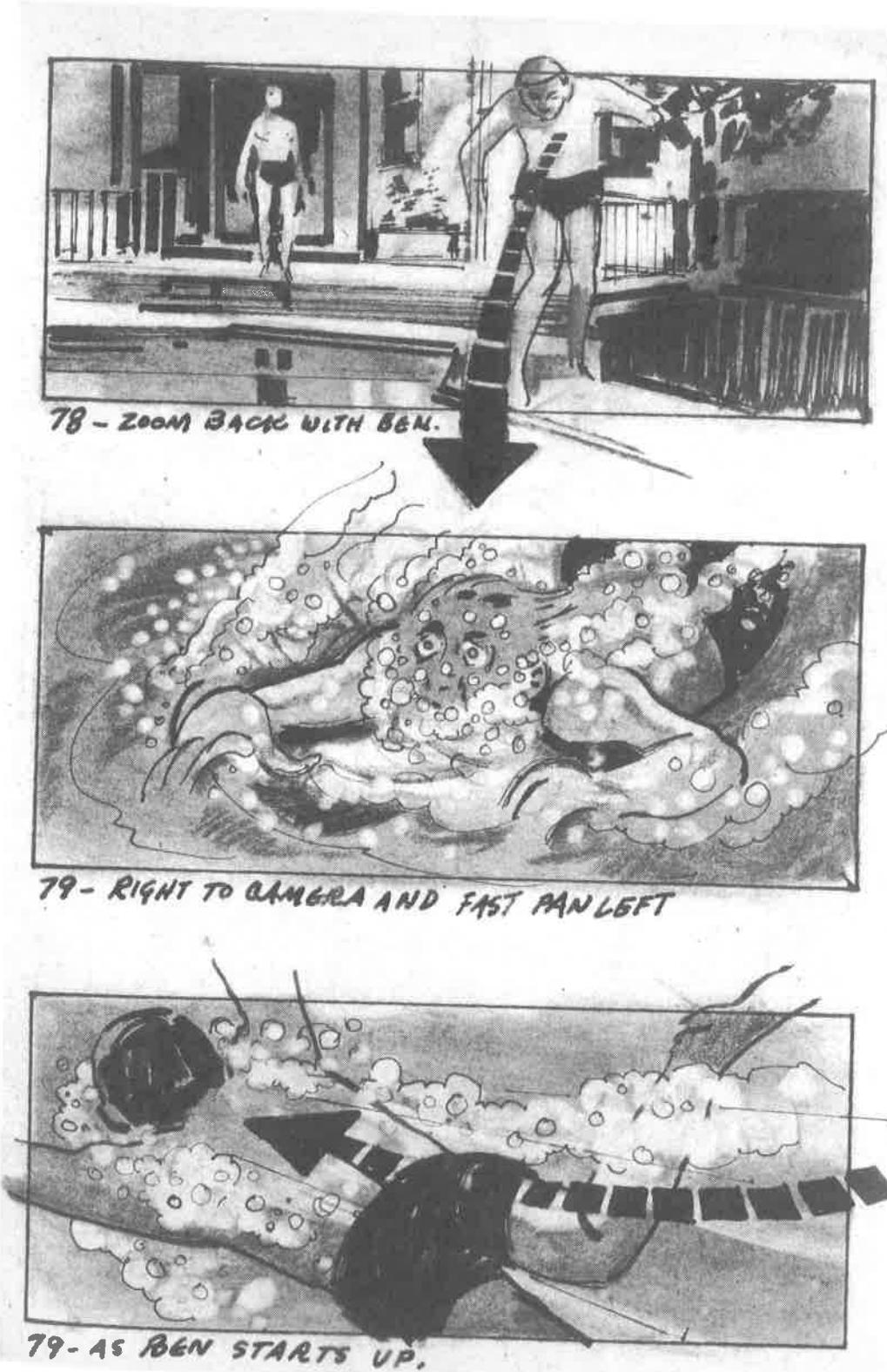
subject and narrative intention. This could very well serve as an object lesson in continuity illustration.

Adaptation

In a sense, all storyboards are adaptations, since they are transposed from a screenplay. Unlike a play or a novel, however, a screenplay is conceived as an intermediary form, a blueprint for the actual medium in which the narrative will appear. A screenwriter strives to be visual, to write drama that can be seen and heard, in fact, that needs to be seen and heard to be fully understood. In theory, the storyboard artist merely pictorializes the ideas in the screenplay, but in practice the storyboard may come very close to being another draft of the screenplay if only to polish some of the ideas. In the same way that screenwriters describe visual elements, some



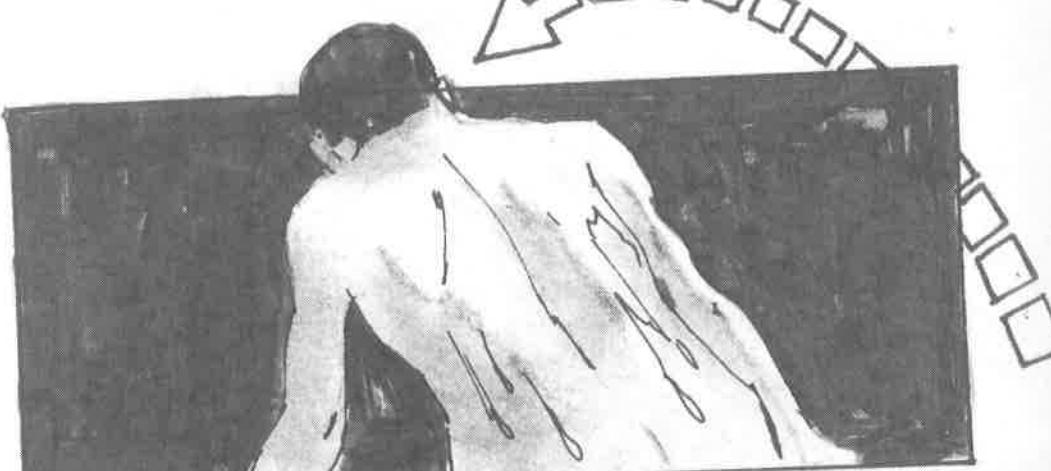
Third of three panels by Fred Lucky.



Harold Michelson's storyboards for *The Graduate*. Production design by Richard Sylbert.



80- BEN SURFACES



80- WE GO UP WITH HIM AND OVER



81- INT. TAFT HOTEL ROOM

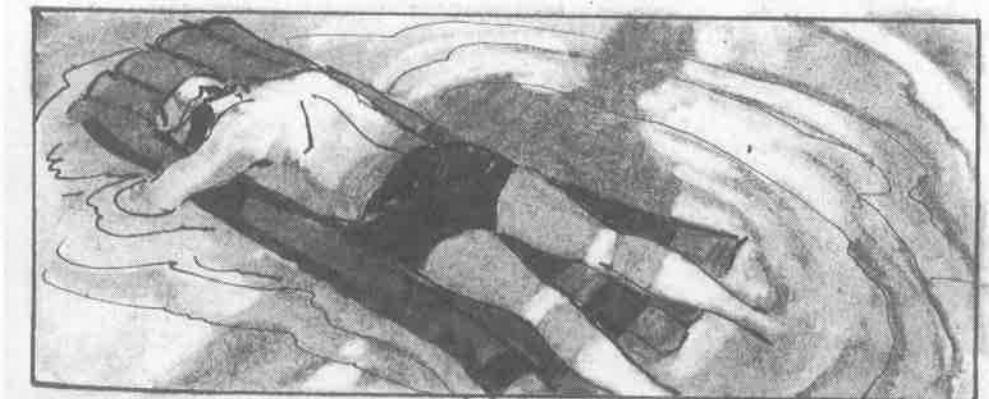
Harold Michelson's storyboard for *The Graduate*.



81- BEN TURNS TOWARD US AND LOOKS



82- P.O.V. SHOT... MR. BRADDOCK AT POOL.



83- BEN ON RAFT.

Harold Michelson's storyboard for *The Graduate*.



83- ... "GETTING OFF HIS ASS..."
"THE ROBINSONS ARE HERE."

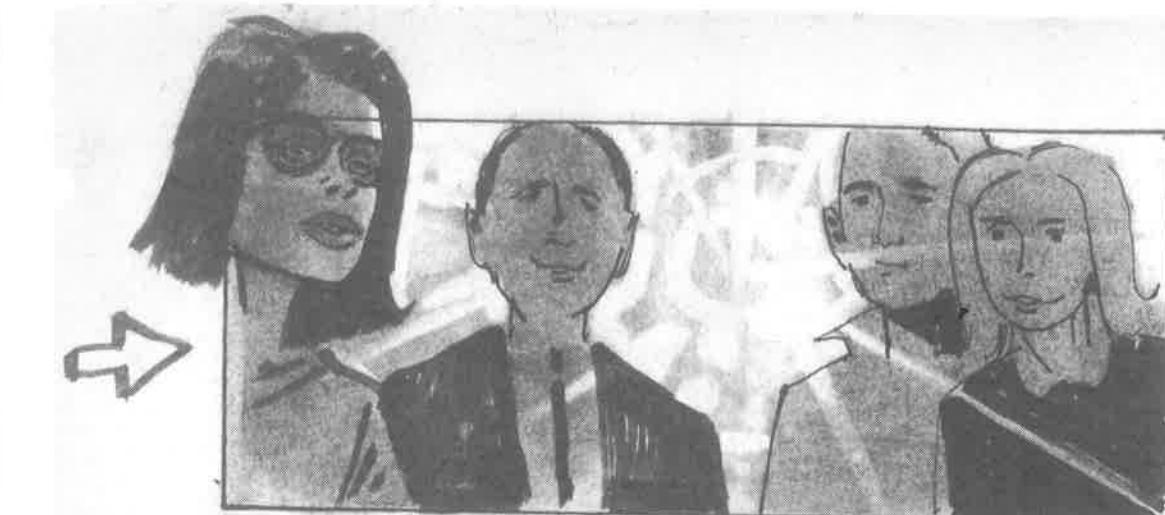


83



83- HI, BEN...

Harold Michelson's storyboard for *The Graduate*.



83- SAY HELLO TO MRS. ROBINSON, BENJAMIN



84- HELLO, MRS. ROBINSON



84- HELLO BENJAMIN,

Harold Michelson's storyboard for *The Graduate*.

storyboard artists suggest literary ideas, restructure scenes, add story elements and contribute dialogue.

To get a better sense of how a story can be shaped for the screen we can take a look at the way filmmaker Steven Spielberg adapted two scenes from J. G. Ballard's autobiographical novel *Empire of the Sun*. In this case, Spielberg is largely responsible for the conceptual content of the storyboard. Fortunately, we have several stages of the process to compare: The novel; two drafts of the screenplay, the first draft dated January 7, 1986, by playwright Tom Stoppard and the revised third draft dated September 12, 1986, by Menno Meyjes; and, of course, the storyboard. The storyboard by David Jonas begins on page 73.

The Novel

The story follows the exploits of an eleven-year-old British boy, Jim, living in Shanghai with his wealthy parents. The year is 1941, at the moment the Japanese invade Shanghai. Our first scene opens at dawn in Jim's room at the Palace Hotel. In the novel he is already awake and dressed in school clothes. He goes to the window overlooking the Shanghai waterfront along the Yangtze river. Jim watches two picketboats filled with Japanese marines and a motor launch of officers leave a Japanese gunboat. They board an American ship and a British ship. The launch flashes a message by signal lamp to the gunboat. Jim tries to signal back moving his arms in semaphores that he never quite learned in the scouts. Within seconds the gunboat fires a shell at the British ship and the shock wave rocks the hotel. Startled Jim jumps back to his bed. This is the beginning of the invasion of Shanghai and within minutes panicked guests are fleeing the hotel. Jim's father comes into his room and tells Jim that they are leaving in three minutes. Sitting on the bed Jim considers that he is responsible for the Japanese attack.

He realized that he himself had probably started the war, with his confused semaphores from the window that the Japanese officers in the motor launch had misinterpreted.

The Screenplay

Here is Tom Stoppard's adaptation of the same scene from the novel. The scene opens in Jim's hotel room. This time Jim is asleep. He is awakened at dawn by the sound of a close flying plane. He gets out of bed and goes to the window.

The prolonged action of the Japanese marines boarding ships that appears in the novel is condensed in the screenplay to Jim's watching the Japanese gunboat moving in the river. He backs away from the window and turns on the bedside light. An exterior shot of the hotel lets us see the light in the window of the generally dark hotel.

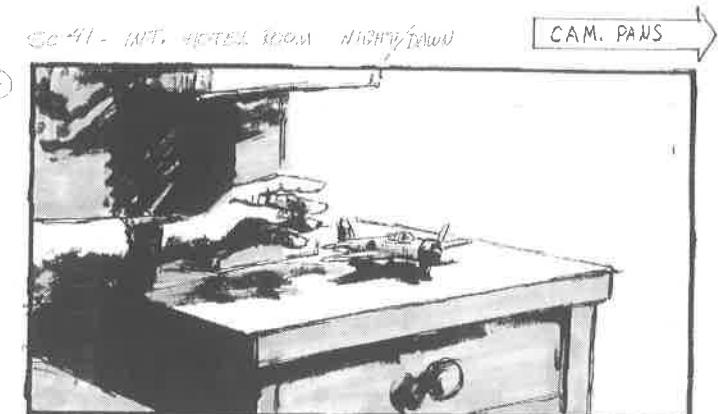
We cut to a short time later and Jim is dressed in school clothes. He picks up a Latin Primer, which is near a small toy plane on a table alongside the bed, but is soon attracted to the action outside the window. The

Japanese gunboat in the middle of the river is sending a message to another boat with a signal light. Jim returns to his bedside and picks up a flashlight. Cut to a new shot outside the hotel. This is a wide shot of the hotel, the river and the gunboats. In the dim predawn light Jim's flashlight blinks in the window of his hotel room. After a moment of signaling, the gunboat cannons roar and Jim's room is lit up with a brilliant flash of light. Jim falls backward. Within seconds Jim's father rushes in calling his name.

JIM

I didn't mean it! It was a joke!

As it turns out the first and revised third drafts of the screenplay are essentially identical. We can compare this with the storyboard, which is a fairly straightforward staging of the screenplay. The major changes, the ones that make the scene truly cinematic, are added in the film. Beginning below is a condensed version of the storyboard.



A POCKET-SIZED METAL JAPANESE FIGHTER ON A BEDSIDE TABLE. JIM'S HAND REACHES OVER AND PICKS IT UP.



JIM MOVES TO THE WINDOW

David Jonas' storyboard for *Empire of the Sun*.

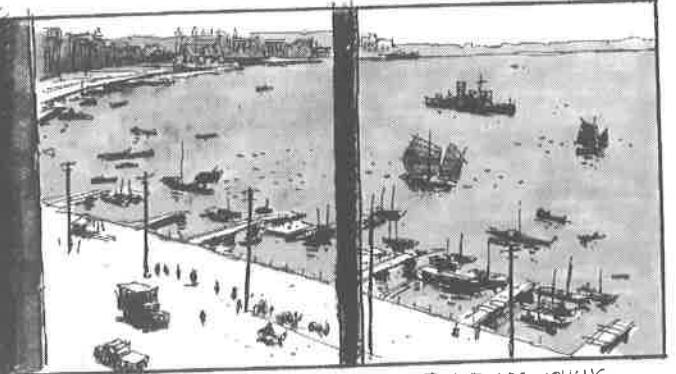
SC 41B



HE LOOKS OUT OF THE WINDOW - CAM PUSHES PAST
JIM TO REVEAL --

CH-1C

SC 42



JIM'S VIEW OF THE RIVER. A FEW BOATS ARE MOVING -
A LITTLE EARLY MORNING TRAFFIC ON THE BUND - A FEW
RICKSHAWS ETC. CUT TO

CH-1D

SC 43 EXT. CATHAY HOTEL DAWN/DARK

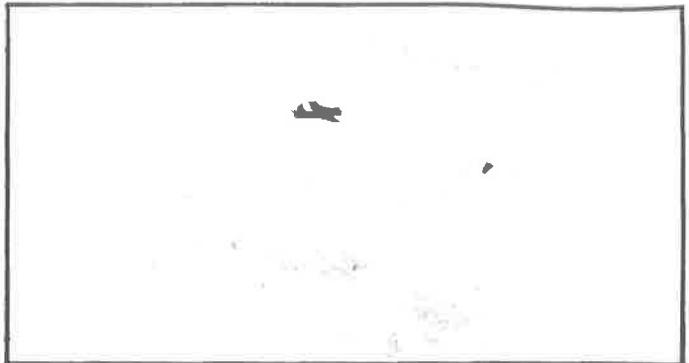


JIM CAN BE SEEN LOOKING OUT OF THE WINDOW. WE
CAN HEAR THE SOUND OF A PLANE.

CH-2

David Jonas' storyboard for *Empire of the Sun*.

SC 43A + EXT SKY DAWN/DARK



JIM'S POV - A JAPANESE FIGHTER. CUT TO --

SC 44. EXT- HOTEL WINDOW



JIM NAKATIMA -
CUT TO

CH-4

SC 45. INT. HOTEL ROOM DAWN



JIM IS DRESSED FOR SCHOOL - TYING HIS SHOE. ON A
TABLE IN FG IS A FLASHLIGHT AND KENNEDY'S LATIN PRIMER.

CH-5A

David Jonas' storyboard for *Empire of the Sun*.

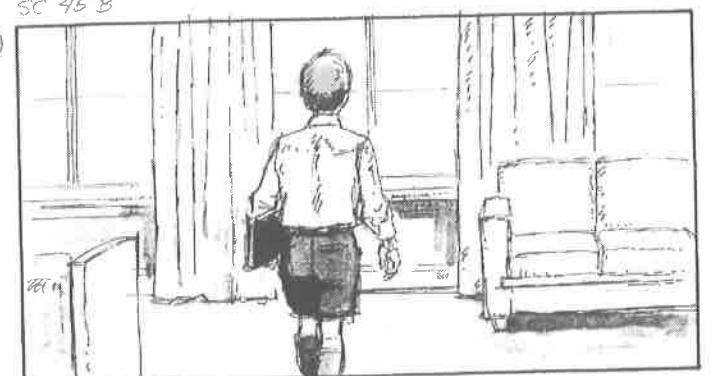
SC 45 A



JIM MOVES TO THE TABLE, TAKES THE BOOK, BEGINS
TO READ, BUT IS ATTRACTED BY LIGHTS BLURRING OUTSIDE.

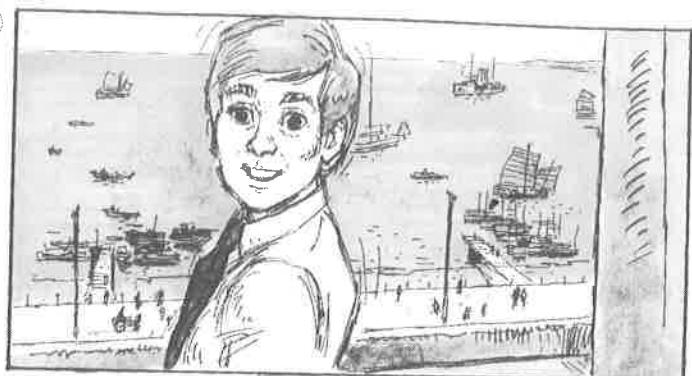
CH-5B

SC 45 B



HE MOVES TOWARD THE WINDOW - CUT TO

SC 46 A



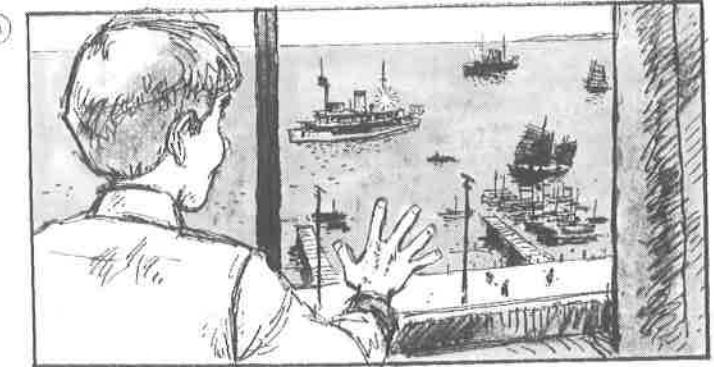
HE TURNS BACK, CUT TO..

SC 47



JIM RUNS TOWARD CAMERA IN A WIDER SHOT.

SC 46



LOOKING OUT THE WINDOW, JIM SEES A JAPANESE GUNBOAT
IN THE DISTANT BG. SIGNALLING (FLASHING LIGHT) TOWARD A
BRITISH NAVAL VESSEL WHICH IS ALSO SIGNALLING.

CH-6A

David Jonas' storyboard for Empire of the Sun.

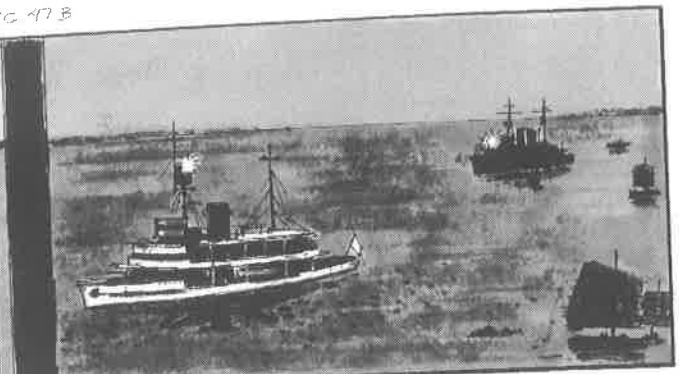
SC 47A



HE PICKS UP THE FLASHLIGHT. CUT TO..

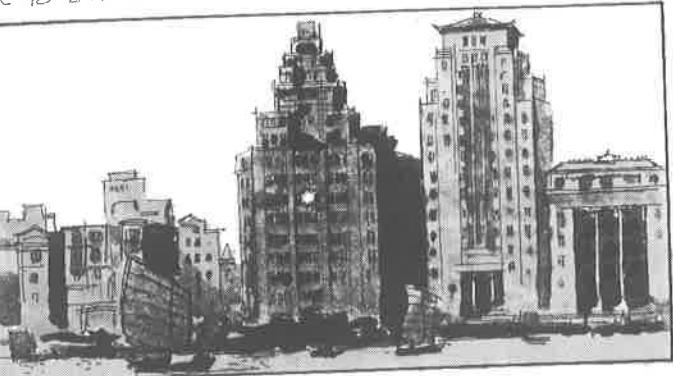
David Jonas' storyboard for Empire of the Sun.

SC 47B



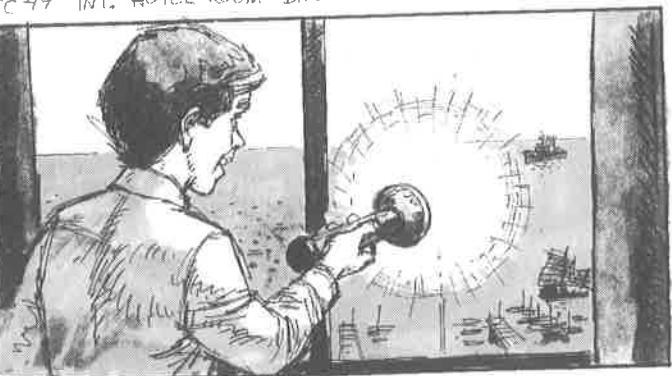
THE JAPANESE VESSEL SIGNALS -- (CUT TO)

SC 48 EXT. CATHAY HOTEL DAWN



THE FLASHLIGHT BLINKING IN JIM'S WINDOW. CUT TO

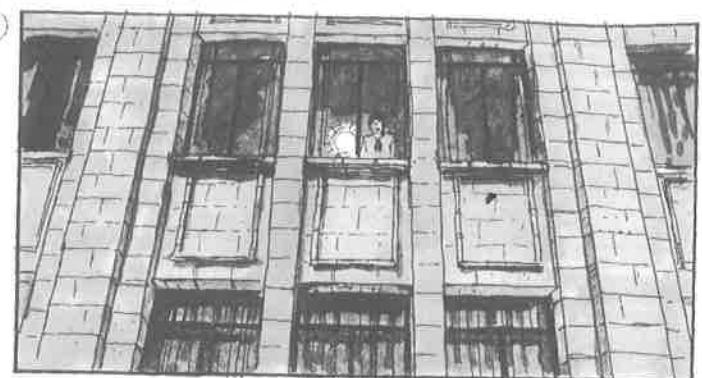
SC 49 INT. HOTEL ROOM DAWN



JIM IS AT THE WINDOW, ENJOYING HIMSELF, LAUGHING
QUIETLY AS HE BLINKS THE FLASHLIGHT. THE LIGHT
FLARES AGAINST THE WINDOW GLASS. CUT TO

David Jonas' storyboard for *Empire of the Sun*.

SC 49A - EXT. CATHAY HOTEL



JIM LAUGHING, BLINKING THE FLASHLIGHT

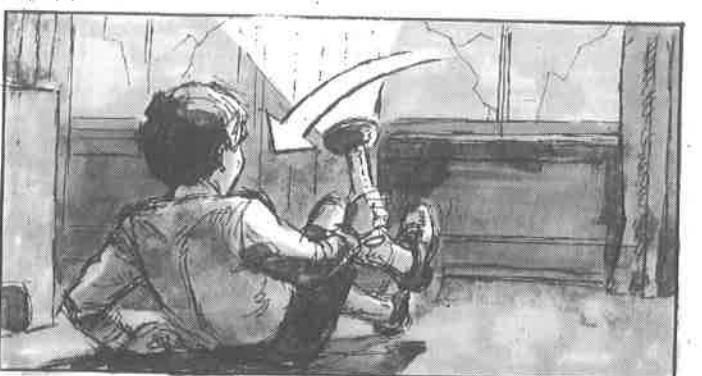
SC 49 B



THERE IS AN EXPLOSION. JIM'S WINDOW CRACKS - OTHERS
SHATTER. STONework BREAKS LOOSE AND TUMBLERS DOWN
THE FLASH IS REFLECTED IN THE WINDOWS

CUT TO --

SC 49 C



JIM IS THROWN TO THE FLOOR, STILL CLUTCHING
THE FLASHLIGHT.

CH-12A

David Jonas' storyboard for *Empire of the Sun*.



JIM'S FATHER (V.O.) JAMIE!
JIM (TURNING) I DIDN'T MEAN IT! IT WAS A JOKE.
CUT TO --

CH-12B



JIM'S FATHER . GET DRESSED!
JIM I AM.
JIM'S FATHER WE'RE LEAVING

CH-13A



David Jonas' storyboard for *Empire of the Sun*.

Now that we have looked at all the sources for the scene—the novel, screenplay and storyboard—we can consider how the scene was actually shot.

The Sequence as Filmed

The scene opens with various shots of the Shanghai waterfront at dawn. Cut to the shadow of a plane on the ceiling of Jim's darkened hotel room. The camera pans with the shadow made by a toy plane Jim holds in the beam of his flashlight. Continue the pan down the wall and over to Jim who is dressed and lying in bed. The mournful sound of a ship's horn draws Jim's attention to the window overlooking the river.

New angle at the window with Jim. He watches the Japanese gunboat signaling the shore with a light.

Cut to three exterior medium shots of the Japanese crewman sending signals.

Cut to a wide shot of the river, the hotel and gunboat in the background. In this shot we see the two Japanese ships signaling back and forth. Suddenly a third light begins signaling in one of the upper floor hotel windows.

Cut to Jim's hotel room with him signaling with his flashlight.

We can pause here to review how the cinematic structure evolves. First, there is the use of the spotlight and the toy plane. Spielberg has condensed two story elements into a single image that graphically moves us to Jim. It's a choice evocation of childhood and it introduces the flashlight and the toy plane, which will become important in later scenes.

Another visual decision substitutes the flashlight for the semaphore signals described in the novel for the obvious reason that the light can be seen from a distance. This opens up new possibilities for shots. It is also far more plausible that Jim would imagine that he had inadvertently sent some provocative signal to the Japanese gunboat with the flashlight than with semaphores.

In the filmed sequence, unlike the screenplay and the storyboard, we never see Jim return from the window to pick up the flashlight. By introducing the flashlight in the opening shot with the toy plane, it is unnecessary to show Jim taking it from the nightstand. By omitting the in-between shots of Jim picking the flashlight up and going to the window, the scene is streamlined and the audience is surprised (but not confused) when Jim's signal light appears above the Japanese signal in the wide shot of the river.

Spielberg adds a final variation on the storyboard in the filmed staging. When Jim is startled by the gun blast and throws himself backwards onto the floor, the camera pans with him but leaves him in midair, panning quickly to record the moment he hits the ground in the reflection of three standing mirrors that are connected by hinges. One of the panels shaken by the blast swings inward and frames the doorway in time for us to see his father enter the room. Jim is reflected in two of the mirrors and his father is reflected in a third. In this way three shots are combined into

one. This is so adroitly executed that the effect is all but invisible.

Empire used the talents of two production illustrators, David Jonas and Ed Verraux, who worked on the project for nearly a year. Using photographs shot in Shanghai, the illustrators worked at the art department in Spielberg's Amblin' Entertainment complex in Universal City. Like many of the production illustrators I spoke with, Jonas began working in production illustration in the Disney animation department, honing his drafting and storytelling skills before moving to live-action.

The *Empire of the Sun* boards, originally drawn to fill an 8½ x 11 in. page, are exceptionally detailed and show Jonas' wonderful compositional sense and figure drawing. This level of execution is as complex as storyboard illustration ever becomes, particularly since nearly every scene of the movie was illustrated with the same craftsmanship. Jonas and the other production illustrator on the movie, Ed Verraux, worked full time for nearly a year on the project.

Seeking a Career in Production Illustration

Storyboarding is a highly specialized skill offering little of the personal recognition artists in other fields can expect. To a great extent production illustrators are hired to work out someone else's ideas and are then under great pressure to complete the work in a short time. For some, the collaboration with a good production designer and director and the opportunity to see their sketches turned into a great movie is sufficient reward.

Instruction

One of the reasons for this book is that there are so few film courses that include production design and production illustration. Though production illustration, in general, and storyboarding, in particular, are of value to directors, producers and writers, the subject is not offered at most film schools. Camille Abbott, the production illustrator whose work was included in Chapter 2, teaches a popular storyboarding course at UCLA called "Understanding Storyboards for the Motion Pictures," probably the most thorough training available at the present time. Unfortunately, it is the only course in the country dedicated to live-action production illustration.

Students are far more likely to find storyboarding instruction in the area of animation. The American Animation Institute in Los Angeles offers noncredit courses in storyboarding, life drawing, background painting and other aspects of animation techniques. The Institute is associated with the animators union, Motion Picture Screen Cartoonists Local 839, and the courses are generally taught by working professionals. Even if you are interested in production illustration for live-action, you will probably have better luck finding instruction in the related areas of animation, since at least some art schools now offer courses in this field. There are also a few dedicated animation schools in the United States that include design courses.

The good news is that traditional training at a fine arts or commercial

art school is still a very good foundation for production designers, art directors and production illustrators. Many art schools offer courses in advertising art, which include television commercial storyboarding in the curriculum. However, the focus is usually on illustration technique and materials such as marker and mixed media rather than on motion picture technique. Though drawing skill is important, a production illustrator is primarily a film designer whose concern is really cinematography and editing. Courses in film history, technique and basic photography are, therefore, a necessity no matter how strong your illustration skills are.

Unions

There are only two organizations that specifically represent storyboard illustrators, both of them in California. First is the Illustrators and Matte Artists Local 790 I. A. T. S. E. (International Alliance of Theatrical Stage Employees) whose jurisdiction includes live-action storyboard art and production illustration. Most of the storyboard art appearing in this book is by members of this union. The major argument for craft unions in the motion picture industry is that they preserve the highly specialized skills of a small group of artists and technicians by providing some degree of job stability in a volatile business. Without the unions, many artists would have left the field to find work elsewhere during the slow periods, taking with them knowledge and experience that is unique to the field. To a large extent, some of this has already happened since shooting in the studio began to decline in the late '50s. In the past, the various trade unions prevented many new artists from entering the field, but today, the chief difficulty in finding work in any industry craft is the scarcity of work, not the pressure of the unions.

Today, the craft unions in the motion picture industry exert far less control than in the past, particularly since there are so many independently produced nonunion pictures made outside of Los Angeles. While the cost of making a picture goes up much faster than the rate of inflation, the main reason why even small motion pictures cost millions of dollars is due to the extraordinary salaries of producers, directors and stars, along with the expense of marketing a picture. Comparatively speaking, the cost of skilled union personnel is a bargain.

Local 790 is quite small with approximately 70 active members. Entrance into the union is not actually determined by the union, but is first dependent on the industry seniority system known as the producers' industry experience roster. To be eligible to enter the union, an illustrator must have worked 30 days under the terms of a union contract. The jurisdiction of local 790 is Los Angeles County, and while there is a San Francisco local as well, production illustrators are not represented by their own union in other parts of the country. Therefore, it is possible to obtain work on union and nonunion pictures throughout the United States without meeting the requirement of the production roster.

Finally, there is the Motion Picture Screen Cartoonists Local 839, also affiliated with the I.A.T.S.E., but this union only represents animators. Some production illustrators belong to both unions, and though there is a

considerable overlap of skills, each has techniques and methods that are unique.

If you are interested in further information on these unions they can be reached at the following addresses and numbers:

Illustrators and Matte Artists Local 790 I. A. T. S. E.
14724 Ventura Boulevard
Penthouse B
Sherman Oaks, CA 91403
(818) 784-6555

Motion Picture Screen Cartoonists Local 839
4729 Lankershim Boulevard
North Hollywood, CA 91602-1864
(818) 766-7151

American Animation Institute
4729 Lankershim Boulevard
North Hollywood, CA 91602-1864
(818) 766-0521

4 VISUALIZATION: TOOLS AND TECHNIQUES

Photoboards

Storyboarding is not the only way to visualize your ideas before committing them to film. Another approach is the one taken in this book: photoboards. Their advantage is that they are easy to create and they share the optical and graphic properties of motion pictures. Depth of field and focal length decisions can all be accurately compared in photoboards, and lighting values can be evaluated. The disadvantage of this method is that models are necessary and scenes must be staged, however simply. The relative merits of storyboards vs. photoboards have a lot to do with the sequences being prepared: A small dramatic scene with a limited cast is ideal for photoboards, while an action sequence featuring large groups of people is more easily created with illustrations.

Video

The development of home video technology in the past decade has provided excellent opportunities for filmmakers to preview their ideas in very nearly the same format in which they will ultimately be filmed. Relatively inexpensive camcorders and home editing systems that permit clean edits are now available so that rough-cut sequences can be easily assembled, and, of course, the results in many ways are more refined than would be possible with a storyboard. Like photoboards, however, scenes must be staged for the video camera and shooting the videotaped version is certainly more difficult for the filmmaker than turning the storyboard work over to an artist.

Visualizing with videotape is particularly applicable to nonunion, independent filmmaking because actors are available to rehearse without significant expense. While your actors are rehearsing you can test visual ideas at the same time. If you don't already own a camcorder you might consider buying one. Camcorders are useful to the filmmaker in so many ways that you will not regret the investment. However, if you can't afford the hefty \$750-\$1,200 price for a new one you can probably justify the expenditure as part of the design budget for your film.

To take the previewing process one step farther, you can edit the test shots on your tapes into sequences. "Cuts only" (that means no dissolves) editing systems can be rented by the day, week or month. VHS, Super VHS and 8mm formats are available. Rental prices range from \$800 to \$1,200 per week. If this is beyond your means, the public access channel at your local cable system probably has an editing system that is available