Art Direction

Walter Keller had been assigned to Heart of Darkness as art director. Keller had worked primarily in theater; Heart of Darkness would have been his first major assignment in film. The experience of Heart of Darkness made it clear that Welles was going to need someone with more firepower in this crucial position as well as a surer hand. Perry Ferguson was selected for Citizen Kane. These are Citizen Kane alumni who maintain to this day that assignment to the Welles unit at RKO was a sure mark of studio disfavor. Ferguson's case demonstrates the contrary. At the time, he was the RKO art department's rising star.1

Ferguson had come up through the ranks; originally a staff draftsman, he was made an assistant art director in 1935. After a brief apprenticeship in B pictures, he advanced to major assignments. An early credit is for Winterset, from the Maxwell Anderson play, which The RKO Story calls the studio's "most prestigious 1936 production." He worked with Howard Hawks on Bringing Up Baby (1938), RKO's entry in the ranks of major screwball comedies and one of the costliest pictures made by the studio up to its time. In 1939 alone, he received screen credit on three of the studio's top releases, each one in a different story category — In Name Only, the year's showcase domestic melodrama; The Story of Vernon and Irene Castle, the last of the RKO Rogers—Astaire musicals; and Gunga Din, the ultimate escapist adventure and, again according to RKO Story, "the most expensive film RKO ever made."2 A 1940 credit was for Swiss Family Robinson (which had narration by Welles), the first in a series of high-quality adaptations of well-known stories.

There is unusual versatility in this list; few art directors are likely to have been involved in so many top-of-the-line productions of such diverse nature over so short a time. According to the standard Hollywood way of thinking, past experience was the surest guide in determining new assignments — hence with Ferguson the recurrence of adaptations, Cary Grant vehicles, and contemporary stories involving sophisticated interior sets. To find the common thread that leads to Citizen Kane, however, we must look elsewhere than to the usual genre or story links. On Ferguson's list is a series of textbook examples of troubled productions. Hawks was painstakingly slow and went way over schedule on Bringing Up Baby.

Whatever its merits as a film, Bringing Up Baby was one of the biggest financial disasters in RKO's history. Gunga Din was not far behind. Originally scheduled for Hawks, it was turned over to the usually reliable George Stevens after the Bringing Up Baby fiasco, with consequences that surprised everyone. The Story of Vernon and Irene Castle, originally intended for Stevens, was then reassigned, but it ran into behind-the-scenes production difficulties on its own and also lost money. Thus, by the time of Citizen Kane, Perry Ferguson had emerged as the RKO art department's expert on expensive, high-risk productions involving strongwilled directors. All indications were that Heart of Darkness had been headed down the same road as Bringing Up Baby and Gunga Din. Clearly, what Citizen Kane needed was someone with the experience and tact to get along with Welles and at the same time counteract his natural tendency to excess.

Ferguson's former art department colleagues stress two things about him: how fast he was in his work and how well he got along with others. Citizen Kane would put his vaunted efficiency to the test perhaps more than any other single assignment of his career. The film had not only an unusually large number of sets, but it also had some very unorthodox set requirements. Yet the financial exigencies were the same as on any other production. Ways had to be found of coping with Welles's sometimes extravagant demands while at the same time observing strict budgetary restraints. The importance of the personal factor also cannot be overstressed. Welles had an uneasy relationship with the RKO professionals. He admired their enormous technical skills, but he found them locked into their own ways of doing things and too often unresponsive to new ideas. Wherever possible, he preferred to recruit his own major talent. On Citizen Kane, he brought in his own writer, cinematographer, composer, and even sound specialist. Ferguson was the principal exception. He is the one RKO regular who worked longest, most closely, and most successfully with Welles in a major capacity. One reason they got along was Ferguson's quiet, easygoing temperament. This was crucial, because Welles was painfully self-conscious of his amateur status in Hollywood and hence even touchier than usual. Another was Ferguson's willingness to try new things. In the area of set design, as in other areas, we find bold and groundbreaking new conceptions in Citizen Kane.

PRELIMINARY ARTWORK

The next phase after scripting entails the material articulation of what the script envisions. In the Hollywood system, this phase almost always meant the design and construction of complete facsimile spaces on the sound stages rather than shooting in actual locations. A script usually contains only minimal information about the scenes — just the time, place, socioeconomic context, and a few characterizing details. The actual work of physical definition was carried out by specialists in the various departments on the studio back lots. There were four distinct
RKO studio organization chart around the time of Citizen Kane showing the various departments on the back lot operation (for enlargement, see page 150).

operations in the process. First, sketch artists would prepare visual treatments of the scenes following the suggestions in the script. After a set of master drawings had been settled on, blueprints would be made and issued to the various construction departments. Bare sets would be built, then painted, papered, and so on. Finally, the set decorators and property people would apply the final touches and ready the sets to appear before the cameras. A designated art director had the general managerial and creative responsibility in this phase. His charge was to come up with an aesthetically valid design plan for the film that achieved the highest possible production value for the price and see to its faithful realization.

On Citizen Kane, the official credit reads:

Art Director    Van Nest Polglase
Associate       Perry Ferguson

This billing reflects the bureaucratic prerogatives of the Hollywood system rather than the actual nature of the individual contributions. Polglase was the administrative head of the RKO art department. He read and assigned scripts, attended budget meetings, made art department policy, and generally supervised all the work in progress. But he was rarely involved directly in any major way on the actual work on individual productions. Nevertheless, he was contractually entitled to the principal screen credit for art direction on all RKO films. Working under him were several unit art directors, who were assigned to individual films. Each major production had its own unit art director, and he was usually assigned full-time to that one project. Nevertheless, the unit director received subordinate billing. The technical staff consisted of craftsmen of two principal types: illustrators and draftsmen. The work of the illustrators involved the pictorial elements of the production. They visualized how the sets would look and how the actions taking place in them would be staged. Working from the script, from instructions provided by the unit art director, and from photographs in the studio's research files, they would sketch out the settings and action. The work of the draftsmen involved the building elements — floor plans, layouts, blueprints, and other formal models for the construction of the sets.*

On Citizen Kane, the specific working procedures were as follows: Welles and Ferguson dealt directly with one another most of the time, not through subordi-
nates. Their work got under way as soon as there was a usable draft of the script. (Ferguson's signed copy of the May 9 script with index tabs indicating the main scenes is in the RKO files.) They discussed each scene at great length. Welles told me he usually did a first set of rough sketches to convey his ideas but found this to be unnecessary working with Ferguson. Ferguson took elaborate notes on their discussions, and the notes became the basis for the instructions given to the illustrators and craftsmen. Ferguson might add an occasional thumbnail sketch involving practical matters, such as layout or prop placement, but the actual visual treatments were done not by him but by the art department staff. He was a specialist in set construction, not an illustrator. As his case demonstrates, to be an art director does not necessarily mean to be a working artist. Ferguson would submit the preliminary sketches to Welles, and the sketches would go back and forth between Welles and the art department until Welles was satisfied. There were two key turning points in this phase of the production. The first was the budgetary crisis in mid-May, which has been discussed in the previous chapter. Its impact on the set-planning process was especially severe, and it served as a major challenge to the creative ingenuity of all involved. The second was the arrival of cinematographer Gregg Toland the first week in June. As we shall see, Toland brought a distinctive visual style to the production that had major implications for the set requirements. After his arrival, Welles, Ferguson, and Toland formed a creative nucleus of the production. They met every morning and worked through each sequence of the script, discussing such things as how the sets would look, where the props and furniture would be placed, how the action would be staged, what the camera would be doing, and so on. Together, they worked out a tentative approach to shooting each scene. Establishing such a plan was an absolute precondition for everything else, since the camera range needed for shooting determined how much of a set had to be built. In this way, special set requirements also emerged early—for instance, the need for an unusually large number of "deep sets" on this production (ones with detailing in both foreground and background; in "shallow sets" the background simply trails off) or for special devices or designs to accommodate Welles's and Toland's elaborate camera choreographies and unorthodox shooting angles.

The work of the art department would begin with the drawing of a floor plan based on a proposed shooting approach specified by Ferguson. Then an illustrator would prepare a storyboard (they were called continuity sketches then) visualizing the action. Storyboards were drawn very quickly, and the visual details were very crude (see illustration opposite). The purpose of the storyboards was to illustrate the camera angles that would be needed for the action as envisioned, not to indicate elements of visual design. Because storyboards often correspond closely to the camera setups in completed films, some writing on art directors has tended to treat them simply as evidence of an illustrator's power to determine such things. Actually, the illustrators usually worked to specifications previously determined.
More creative latitude was used to concretize the details. Typically, the process began with what some called a rough idea—an exploratory sketch in charcoal outlining the main spatial conceptions and the general architectural themes. Its content would be derived from the script, Ferguson's instructions, and actual models, but the composite visual treatment would be the artist's own. A series of variations would be drawn showing different angles of approach or highlighting certain details; other artists would probably prepare alternative treatments of the same material. Ferguson would present the various treatments to Welles, who would approve or reject them in whole or in part and indicate which specific stylistic, decorative, or architectural lines of development he wished further explored.

After a sketch was approved, miniature working models of the sets would be made. Flat, four-sided scale drawings of the furniture and main props would be done on paper, pasted onto cardboard, cut out, and set up. Welles and Toland would work their way through these models with little periscopes, checking how things would probably look and further refining their strategies of object placement, camera movement, and so on. Once everything had been worked out, Ferguson would issue final instructions, and the sketch artists would prepare elaborately detailed working drawings, usually thirty by forty inches, showing each scene as it might appear on the screen. The working drawings would then serve as the master plan and the basis from which construction would proceed. (See illustrations on the facing page, detailing the Inquirer exterior.)

Two of Claude Gillingwater's working drawings for Citizen Kane. The style is American Ashcan School.
STORYBOARDS AND SKETCHES

Following is a representative selection of the early artwork, with examples of how the sets looked when completed. The sketches are probably by Charles Ohmann, who did most of the early work. An exception is the boardinghouse interior, which has been attributed to Albert Pyke. The storyboards could have been done by anyone. Storyboards were turned out so quickly that they usually lacked individuality, and it was in the nature of things for everybody on the staff to take at least one turn at one thing or another on any given production.
THE EVOLUTION OF A SET

The Hollywood studios usually maintained a complete scripting file on every feature film released. Typically, these files contained the final shooting script and the release continuity, plus copies of such things as the source work on which the film was based, any preparatory materials, such as reader reports, treatments, or synopses, and all intermediate script drafts. This was good business practice. Since the studio usually owned the remake rights, the script file was not merely an archival record; it also represented an actual property with potential additional value. Also, lawsuits involving story rights were common, and full documentation of a script’s evolution was often needed as part of a defense. Besides, scripts presented no special archival problems because they could easily be stored in standard-size files. In contrast, a film’s artwork was generated in great profusion in formats that were bulky to store, it had no inherent property value, and there was no compelling practical reason to preserve a record of it. Photographs would be taken of representative sketches and drawings, and these would be arranged by subject category and added to the general research files. A few of the original sketches and drawings might be exhibited in the theater lobby for the film’s Los Angeles opening. An art department employee might carry off a few pieces as souvenirs or to add to a private file. The great bulk of such materials, however, was discarded or destroyed. As a consequence, it is usually difficult to come by even a reasonably complete record of the art department’s work on a typical Hollywood studio feature. Making things worse for RKO is that, when the studio was sold to Desilu Productions in 1957, many of the records and materials (including the art department’s) were left behind in order to give the new owners a sense of how the studio operated and to ease the transition.

Fortunately, a small and significant core of the art material for Citizen Kane has survived. It is in bits and pieces in all kinds of places, some of them very out of the way. The largest single batch of these materials somehow managed to survive the depredations of the Hughes era and the closing down of the studio. The RKO West Coast business archive contains a set of sixty-eight eight-by-ten-inch matte-finish photographs of storyboards and preliminary set sketches based on early drafts of the script. Altogether, about three-fourths of the sets that appear in the film are represented. (For scenes that do not appear in the film, see the Appendix.) The Mercury collection possesses a few photographs of this type that are not in the RKO files, plus a small number of research photographs (including a series of exterior views of San Simeon). The Museum of Modern Art has a half dozen sketch photographs, the gift of a former RKO art department employee. Other former RKO people have samples of the Citizen Kane artwork. Most are photographic copies, but one private collection holds seven original pieces, which probably came from a lobby display. Finally, things can still be found on what was once RKO property. In 1977, the original Rosebud sled turned up in a prop warehouse at Paramount that used to belong to RKO. (Custom-built in the RKO property department, it was thirty-four inches long, made entirely of balsa wood, and
fastened together with wood dowels and glue. Actually, three identical sleds were built; two were burned in the filming. The sled is shown on this book's endpapers. Some of the statues cast for *Citizen Kane* lie abandoned in a warehouse basement at Laird Studios in Culver City, the site of the old RKO-Pathé operation. Little caches of former art department materials turn up here and there in these locations—a filing cabinet of sketch photographs in a closet, a box of set stills in an out-of-the-way corner, a few packing cases of research pictures in an unused warehouse—and occasionally a *Citizen Kane* item is among them. For the most part, this material provides only random and fragmentary glimpses of the creative evolution of the film's physical spaces. In one notable instance, however, there is enough for a relatively full account. Most fortuitously, this instance involves the film's perhaps single most famous set, the Great Hall at Xanadu.

In the story, our first introduction to the Great Hall at Xanadu is when Kane and Susan retire there after her unsuccessful opera tour and suicide attempt. The script provides the following information:

134 CLOSEUP of an enormous jigsaw puzzle. A hand puts in the last piece. CAMERA PULLS BACK revealing puzzle spread out on the floor. Susan (38) is on the floor before the puzzle, Kane (60) is in an easy chair. Behind them, beyond the massive renaissance fireplace, Baroque candelabra illuminate[sic] the scene.

Later, when the reporters assemble in the Great Hall as they are about to leave, a few additional details are given:

161 The magnificent tapestries, candelabra, etc., are still there, but now several large packing cases are piled against the walls, some broken open, some shut; and a number of objects, great and small, are piled all over the place. Furniture, statues, paintings, bric-a-brac—things of obviously enormous value—standing beside a kitchen stove, an old rocking chair and other junk, among which is also an old sled.

   Somewhere in the back, one of the vast Gothic windows of the hall is open and a light wind blows through, rustling papers.

A sketch artist's job, as one of those who worked on *Citizen Kane* explained it to me, was to fill out the suggestions in the script with architectural and decorative designs and combinations that were appropriate to the character and action. It did not require much penetration, particularly for a native of Southern California, to recognize that Xanadu parodied Hearst and his life-style at San Simeon. (Mankiewicz's juxtaposition of Renaissance and Gothic strongly suggests San Simeon, as does the fireplace itself.) Curiously, almost no one I talked to who worked on the film had ever been a guest or even visited there. What knowledge they had of it was based on secondary accounts and on photographs in books. For a sketch artist in 1941, an unmistakable starting point would have been a copiously illustrated 1931 *Fortune* magazine feature article on life at San Simeon titled "Hearst at Home." Above is a photograph from that article of the Great Hall at San Simeon.

Several details will be precisely echoed in the Great Hall of the film—the massive oak table in the center, a high-backed upholstered armchair beside it, an enormous fireplace in the background. There is also the general sense of clutter. Yet for all the similarity in individual details, the two structures do not look anywhere near the same. One obvious reason is that the sketch artist would have been careful to obscure his original source, for legal protection if nothing else. But a more basic reason is that the Xanadu Great Hall evolved not in simulation of Hearst but according to the dynamics of the script and the exigencies of the production process.
From its earliest conception (above), the Xanadu Great Hall is treated not like Hearst’s but as a much larger, more imposing, above all monumental space. The overall idea would have originated in Ferguson’s conferences with Welles. For the visual rendition, the sketch artists would have started by combing the research photographs for ideas. The RKO art department maintained elaborate files for this purpose, with representations of every conceivable period, geography, and style. Files would be included not only for larger architectural categories, such as “Palaces — Italian Renaissance” or “Houses — Spanish Colonial,” but also for small parts and details, such as gates, arches, fireplaces, and windows. The art department also had its own reference library, which contained several dozen standard works of art and architectural history. When accuracy or historical fidelity was the aim, the files would provide precise models. When the architecture was to be used evocatively, as it was in so much of Citizen Kane, the files would provide familiar visual prototypes as a starting point, and the illustrator would improvise the rest.

A key term in the script is Renaissance. The RKO art department library contained a standard work, The Architecture of the Renaissance in Italy, by William J. Anderson. In this volume was the drawing opposite of an Italian Renaissance forecourt and staircase:
This drawing may be the original visual model for the preliminary sketch. The overall use of space is very similar. As for the architectural details, both structures have an imposing forecourt, a staircase rising to a loggia with vaulted ceilings in the upper level, and figures drawn in on the staircases to give a sense of scale. More tellingly, except for the reversal of direction, the point of view in the two sketches is virtually identical.

Typical, however, the sketch artist has made changes in order to emphasize certain points. Left-to-right composition is more cinematic for the subject matter. The Hearstian element is brought out in the almost perverse juxtaposition of incongruent architectural styles and motifs — Gothic along the far wall, Venetian Baroque in the loggia, Egyptian on the landing (including a sphinx on a plinth!), vaguely Far Eastern figures along the staircase. (Each of these details might have had its original visual model, or they might have been drawn from memory — it probably depended on which would have been faster.) Also, the sense of scale is altered: The staircase in the original drawing complements the human figure, while the staircase in the sketch engulfs it.

A detail sketch of the staircase (below) is even more blatantly thematic. The image is a visual summary of the script: A massive stone staircase leads up to a monument. In climbing, one passes the disparate jumble of a lifetime devoted to possessing. At the top stands a sphinx, the symbol of an eternal mystery — Charles Foster Kane. As real architecture, this arrangement of elements would make no sense — for instance, the stairs continue beyond the monument to lead finally to a wall of windows in the loggia. But there is no real reason why it should, since the artist’s aim is not to make architecture but to appropriate architectural elements in the service of storytelling. Moreover, he does so within a set of visual conventions that would have been very familiar to the filmgoing audience — the Griffith–DeMille genre of spectacle, in which massive, overscaled structures overdecorated with the visual clichés of various historical periods and styles (usually incongruously juxtaposed) signify imperial grandeur, epic scope, non-Aryan mystery, and the lure of the forbidden. In fact, two different architects historians to whom I went for possible historical models for the sketches both drew parallels not with architecture but with the movies — one to DeMille, the other to the Babylon set for Intolerance. The o.k. notation on the staircase sketch by Freddie Fleck, one of the assistant directors, indicates that Welles himself liked this line of treatment and was directing that it be followed up. By the time it appears on the screen, however, the Xanadu Great Hall has been purged of most of its elements of standard cinematic spectacle. The explanation probably lies less in aesthetic considerations than in practical realities.

These first sketches of the Great Hall were drawn before budgeting began. When the budget estimate came in, Welles and Ferguson were forced to scale down their plans drastically. A good deal of the scaling down was accomplished in the customary fashion — by making use of existing sets and materials and by eliminating scene setups called for in the script. But they also came up with a number of much more innovative solutions. A particularly ingenious combination of these can be seen in what happens to the Great Hall set.

The dramatic requirements of the Great Hall set made Perry Ferguson’s job even more difficult. Neither he nor any other of the Citizen Kane principals would have been in on the early budgeting sessions, which would have been attended by the department heads (principally Polglase, Darrell Silvera of property, and Vernon Walker of special effects) and the professional budget estimators. In these preliminary sessions, the Great Hall was budgeted as part live action and part a series of “hanging miniatures.” The hanging miniature was a photographic special effects process used mainly for large structures, in which a miniature representing a portion of the set was placed between the camera and the part of the set actually constructed. It saved construction costs, but it was enormously inhibiting, because it required precision matching in long shot by a stationary camera. Toland and Welles would be opposed to such a treatment, because it would be at odds with the elaborate camera choreography they preferred. Also, they must have sensed the enormous dramatic potential of the vast empty spaces of the Great Hall set for deep-focus compositions. Consequently, the miniature process would have to be scrapped, and a full set would have to be constructed. The problem for Ferguson, then, was compounded — how to cut costs drastically while at the same time adopting a plan far more costly than the one originally proposed.
Another decision made under budgetary pressure produced important changes in the dramatic requirements of the Great Hall set. The most effective way of lowering set costs was to eliminate whole sets. This could be accomplished either by dispensing with all the scenes called for on a particular set or by relocating them to other sets. In the early scripts, some of the scenes involving just Kane and Susan at Xanadu took place in a living room. (See the Appendix for a sketch.) The Great Hall was intended to serve as a combined social and ceremonial centerpiece, just as the Great Hall at San Simeon was. In response to the budget crisis, the smaller, private space was eliminated, and its scenes were shifted to the Great Hall. The consequences were extraordinary, as we shall see.

Claude Gillingwater, Jr.'s later working drawing of the set (below) gives us glimpses of some of the changes in progress. The most dramatic change involves the staircase, which has become much less prominent. This is partly the result of practical necessity. By a fortunate coincidence, it was discovered that a large staircase built for another film was still standing on the stage where the Great Hall set was to be constructed. It could be used at a considerable savings, though the enormous sense of scale conveyed by the original staircase design would have to be sacrificed. Again, the visual prototype for the revised plan may have come from Anderson's Architecture of the Renaissance in Italy:
The angle of view toward the staircase, its directional placement, and in particular the window lighting suggest the parallel, though Gillingwater's rendition is a typical outrageous fusion of diverse architectural styles. In this new treatment, the sphinx is redundant. Almost as if in acknowledgment of the fact, it has been moved aside and toward the background. Eventually it will disappear altogether, along with most of the other costly detailing on the upper level. 14

As the staircase recedes in compositional importance in Gillingwater's drawing, so the fireplace rises to prominence as the set's central feature. Again, this is appropriate, since elimination of the other set left it the focal point of several key scenes. Like the Great Hall generally, the fireplace has its origins in San Simeon. Below is the photograph of the refectory, called the Great Dining Hall, at San Simeon that appeared in the Fortune article. The carved stone chimneypiece in the background is a French Gothic original that is thought to have come from the collection of architect Stanford White. The mantel, eleven feet eight inches in height, is the tallest at San Simeon. The inset figures on the overmantel are Visigoth kings.

The preliminary sketch for the chimneypiece at Xanadu (above) is almost a literal rendering of it. Typically, the sketch artist has improvised an extraneous feature: an arched lintel in the English Gothic Revival style. (A good example that could have served as the artist's source is Plate I in L. A. Shuffrey's The English Fireplace, London, 1912.) Gillingwater's fireplace retains all the essential features of the earlier sketch, but he has changed enough details to obscure the direct link with Hearst.

In its major details and their placement, the lower half of the Gillingwater sketch is very close to what we see on the screen. Yet in some ways the finished set is as different from the Gillingwater drawing as it is from the Great Hall at San Simeon. These changes came about during the process of constructing the actual set.
Start with the foremost element, the fireplace. The overmantel has been eliminated—undoubtedly to cut costs, but it would have been out of camera range most of the time anyway. The mantel itself has been so widened that it looks almost as much like a proscenium arch as like a fireplace treatment. In fact, several scenes are played as if it were. The mantel would have been produced in the RKO plaster shop, which employed a permanent staff of plaster carvers and sculptors under the supervision of longtime foreman Joe Zokovich. So large a piece would have had to be cast in several separate sections, which would then have to be matched and bonded together. The sculptors would have come up with ideas for the detailing and submitted them to Ferguson. For the most part, detailing consists of standard ornamental motifs, such as rosettes and fleurs-de-lis, but there is one genuine curiosity: Along the lintel arch is a nautical treatment consisting of a piece of driftwood with seashells and winding rope. This motif is probably intended to refer to Xanadu’s location on the Florida seacoast. A famous sculptural prototype would be Benjamin Latrobe’s use of native American cornstalks and tobacco leaves on classical columns in the Capitol Building. Of course, this sort of thing became a cliché in American estate architecture.

The theme of outrageous juxtaposition is carried out in the props and set decoration. If the statuary flanking the fireplace is clearly in the classical idiom, the figure on the mantelpiece is just as clearly medieval Gothic. Both figures are probably copies of well-known originals: The figure on the right might be a Hercu-
fireplace is an even more illogical grouping — the classical figure, a bellows from an English country estate, and an ecclesiastical candle bearer that is probably French in origin.  

The set as a whole is also very different from the artistic plan. The major change involves the amount of detailing. The Gillingwater drawing envisions a fully illuminated three-sided set with all the spaces filled in. The completed set is selectively illuminated, and whole areas are left dark. This fundamental change represents the difference between visual illustration and the dynamics of set design. Ferguson’s problem was to preserve a sense of monumental scale for this set while at the same time significantly reducing its cost. His solution was extremely ingenious. Only the most prominent features of the set were actually built from scratch — the fireplace and the doorway treatment to the left of it. The staircase, we know, was modified from an existing set. The property vaults turned up other pieces that could be used without cost, such as the enormous Gothic entryway at the left of the stairs. The walls were left bare except for occasional hangings and ornaments, but low illumination and strategic placement of statuary and other props helped to camouflage this. Rolls of black velvet were hung in the empty spaces, causing them to register photographically as extreme depth. The result is a very sophisticated piece of optical trickery: The eye continually reads more than it actually sees.

On the screen, the scale, the exaggerated depth perspective, and the lighting plan all work together to give the Great Hall set a powerful sense of the vast and foreboding. Yet the individual parts of the set make possible a more subtle range of effects. The arrangement of statuary here differs from that shown in the set photographs. Here a medieval gargoyle partially obscures the Hercules and looms menacingly toward a neo-classical female figure — a visual pun for Kane’s treatment of Susan, and probably a Wellesian touch (see frame enlargement on page 64). More significantly, the fireplace area is made to serve as a kind of living room. The Kanes play out their private domestic scenes in what was obviously conceived of as an enormous ceremonial and display space. The verbal substance of the conventional is there (“Our home is here, Susan”), but the surroundings are totally out of kilter. The domestic hearth is more than twenty-five feet long, Kane traverses perhaps twenty yards to get to his favorite chair; their dialogue drifts back and forth across the great empty spaces between them. Except for Susan’s puzzles, there is absolutely nothing of a personal or intimate nature around. As we know, these circumstances were dictated by practical necessity, but the dramatic result is to create one of the most startling and psychologically upsetting effects in the entire film.
THE LEGACY

The revised budget of June 27 listed a total of 81 sets for Citizen Kane, not counting pickups and inserts.\textsuperscript{13} When the film was in production, Hollywood Reporter carried a news item stating that it would require a “record number of 93 sets.”\textsuperscript{14} The souvenir program issued at the time of the film’s release quoted Ferguson as saying there were either 106 or 116 sets, depending on how one counted, and that his highest previous count on a film was 65.\textsuperscript{15} The fact that this information was deemed newsworthy is in itself an indication of how special the set requirements for this film were. First of all, the number of individual sets was unusually large. Second, these represented a great diversity of places and kinds of settings covering a seventy-five-year period. Next, the deep-focus shooting style necessitated costly foreground and background detailing on many sets. A number of sets had other unusual requirements — muslin ceilings, for instance, or camera boxes built into the floor for low-angle shots. Finally, there were the virtuoso sets specially designed to accommodate Welles’s flair for the sensationally dramatic. The Great Hall is merely the flashiest of these. There is also the nightclub sign, a live action set (not a miniature, as most people think) built in halves so that it can fold outward as the camera passes through. Or the interior of Mrs. Kane’s boarding house, a small, fully appointed space that the camera can traverse with ease because the walls fold down and the furniture is set into place as the camera truck clears the path. Or the room where the newspaper party is held, an enormous structure with muslin ceilings built on an elevated platform that is large enough to contain, simultaneously, each in its own space, a banquet, a marching band, a chorus line, an emcee, a private conversation, and a courting newspaper publisher. Yet all this was accomplished at a cost considerably lower than the average for the time. In the preliminary estimate, $105,575 of the $1,082,798 total had been budgeted for set costs, roughly the 10 percent considered standard for A-type productions. As a result of severe cutting during the budget crisis, the estimate was reduced to $58,775, slightly more than 8 percent of the $723,800 budget. (It is significant that, in the July 2 go-ahead estimate, the total budget had been reduced by 33 percent, but the sets budget had been reduced by 45 percent.) The actual cost ran to $59,207 — within $300 of the estimate and an astonishingly low 7 percent of the total picture cost of $899,727.

Shortly before the film’s release, Welles wrote a long letter to Schaefer summing up his experience on Citizen Kane and looking ahead to his next project. One of his major achievements, he says, is that Citizen Kane looks like it cost a lot more than it actually did. The root explanation, he goes on, is in the art direction — his own careful attention to this phase of the production and the art department’s full cooperation in giving him exactly what he wanted. He says he has already asked Ferguson for his new project and wants him in New York right away so they can start work.\textsuperscript{16} Schaefer did his part to help things along, and Ferguson was assigned for a time to Welles’s Mexican story (see Chapter Six).\textsuperscript{17} Welles would also have wanted Ferguson for The Magnificent Ambersons, but by that time he had left RKO, first to do The Outlaw for Howard Hughes, then to become a permanent fixture at Samuel Goldwyn, where he eventually became head of the Goldwyn art department. At Goldwyn, he and Toland formed a team — on Ball of Fire (1942), The Best Years of Our Lives, The Kid from Brooklyn, The Bishop’s Wife (all 1946), and A Song Is Born (1948). He worked again with Welles on The Stranger (1946), whose few distinctions include a church tower said to be the tallest set built in Hollywood since Ingrid Bergman’s. Another notable credit is Rope (1948), Hitchcock’s experimental single-set, single-take curiosity piece. In the 1950s, he moved over to television, where he is best known for his work on the series “77 Sunset Strip.”\textsuperscript{18}

Citizen Kane has always represented different things to different people. For Hollywood set designers of the 1940s, it was a textbook example of how to function creatively under severe budgetary restraints. That lesson had special relevance for the times. Only a few months after Citizen Kane was released, the war broke out. Among the wartime restrictions that hit Hollywood was a ceiling on the amount that could be spent on new materials for set construction on any one production — a paltry $5,000. In a trade article on this subject published in 1942, Ferguson pointed out how Welles’s film could serve as a model:

There is another way in which we can effectively minimize actual set-construction to great advantage. This is in taking advantage of the camera’s powers of suggestion...
ground piece, a background piece, and imaginative lighting suggest a great deal more on
the screen than actually exists on the stage.76

Probably the single most ingenious device was the black velvet technique, which
was used not just on the Great Hall set but in other situations that had similar
lighting. A leading art director told me he first learned this trick from Perry Fer-
guson on Citizen Kane and that thereafter it became a standard feature of his own
repertory. Film history has traditionally assigned credit for the expressionistic
lighting of the Great Hall and other sets almost exclusively to Toland. Actually, as
we have seen, the lighting program originates in the design of the sets. This is not
to deny that Ferguson and Toland may have worked these things out together with
Welles. But at the very least, the credit will have to be shared.

Cinematography

Welles says it was Toland who first broke the ice. Welles had made it known that he
was interested in working with the veteran cinematographer. When word of this
reached Toland, he telephoned Welles at the Mercury Theatre office and offered
to sign on. After a long string of directors who “know everything there is to
know,” he told Welles, it would be a real pleasure to work with an amateur. What
attracted Welles to Toland is clear enough: his long years of experience, the stature
of his assignments, a recent Academy Award (after two previous nominations) for
Wuthering Heights, and a reputation for unconventionality. He had probably also
heard the legend that Toland was “the fastest cameraman alive.” What attracted
Toland to Welles becomes clearer when we look at the overall contours of Toland’s
career. Despite the universal professional respect he commanded in Hollywood,
Toland was never a creature of the Hollywood studio system. In fact, he was a
devoted rebel against the conventions and rituals of big studio filmmaking. His
way of escaping them was to work at Samuel Goldwyn Studios, where he stayed
under contract throughout his career. At Goldwyn, he enjoyed privileges that
would have been less likely to be available in the larger studios; a light production
schedule, carefully selected story material, his own specially designed or modi-
fied equipment and handpicked crew, an atmosphere conducive to innovation, and
the chance to work regularly with nonconformist directors like John Ford, Howard
Hawks, and William Wyler, who welcomed and encouraged his innovations. He
had access to the Goldwyn facilities between assignments so that he could freely
tinker and experiment. His dislike for conventional studio photography was leg-
endary. He was always in the forefront of change, the first to adopt new methods
made available by technological developments in lighting, optics, and film stocks.
He appears to have been driven by a compulsion to expand the accepted technical
boundaries of the medium. He was also a shameless exhibitionist in the films on
which he worked, never missing an opportunity for a flamboyant display of what-
ever new and sensational visual effect he had come up with. He told Welles he had
seen and admired the original Mercury Theatre Julius Caesar, a more unconven-
tional production than which it would be difficult to imagine. He certainly would
List of the equipment Toland brought from Goldwyn for shooting *Citizen Kane*.

Toland was the first major cinematographer to use the new blimpless Mitchell cameras, the BNC. The 24-mm Cooke was the widest-angle lens in common use at the time.

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<thead>
<tr>
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<tr>
<td>1</td>
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<td>5</td>
<td>75 M.M. Astor</td>
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<td>4 inch Astor</td>
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<td>7</td>
<td>5 inch Astor</td>
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have known, too, about *Heart of Darkness*. What better proofs could there be that Welles would make an ideal collaborator?

Goldwyn agreed to loan Toland out at $700 per week. As part of the deal, RKO was obliged to employ Toland's regular camera crew and to rent his camera equipment from Goldwyn. The crew, which had worked with Toland off and on since the 1920s, consisted of Bert Shipman, camera operator; W.J. McClellan, gaffer; Ralph Hoge, grip; and Edward Garvin, assistant cameraman. Toland insisted on using his own equipment because some of the pieces were fitted with his own special modifications and also because he was using a camera and lenses that were not commonly used in the major studios at the time. We will consider the specifics in due time. For the moment, we should recognize that, with Toland, Welles was getting more than just a cinematographer on free-lance assignment. He was also unwittingly contracting for the mechanics and apparatus of a specific kind of shooting plan.

Toland reported for work on *Citizen Kane* the first week in June. At the time, the script was still in budgeting. Welles and Ferguson had done some preliminary work, but there was not yet an overall design plan. Once Toland arrived, he, Ferguson, and Welles worked out in their morning sessions. Afternoons and evenings, Welles spent what time he had left over from working with the actors and revising Mankiewicz's script not only discussing *Citizen Kane* with Toland but also, quite frankly, learning the ropes. Welles says that Toland spent enormous amounts of time patiently explaining the most elementary and basic things about cameras, camera angles, lenses, and lighting to him but that he always did this quietly and in ways that carefully avoided showing Welles up in public. Clearly, too, Toland was selling Welles on the merits of a particular approach.

When the budgetary crisis developed, the RKO front office insisted on holding everything up until it was resolved. Such crises, however, were old hat with the Mercury operation, and Welles was eager to try out some of the things that he and Toland had been discussing. He proceeded with shooting and fabricated a cover story. *Because the sets had not been built, it was necessary to improvise.* The first day of shooting, Saturday, June 29, 1940, was devoted to the projection room sequence. The budget had called for the construction of a set; a real projection room on the RKO lot was used instead. For the second day of shooting, Thompson's first visit to the nightclub where Susan Alexander sings, a set with a Western background constructed for another production was commandeered. For the third sequence shot, Susan's suicide attempt, only a partial background set was needed because of the lighting requirement. On the daily production reports that were forwarded to the front office, all three days of shooting were listed as "Orson Welles Tests." The tests were the source for one of the colorful legends that has grown up about the making of the film. Robert Wise tells it this way:

One of the remarkable things about *Citizen Kane* is the way that Orson sneaked the project onto RKO. He told the studio that he was merely shooting tests. ... After Orson had been shooting for a while, the RKO bosses finally became aware of what he was doing. Then they said, "Okay, go ahead."
As a matter of fact, thanks to the budgeting process, the front office already had the full script in hand. Welles had other reasons for concealing what he was doing. When we look at what was actually shot on these three days, we begin to see what these reasons were.

The first day of shooting: the projection room sequence. This sequence was shot at unusually low light levels. Then the film was "forced-developed" in the laboratory—that is, it was left in the chemicals a longer time than usual to increase the contrast. Forced-developing would ordinarily make the footage unacceptably grainy, but the tonal range in the scene was so high that the grainy effect was minimized.

The RKO projection room used for the first day's shooting was a space approximately thirty by sixteen feet. In this, Welles and Toland placed a camera, equipment, lights, microphones, crews, and nine performers. They shot the sequence at daringly low light levels—only the streams from the projection windows and a few small fill lights. The performers were barely visible, except when they crossed the harsh beams of light. The performances were pure Mercury Theatre—constant overlapping of the dialogue and background voices. The nightclub sequence is filled with equally daring visual conceptions. It opens with an elaborate descending crane shot, the first recorded appearance of the kind of exaggerated moving-camera effects that were to become the Welles trademark. (It was duly accompanied in the production reports by suggestions of profligacy and waste. In the "Reasons for Delay" column was a notation by the assistant director, an RKO company man—"Returned from lunch 1:30 pm and rehearsed and lined up Crane
shot to 4:30 pm.”) Later on, this crane shot would be joined optically to a similar exterior shot to give the appearance of continuous movement through the skylight. The sequence ends with another extremely unorthodox visual conception. The reporter enters a telephone booth to call his boss in New York. The camera looks into a cross section of the booth. The reporter stands about four feet from the camera. A wide-angle lens is used on the camera to increase the depth. High-contrast lighting is used in the nightclub background to enhance the sense of depth. In the middle distance stand the captain and a waiter. Slumped at the table in the background is Susan Alexander. All three depth planes are in clear focus. The third sequence, the discovery of Susan’s suicide attempt, contains the most daring visual conception of all. In the foreground, only inches from the camera, are a medicine bottle and a glass. Behind them, unconscious on the bed, is Susan, sweating and gasping for breath. In the background, Kane and a servant break down the door to get in. All the planes of activity, from extreme foreground to distant background, are in focus.

In its visual appearance, what was shot on these first few days departed radically from the conventions of studio filmmaking at the time. Much of it was openly, blatantly experimental; one member of the camera crew explained later that the whole purpose of this early shooting was to “prove certain new techniques.” The one thing as much feared in Hollywood as a runaway budget was radical innovation. If the truth were known, *Citizen Kane* now had both strikes against it. Indeed, Welles had much to hide.

**THE CINEMATOGRAPHIC PLAN**

In an article on his involvement in *Citizen Kane*, Toland makes a special point of the fact that he came in very early in the film’s production. He explains that this was unusual in Hollywood, “where most cinematographers learn of their next assignments only a few days before the scheduled shooting starts.” As a consequence, “the photographic approach to *Citizen Kane* was planned and considered long before the first camera turned.” The principal elements of that photographic approach are: deep-focus cinematography; long takes; the avoidance of conventional intercutting through such devices as multplane compositions and camera movement; elaborate camera choreography; lighting that produces a high-contrast tonality; UFA-style expressionism in certain scenes; low-angle camera setups made possible by muslin ceilings on the sets; and an array of striking visual devices, such as composite dissolves, extreme depth of field effects, and shooting directly into lights. Most of these elements ran directly contrary to the conventional studio cinematography of the time. As Toland explained, Welles insisted on “letting the Hollywood conventions of movie-making go hang if need be.” Toland himself allowed the impression to stand that many of these rules were being broken for the first time in *Citizen Kane*. In fact, most of them had been broken before, by Toland himself, in films on which he had worked for other directors. In a number of its most important visual features, *Citizen Kane* can be seen as a direct and logical extension of Toland’s previous work.

It is said that when John Ford was making documentaries for the government in World War II, he could usually tell from the images themselves which cameraman had shot what footage. If we look at Toland’s films of the 1930s with *Citizen Kane* in mind, certain stylistic mannerisms seem familiar: the use of reflecting surfaces and multplane compositions in the Goldwyn musicals; the way Peter Lorre is lighted in *Mad Love*; the corner compositions of a character with his back to us at the side of the frame in *Come and Get It*; Laurence Olivier’s face in darkness in some of the scenes in *Wuthering Heights*. Around 1939, however, these similarities begin to be more pervasive. Thanks to major new technical advances, Toland begins to evolve a radically new cinematographic style that develops to its full maturity in *Citizen Kane*.

The first set of advances involves the sharpness of the film image.* In the 1930s, the typical studio style tended toward heavily diffused lighting, soft tonality, and a relatively shallow depth of field. This so-called soft studio style can be traced back to the coming of sound, when noisy arc lamps had to be replaced by incandescent lamps, which, though quieter, provided much lower levels of illumination. To compensate for the light that was lost, lenses had to be used at maximum aperture settings; this reduced the depth of field and it could also soften the image. As the decade progressed, technical improvements in lighting and film stocks made possible a return to the sharper, crisper, still-photographic style characteristic of many silent films. But the soft look was still favored, and conservative studio cinematographers usually found it safer to observe established practices than to strike out in new directions.

Several developments made a sharper, deeper, high-contrast image possible. Depth of field can be increased by shooting with a wide-angle lens and narrowing the aperture setting. Among the technical difficulties involved in achieving extreme depth of field are the great loss of light that occurs when the aperture is narrowed and the graininess of the fast film stocks used to compensate for this loss. In the mid 1930s, partly in response to the requirements of the new Technicolor cinematography, a new generation of are lamps was introduced. They were silent, more controllable, and much more powerful than their predecessors. In 1938, Eastman Kodak introduced its new Super XX film stock, which was four times faster than Super X with any appreciable increase in grain. In 1939, researchers announced the principle of lens coating, which allowed light transmission to be improved by covering the lens surface with a microscopically thin layer of magnesium fluoride. Also in 1939, a new, exceptionally fine-grain stock for release prints was introduced, which virtually eliminated the problem of grain multiplication that appeared when the print passed through successive generations between camera and release.

A second area of technical advance involved the recording instrument itself. In the early 1930s, the standard studio cameras were encased in giant soundproof blimps to eliminate the sound of the camera mechanism. In the mid 1930s, the
Mitchell Camera Corporation introduced the self-blinded BNC, which had a built-in noise-dampening device. For understandable reasons, Mitchell chose Toland to test the BNC. (Its first use on a major production is thought to have been on Wuthering Heights, for which Toland won his first Academy Award.) The capabilities of this new camera are related to the new optical phenomenon of deep-focus cinematography. As critic André Bazin first pointed out, composition in depth provides the basis for a mode of film narration that is fundamentally different from the older montage style. This newer style he called réaliste — by which he meant its propensity to maintain the continuous spatial integrity of the image through long takes and such devices as moving the camera or staging multiple planes of action in order to eliminate the need for cuts. (In the standard shooting style of the thirties, focus was shallow, and space was fragmented. The visible result on the screen was characterized by the intercutting of partial actions according to regularized patterns within a master scene.) The smaller, more portable BNC permitted a much greater freedom and flexibility of camera choreography than its bulkier predecessors.

Finally, Toland contributed a number of technical innovations of his own. He was known as a “gadgeteer who could make gadgets work for him,” and he always had his cameras “loaded with things he had cooked up to aid him in his work.”

During his most creative period, which extended from Wuthering Heights in 1939 to the time when he was drafted for photographic service in the military in the early forties, he invented several processes and devices that were later to come into general use in the industry.

**TOLAND AND THE LONG VOYAGE HOME**

There are striking compositions in depth in Wuthering Heights (1939), and The Grapes of Wrath (1940) contains both deep-focus compositions and images that approach the high-contrast tonality of documentary still photography. (Almost surely one of Toland’s visual models was a photographic feature on real-life migrants in the Life magazine of June 5, 1939; it is obvious that some of these photographs were a source for details of characterization and costuming.) However, the first film in which these elements appear as features of a consistent style is Ford’s The Long Voyage Home (1940), Toland’s last film before Citizen Kane.

The opening shot of The Long Voyage Home boldly announces the visual plan of the film. In the extreme foreground, a native woman propped against a tree heaves sensuously to the sound of a native chant offscreen. In the middle distance, another native woman is propped against another tree. In the far distance, we see the outline of the steamer that the women will soon visit to bring “companionship” to its retesting crew. The scene is in virtual darkness except for shafts of bright light thrown across the profiles of the women and for back lighting on the steamer, which is reflected on the surface of the water. All the depth planes are in focus; the selective lighting of each plane reinforces the perception of depth. This composition is repeated several times in the film, as in the illustration below, where one character listens in on the conversation of a shipmate who is suspected of being an enemy saboteur. The inherent distorting properties of the wide-angle lens function here as an expressionistic element in the composition of this shot.
Throughout the film, objects in sharp focus are made to loom in the foreground between us and the main action, as if Toland cannot resist any opportunity to intrude the cinematographer's presence into the story. In one such shot, a crooked bartender has been caught at his game of shanghaiing drunken sailors, and one of the crew members punches him. The camera watches from bar level as he reels backward from the blow, sliding along the bar. At the right of the frame, only inches from the camera, is a liquor bottle in focus—a composition that looks forward to the shot in Citizen Kane of Jed Leland passed out over his typewriter after he fails to complete his review of Susan’s opera debut. In another shot designed to emphasize the depth perspective, the direction of movement is reversed. The camera is almost at floor level; the wide-angle lens takes in an entire aisle of the deck; props along both sides emphasize the perspective: in the extreme foreground are a ladder and a chain, both laid out on perspective lines running toward the camera from center screen to the sides. An air raid alarm has been sounded; a character is running from the far end of the deck; midway he slips and, still in sharp focus, slides almost up to the camera.

Like Mutiny on the Bounty, The Sea Wolf, and dozens of other stories about life at sea, The Long Voyage Home centers on a small group of men thrown together in extremely close quarters for an extended period of time. Unlike most other sea films, however, the overall effect of The Long Voyage Home is genuinely claustrophobic. Part of the explanation is obvious: The spatially expansive images that are conventions of the genre, such as the shot of a crew assembled on deck at midday or stock shots of a vessel on the high seas, are absent. But an equally important contribution is Toland's filming plan. The BNC camera allowed him to stage actions in very confined playing areas and to shoot the actors at very close range. Most of the film's scenes are shot on small interior sets. Of special interest for Citizen Kane is the set where the men bunk: a small, extremely crowded and cluttered area. At the climax of one of the stories, the men gather there to accuse a shipmate of being a traitor. At a dramatic high point in the action, one of the characters gets up and unscrews an overhead light bulb, which removes the principal source of illumination for the scene. The filming continues at a daringly low level of illumination, with objects and the faces of the men just barely discernible in
the semidarkness — a situation and effect that are strikingly similar to the projection room sequence in *Citizen Kane*.

An opening title in *The Long Voyage Home* is in the spirit of Eugene O'Neill: "With their hates and desires men change the face of the earth, but they cannot change the sea." The unrelenting fatalism of the story material find its perfect embodiment in Toland's expressionistic composition and lighting. The film's final shot provides a good example. The young Swede has been rescued from being shanghaied just in the nick of time, but one of the older sailors was not so lucky. The diminished crew returns to the ship. As one of the crew members kneels on the deck to pray, a dark shadow slowly falls like a curtain over the entire scene.

Traditional film history has it that UFA-style expressionism survived underground as it were in the Hollywood horror film until Welles revitalized it in *Citizen Kane*. As *The Long Voyage Home* demonstrates, that version of the story is seriously incomplete. A number of expressionistic compositions in the Ford film are even more precise forerunners of what will appear in *Citizen Kane*. One is a shot with characters spotlighted partly in and out of darkness, as Charles Foster Kane will appear in several scenes. Another is a shot with streams of light falling into a dark interior, as in the projection room sequence. Another shot uses a reflected surface to create simultaneous action and reaction in the image, as in the sequence of the publisher's party.
Other stylistic traits traditionally associated with Citizen Kane also appear in The Long Voyage Home. One of these is the extensive use of muslin ceilings on sets. Welles said he originally got the idea for them from Ford's Stagecoach, but they are also a regular feature of films shot by Toland during this period, since they are in evidence not only in The Long Voyage Home and Citizen Kane but also in Ball of Fire (1941, directed by Hawks, art director Perry Ferguson). Toland had good reason for encouraging their use: Not only did they permit shooting and lighting from below, unorthodox devices of which he was fond, but they also eliminated the shadows that would be thrown by boom microphones directly overhead, thus increasing the camera's operative range and mobility.

Another Toland device is shooting directly into lights. This was not an acceptable practice in conventional cinematography of the time because of the extraneous halo effect that appeared in the photographic image. The halo effect was caused when direct light rays bounced off the surface of the metal iris back onto the front element of the lens. Toland had been able to eliminate this unwanted effect with a device that he may have used first on The Long Voyage Home. He removed the regular sliding aperture from the lens and replaced it with a special insert that would hold a device used in still photography—the Waterhouse stop, a black plate with a round hole corresponding to the appropriate f-stop and serrations around the outside edge of the hole that cut down the reflections and thus eliminated the glare. It gave just the kind of flashy dramatic effect that Welles desired, but it also had some very practical applications. For instance, shooting into the bank of stage lights for the second telling of Susan's opera debut eliminated the need for a costly background audience.

WELLES AND TOLAND

On Citizen Kane, Welles not only encouraged Toland to experiment and tinker, he positively insisted on it. As we have seen, from the first days of shooting, they approached the film together in a spirit of revolutionary fervor. This atmosphere continued to characterize their relationship throughout the production. Those involved say there was a kind of running game between the two, with Welles coming up with one farfetched idea after another and challenging Toland to produce it and Toland delivering and then challenging Welles to ask for something he could not produce. Some of the devices Toland came up with he had already used in other films, but others were new or used in significantly new ways in Citizen Kane. One example is the distorted image of the nurse who enters Kane's death room. For this shot, Welles wanted a surreal effect, as if the camera were actually seeing through one of the broken pieces of glass. To accomplish this, Toland fitted the camera with one of his gadgets. He placed a diminishing glass (that is, a viewing device that produces the optical effect of looking through the wrong end of a telescope) a short distance in front of his wide-angle lens. The result is a forerunner of the extreme wide-angle fish-eye lens that came into general use in the 1960s.

A whole range of examples of Toland's ingenuity can be seen in the various in-camera effects he devised for Citizen Kane. In some, he was pursuing a visual course that had become more or less outdated. Between 1932 and 1940, the art of optically printed special effects first came into its own. RKO was one of the leading studios in that field (see Chapter Five). By the end of the decade, the trend was to have as many as a film's special optical needs as possible met in the camera effects department, not in principal photography. Toland continued to insist that special optical effects were the province of the cinematographer and that it was his duty to devise ways of meeting special optical needs. (A primary motive must have been his almost fanatical pride in the sharpness of the image. Optical printing is a duplicating process that progressively degrades image quality.) One such device is the four-part in-camera dissolve that serves as a recurring transitional motif in Citizen Kane. The background of a scene fades out, then the characters in the foreground; the background of a new scene fades in, then the new characters. The effect is created by dimming the lights by sections, then bringing them up again
the same way on the new set; it is very appropriate to the elegiac and reflective moods of most of the storytellers. Another example occurs at the beginning of the film. As we approach the outside window of Kane’s bedroom at Xanadu, the profile of a sheeted figure is visible on the bed inside. The light dims. Suddenly, without a cut, we are inside, but the profile on the bed is in exactly the same place on the screen. The transition is accomplished by means of an in-camera dissolve: The first shot slowly goes dark, the film is rewound to precisely the right point, the setup is reverse matched on an interior set, and the lights are slowly raised again. Dramatically, the effect is a typical piece of Wellesian bravura, but it also carries a self-reflective overtone: The very first appearance on the screen of Welles, who is a practicing magician, is accomplished by a stunning feat of visual magic. (In the same way, the first public line he speaks in the film — “Don’t believe everything you hear on the radio” — alludes to the infamous “War of the Worlds” broadcast.) An equally striking example of an in-camera effect has almost never been recognized as one: the shot of the bottle and glass on the nightstand after Susan’s suicide attempt.

The multiplane composition revealing Susan’s suicide attempt is not an extreme deep-focus effect, as it is usually described, but an in-camera matte shot. First, the foreground was lighted and focused, and shot with the background dark. Then, the foreground was darkened, the background lighted, the lens refocused, the film rewound, and the scene re-shot. In a famous analysis, André Bazin showed how a narrative logic of cause and effect is embedded in the composition of this shot. Bazin’s point is valid, but his underlying premise was wrong: The shot reveals Welles not as a photographic realist but as a master illusionist.

Exerting such a major influence on a film’s visual plan in this way was nothing new for Toland, as we have seen in the case of The Long Voyage Home. But Toland himself was the first to recognize the special significance of his work on Citizen Kane. In “Realism for Citizen Kane,” an article which was published several months before the film was released, he wrote:

“During recent years a great deal has been said and written about the new technical and artistic possibilities offered by such developments as coated lenses, super-fast films and the use of lower-proportioned and partially ceilinged sets. Some cinematographers have felt, as I did in one or two productions filmed during the past year, opportunities to make a few cautious, tentative experiments with utilizing these technical innovations to produce improved photo-dramatic results. Those of us who have, I am sure, have felt as I did that they were on the track of something really significant, and wished that instead of using them conservatively for a scene here or a sequence there, they could experiment free-handedly with them throughout an entire production.

In the course of my last assignment ... the opportunity for such large-scale experiment came to me."

While Ford seems to have taken a real fancy to Toland’s dark and brooding images in The Long Voyage Home, they are strikingly at odds with the folksy humanism that is the real core of the film, and Toland’s contribution could be described as a visual plan in search of a theme. In Citizen Kane, in contrast, the visual conceptions are more fully integrated with the film’s themes. Toland knew this had come about because he had been in from the beginning and because he and Welles were in almost total agreement on everything. He also thought he had a firm understanding of how the method related to the meaning. The film’s keynote, he wrote, was “realism”; his and Welles’s guiding motive throughout the production had been to make the audience “feel it was looking at reality, rather than merely at a movie” — hence the ceilings on sets, as if they were real rooms; the depth sense, which was closer to what the eye actually sees; the continuous takes in something resembling real time; and so on. From today’s perspective, Toland’s analyses are almost comical, as if he had been around Welles almost day and night for six months and never understood that it was the flashiness and potential for showmanship of such techniques that really excited him. This, in fact, was the nexus of their collaboration — the deadpan Toland coming up with one zinger after another just to prove he could, with Welles the showman sensing and realizing their dramatic potential for his story.

Deep-focus cinematography provided Welles not with realism but with the technical means of adapting the Mercury Theatre performance style to the requirements of a new medium. Extreme depth of field gave them a playing space roughly equivalent to what they had on a stage. The wide-angle lens kept them suitably distanced. (There is one very good reason why there are so few close-ups in the film: the heavily theatrical gestures and mannerisms of the Mercury players, Welles included, are very unsuited to the studio style of intercutting.) Long takes permitted them to play scenes almost continuously, as they were accustomed to play them on the stage. The extreme mobility of the camera allowed Welles to exercise fully his special talent for elaborate choreographies.
The lighting plan also has dramatic relevance to the story material. The technical advantages of the late 1930s made two different kinds of developments in lighting possible. On the one hand, it became possible to shoot in full light with high-intensity, point-source arc lighting and produce the crisp, sharp tonality of still photographs. On the other hand, it was also possible to shoot at much lower levels of illumination than before, thereby producing very striking expressionistic compositions. As we have seen, in The Long Voyage Home Toland was determined to push both effects to their extreme limits, and he was so successful that the cinematography sometimes displaces the story. The two lighting styles reappear in Citizen Kane, but there they are made to serve a clear dramatic and thematic function. The crisp, high-contrast daylight style predominates in the first half of the story after the newsreel— that is, in the parts dealing with Kane’s rise to prominence in American life. Here, Kane is seen as a self-starter, an idealist, a reformer, a figure of dynamic energy, a traditional type—the hope of the future embodied in a genuine American titan, the entrepreneur tycoon. A contemporary reviewer remarked of these scenes, “Gregg Toland’s photography is magnificent. I think it’s modeled after the old, needle-sharp pictures of Eugene Atget.” 16 By contrast, most of the harshly expressionistic scenes involve the later part of Kane’s story, after he has betrayed his promise and become a petty and ruthless tyrant. Above all, we associ-
This Gun for Hire, Mildred Pierce, and a prestigious literary adaptation like Jane Eyre. A familiar theme in criticism is that Citizen Kane was largely responsible for this trend. For instance, Thomas Schatz in Hollywood Genres treats Citizen Kane as an archetype of film noir and claims an enormous influence for it on the development of that genre. This seems to me an oversimplification. Likelier explanations for the resurgence of the expressionist style are the wartime restrictions on set costs discussed in Chapter Three or the emergence of European-trained directors, cinematographers, and—especially—art directors in the Hollywood studios after the cream of native talent had been enlisted in the war effort. The Academy’s categorical rejection of Citizen Kane seems to me a much more accurate reflection of the film’s status in Hollywood. George Cukor expressed the prevailing view: “I must say I thought Citizen Kane, in spite of its brilliance, was rather too much UFA.” A memorial tribute to Toland by his British colleague Douglas Sirk illustrates how ambivalent and uneasy Toland’s peers felt about his achievements in this film:

Gregg Toland’s contribution to Citizen Kane was obviously considerable and it is indeed difficult (as in so many pictures) to disassociate his work from the picture as a whole. Several years after seeing the film I find that one is inclined to remember the image rather than the message, which suggests that Kane might have been a very much better film had the novel technicalities not been allowed to run away with their masters. Technically it was certainly an exciting picture to watch with really powerful compositions and dramatic lighting effects despite a certain “rawness” and lack of texture from which one concludes that Toland had not yet tamed his process to wieldy limits.