



*"They held in their hands the fate of millions!" The stars of MGM's The Beginning or the End—from left, Robert Walker, Audrey Totter, Tom Drake, and Beverly Tyler—pose for a publicity photo.*

## MGM Meets The Atomic Bomb

During the past decade, the film genre known as the “docudrama”—a dramatized recreation of recent events in the headlines—has become increasingly popular in both the movie theater and on television. Prominent recent examples include *The Right Stuff*, *Silkwood*, and *Star 80*, along with such “made-for-TV” miniseries as *Kennedy*. One of Hollywood’s first attempts at docudrama was MGM’s widely publicized *The Beginning or the End* (1947), a film about the making of the first atomic bomb. Despite some initial encouragement from President Truman, it ran into many of the same difficulties as do modern docudramas, for the same reasons, and with similar results. The story of the making of the movie makes a curious tale, and historian Nathan Reingold tells it below. In so doing, he helps to explain why art, at least in Hollywood, has such trouble holding a mirror up to life.

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by Nathan Reingold

In February 1947, barely 18 months after an American-made atomic bomb known as Little Boy leveled the Japanese city of Hiroshima, Metro-Goldwyn-Mayer released to the world what would today be called a “docudrama” about the making and deployment of that bomb. It was the first such movie of the atomic age, the first full-length feature film describing what *Life* magazine called the “biggest event since the birth of Christ.”

In theaters across the United States, before millions of moviegoers, the MGM lion growled his cus-

tomary two growls. Below his mane appeared the company’s celebrated motto: *Ars Gratia Artis*, “Art For Art’s Sake.” Then came what purported to be a newsreel, showing canisters of film—supposedly, copies of the film that the audience was about to see—being buried in a grove of California redwoods.

“A message to future generations!” the voice-over proclaimed: “Come what may, our civilization will have left an enduring record behind it. Ours will be no lost race.”

Thus began *The Beginning or the End*, Hollywood’s ambitious and ul-

timately ill-starred portrayal of the World War II Manhattan Project and the people behind it.

No one man or woman was responsible for the way this motion picture turned out (badly). Then as now, docudrama film-making in Hollywood involved a triad of conflicting interests: the commercial hopes of the producers, the perceived demands of a mass audience for entertainment, and the personal qualms of the participants in the events described in the film. Taken together, these proved to be a recipe for a fiasco, in terms of both historical veracity and box-office receipts.

Happily, we can reconstruct what happened, thanks to a legal requirement that no longer exists: In order to depict living, well-known public figures, MGM had to secure their permission in writing. These individuals, in turn, often demanded the right to review the script. The result is a vast harvest of correspondence scattered among the MGM files, the National Archives, the Library of Congress, and various universities. The letters, along with the film, supply a bizarre footnote to the dawn of the atomic age.\*

The idea for *The Beginning or the*

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For related reading, see also Alice K. Smith's *A Peril and a Hope* (1965) and Michael J. Yavenditti's "Atomic Scientists and Hollywood: The Beginning or the End?" in *Film and History* (December 1978, vol. 8, no. 4).

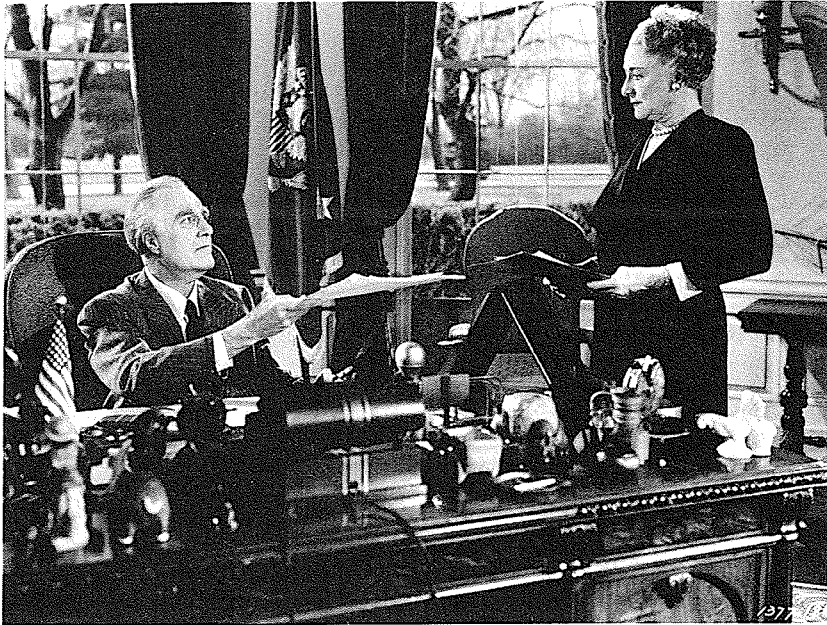
*End* grew out of contacts between MGM producer Sam Marx and members of the so-called atomic scientists' movement, a group of young, liberal, rather antimilitary Manhattan Project alumni who hoped to educate the lay public about the nature of atomic weapons and their disturbing implications for both domestic and foreign policy. (The movement soon developed into the Federation of American Scientists.) Edward R. Tompkins of the Clinton Laboratories, now the Oak Ridge National Laboratory, in Tennessee seems to have been the first to suggest the idea of a movie—in a letter to a former high school student of his, actress Donna Reed, who brought the concept to MGM's attention. MGM eventually paid Tompkins a modest honorarium of \$100.

#### Film vs. History

Sam Marx was as much in awe of the new atomic weapons technology as the scientists were of Hollywood; initially, at least, Marx approached the subject of the bomb with unusual care. During the autumn of 1945, in preparation for his film, the producer visited the Clinton Laboratories and on the same swing east visited Harry S Truman in Washington. MGM officials later assured the President that "a great service to civilization" might be done if "the right kind of film could be made."

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*Godfrey Tearle as President Franklin D. Roosevelt. "If it [the bomb] works and we win the race," says FDR in the movie, "it will win the war."*

High-minded though its intentions were, MGM faced a forbidding challenge: How to present complex, often cerebral, feats of science and engineering in a way that American audiences would sit through, without fidgeting, for 120 minutes. Then as now, the solution, inevitably, was to veer, often sharply, from factual accuracy in the interest of entertainment.

Screenwriters Robert Considine and Frank Wead, abetted by Marx and by director Norman Taurog, added several fictional characters and the mandatory "love interest" to the story. To build tension, they depicted the Manhattan Project as a race pitting America against both the Germans and the Japanese, who were said to be nearing completion of their own atomic bombs. (In real-

ity, there had been little concern about Japan.) The film-makers invented numerous other aspects of both nuclear technology and the development of the Manhattan Project.

The members of the atomic scientists' movement, active in shaping the script during its early stages—they naively hoped to determine its point of view and, through a substantial contribution from MGM, to swell their organization's meager coffers—withdrawed their cooperation when they saw what Hollywood was doing to the story. In the opinion of Sam Marx, who did not want his film to be "a big, long speech for world government," this was just as well.

The scientist-activists withdrew with the expectation that the senior scientists and military men in the

Manhattan Project, people such as J. Robert Oppenheimer, General Leslie R. Groves, Vannevar Bush, and James B. Conant, would likewise withhold their endorsements. In this they proved to be, for the most part, wrong.

Why? One reason was that some of the key military participants in the Manhattan Project had already accepted fees from MGM—\$10,000 in the case of General Groves—in return for their permission to be depicted on film. For their part, many of the important scientists (none of whom accepted money) seem to have assumed that helping the filmmakers was a professional obligation. Moreover, only by cooperating could the Manhattan Project's "big shots" exercise any control over the film's content. MGM's need to get waivers gave all of them a certain leverage that the younger, unknown scientists did not possess.

#### **Dramatic Truth**

To be sure, the senior Manhattan Project personnel protested the direction in which the movie appeared to be heading when, in the spring of 1946, the first screenplay was sent to most of them for approval. MGM, in response, agreed to make some small changes. Some of the scientists protested once more after viewing the first completed film version in autumn of the same year. Once again MGM made some changes. But when it came to what the studio insisted was a matter of both artistic principle and commercial necessity, MGM stood its ground.

In the words of an MGM memo passed on to Albert Einstein by studio head Louis B. Mayer in 1946, "It must be realized that dramatic truth is just as compelling a requirement on us as veritable truth is on a scientist." The

studio reminded General Groves, who headed the Manhattan Project in its later stages, that MGM was not an endowed institution "like Harvard" but a commercial enterprise. The requirements of "dramatic truth" helped shape the film into a familiar narrative form with stock characters and stock situations.

#### **The Plot**

In the original screenplay, the movie begins with J. Robert Oppenheimer (who would be played by Hume Cronyn) recounting the flight of physicist Lise Meitner from Berlin when Nazis overrun her laboratory in 1938. She takes refuge with Nobel laureate Niels Bohr in Denmark. Soon, word of the pair's work in nuclear fission reaches America; Albert Einstein, at the behest of a fictional physicist named Matt Cochran (played by Tom Drake), writes his historic 1939 letter to Franklin D. Roosevelt suggesting the theoretical possibility of constructing an atomic bomb. An Office of Scientific Research and Development (OSRD) is set up, leading to physicist Enrico Fermi's first controlled chain reaction at the University of Chicago's Stagg Field in 1941. ("Dr. Fermi, scientifically detached from the world, enters," reads the screenplay.)

Among the scientists at Stagg Field, the fictional Cochran is the most vocal in airing doubts about going forward with the atomic bomb. His concerns are typically dismissed out of hand. ("Get it done before the Germans and Japs, then worry about the bomb," he is told.) After the successful experiment at Chicago's Metallurgical Laboratory, a small group of scientists is shown resigning from the bomb project; both correspondence and the script make it clear that these men were in-

tended to be perceived as Quakers. The walkout, which never occurred, gives the Enrico Fermi character an opportunity to say: "Sometimes, it takes greater principles to stay than to go." In general, *The Beginning or the End* slides over issues of morality that some atomic scientists at Stagg Field, hardly pacifists, debated intensely among themselves.

Skipping over much important scientific work of the period, the screenplay shifts to the domain of the Manhattan Engineer District, which superseded the OSRD. General Groves (played by Brian Donlevy) is shown exhorting industry to support the weapons effort. We see the DuPont representative grandly waive all potential patent rights, an easy position for DuPont to take fictionally since the real Leslie Groves and Vannevar Bush would never have let atomic weapons technology fall into private hands. The movie screen bustles with a panorama of factories, railway yards, and busy assembly lines.

### Dropping the Bomb

The action moves to Los Alamos, where rather little is shown, given the requirements of military security. (Until 1958, the town of Los Alamos was off limits to the general public.) Then comes the first test explosion. For the movie, the A-bomb blast at Alamogordo, New Mexico, would be impressively recreated in the MGM studios in Culver City, California. Right after the test, a turtle is seen walking across Ground Zero, a symbolic affirmation that, yes, life can survive a nuclear blast.

Declaring in the original script that "I think more of our American boys than I do of all our enemies," President Truman decides to drop the bomb on Hiroshima. Matt Coch-

ran and his equally fictional friend Jeff Nixon (played by Robert Walker), an Army colonel on General Groves's staff, travel to Tinian, a small Pacific island, to prepare the first of two atomic bombs for use against Japan. In an impossible accident, Matt suffers a fatal radiation injury while setting up the bomb one evening all by himself.

Then, the *Enola Gay* takes off on its historic mission, braving heavy flak over Hiroshima. (In reality, the B-29 encountered no hostile fire.) Little Boy devastates the city in a spectacular film sequence that demonstrates Hollywood's skill at special effects. (The special effects won the movie an Oscar.)

Matt dies, though not before writing the obligatory final letter, resolving his own doubts about the bomb. The screenplay (like the movie) ends with Matt's pregnant widow, along with Jeff Nixon and Jeff's girlfriend, standing before the Lincoln Memorial in Washington and talking inspirationally about how the world will be better for the young scientist's sacrifice.

### Oppenheimer's O.K.

This, in outline, was the screenplay that those Manhattan Project alumni depicted in *The Beginning or the End* were asked to review and approve during the spring of 1946.

The senior participants in the Manhattan Project did not like what they read and said so in no uncertain terms. The first hurdle for MGM was physicist J. Robert Oppenheimer, who had served as director of the atomic laboratory at Los Alamos. Oppenheimer's chief complaint was artistic; the characters appeared "stilted, lifeless, and without purpose or insight." Producer Sam Marx wrote back, agreeing to fix certain

minor factual details and to spruce up the personalities. In particular, Marx said, "the character of J. Robert Oppenheimer must be an extremely pleasant one with a love of mankind, humility, and a fair knack of cooking." Marx added that the film would make it plain that Oppenheimer, not Groves, was in command at the Alamogordo test.

Somewhat mollified, Oppenheimer signed a release in May 1946. He would be depicted in the movie as an earnest scoutmaster who accidentally had a doctorate in theoretical physics from Göttingen. Queried later by an incredulous member of the atomic scientists' movement, physicist James J. Nickson, Oppenheimer replied that while the screenplay was not "beautiful, wise, or deep . . . it did not lie in my power to

make it so."

While Oppenheimer withdrew from further involvement in *The Beginning or the End* after May 1946, both General Groves and Vannevar Bush corresponded with MGM throughout the year. Groves was determined that the movie not violate national security (a sensitive issue in the immediate postwar era) or discredit anyone involved in the Manhattan Project. He sought assiduously, though with limited success, to correct inaccuracies.

Among other things, Groves was disturbed by the way he was shown barking orders at industrialists; relations with business, he insisted, had always been polite and respectful. The General was outraged by his fictional subordinate, Jeff Nixon, the long-haired (for an officer) womanizer and wise



*Hume Cronyn (center) as J. Robert Oppenheimer. MGM assured the scientist: "We have changed all the lines at the New Mexico test so that General Groves is merely a guest and you give all the orders."*

guy. Such a man, Groves argued, would not have been tolerated in the corps of engineers and would *never* have been asked to join his personal staff. As to his own film image, the rumpled, pudgy Groves raised no objection to being portrayed by the handsome Brian Donlevy.

#### Exit Fala

In the end, the General won some small concessions, notably the elimination of a highly imaginative scene in which Groves tells Roosevelt and Secretary of War Henry L. Stimson that if the United States did not use the atomic bomb at once against Japan, Japan would greet a U.S. invasion of the home islands with nuclear weapons of its own. Essentially, though, Groves went along with MGM's plans. He was no doubt relieved by the report of an aide who attended a sneak preview of the final film version early in 1947. The aide concluded that the public impact of the movie would be minimal because the film would be a box-office flop.

Vannevar Bush, formerly director of the Office of Scientific Research and Development, had better luck than Groves with the creative folk at Culver City. Bush had held the crucial discussion with FDR about launching the Manhattan Project, but in the screenplay, MGM gave the credit to another man, the National Bureau of Standards' Lyman J. Briggs. Bush objected and the movie-makers rewrote the script accordingly.

Bush did not like the rewrite either. In the new version, Bush was shown with Roosevelt (and with FDR's Scotch terrier, Fala, who leaves the room when Bush announces that he has a top-secret matter to discuss); he was portrayed as uncertain over whether an atomic bomb could be built "in time" or

would even be small enough to fit inside an airplane. On the contrary, Bush insisted, he had had no doubts on either score.

Sam Marx agreed to soften but not eliminate this angle. It was a Hollywood fiction that had been deliberately introduced to heighten dramatic tension—to suggest the possibility that the Axis powers might get the bomb first.

Bush also disliked being shown leaving the White House disgruntled at not getting an immediate go-ahead from the President. The scene implied, he believed, that American scientists were "arrogant enough to feel [they] should either make the decision [themselves] or force the Commander-in-Chief into making it then and there." Again, MGM gave way. The released film shows a rather prosaic parting of Bush and Roosevelt, followed by the President placing a transatlantic call to Winston Churchill to give him the details.

On the eve of the film's release in 1947, Bush could write to financier Bernard Baruch that, insofar as his own role was concerned, "history was not unreasonably distorted" by *The Beginning or the End*.

#### Einstein's Dismay

Harvard president James B. Conant, a key administrator in the A-bomb effort, proved more persnickety even than Bush. Conant was hardly publicity shy. Indeed, he and Bush willingly played themselves in a 1946 March of Time documentary, *Atomic Power*, which showed the pair stretched out on the desert (actually, a sand-strewn garage floor in Boston) awaiting the first nuclear blast at Alamogordo. *The Beginning or the End* was another matter. Conant agreed to being shown at Alamogordo but not to having any



words put in his mouth.

The foreign-born scientists depicted in the movie gave Sam Marx his biggest headaches. Having been told by members of the atomic scientists' movement that *The Beginning or the End* would reflect the Pentagon's viewpoint, Albert Einstein twice refused his consent to be portrayed, reluctantly giving in only at the urging of colleague Leo Szilard. Appalled by inaccuracies and outright fabrications, Lise Meitner and Niels Bohr spurned all of MGM's entreaties and had to be written out of the movie altogether.

From MGM's standpoint, the most serious refusal was that of Bohr. The early scenes of the screenplay featured him in Europe. To highlight the race against the Nazis, much was made of smuggling the physicist out of Copenhagen and then bringing him to the United States. That Bohr was essential to the A-bomb project was more than strongly implied—though in fact he was not a member of the Manhattan Project. For dramatic effect, he was placed at the Alamogordo test site; but, in fact, he was not there.

#### Inventing Dr. Schmidt

To make up for the absence of Bohr and Meitner, MGM in December 1946 hastily began cutting the movie and reshooting scenes, a process that continued into January.

The intransigence of Bohr, Meitner, and others cost *The Beginning or the End* one of its more vivid fictional interludes. In the original script, Niels Bohr shocks Oppenheimer when he brings the news that the Germans are sending atomic experts and know-how to Japan. Later, the screenplay has a U-boat leaving Hitler's doomed Reich with a fictional German physicist aboard named

Schmidt—identified as a former worker in Lise Meitner's Berlin laboratory. The submarine surfaces in Tokyo Bay, and the Japanese promptly rush Schmidt off to a modern laboratory they have built for him—in the city of Hiroshima.

#### Does It Matter?

Columnist Walter Lippmann was responsible for another excision. After previewing the original version of the movie in the fall of 1946, Lippmann complained that Truman's order to drop the bomb was depicted as a snap decision. This, he wrote, was an "outright fabrication and reduces the role of the President to extreme triviality in a great matter." Lippmann also objected to the movie Truman's seeming unconcern for the loss of Japanese lives. The entire scene was reshot.\*

Neither Herr Doktor Schmidt nor a shoot-from-the-hip Truman appeared in the final film version, but many of MGM's other revisions of the record made it through. Before the first atomic bomb is tested at Alamogordo, for example, Oppenheimer and General Groves's deputy, Brigadier General Thomas F. Farrell, discuss the frightening possibility that the nuclear chain reaction would go around the world, converting the planet into one big fireball. In the movie, Oppenheimer rates the possibility at less than one in a million. Asked after the test if he really had been worried, the Oppenheimer character says: "In my head,

\*Because Truman's visage did not actually appear—the camera shot over an actor's shoulder—MGM did not need a signed waiver from the President. Truman read the screenplay of the first film version and, judging from private letters, disliked the same sequence that Lippmann criticized, and for the very same reasons. However, wishing to avoid charges of censorship, he refused to intervene.

no, in my heart, yes."

In fact, the Manhattan Project physicists had no such worries; the possibility was raised only *after* the bombings of Hiroshima and Nagasaki, by people with little expertise in nuclear fission.

Until the world premiere of *The Beginning or the End* in Washington, at least some MGM officials were certain they had a hit on their hands. Carter T. Barron, MGM's man in Washington, cabled to Culver City on January 7, 1947: "Seldom have we experienced more enthusiasm for the dramatic entertainment of a film than that demonstrated by small preview groups comprised of immediate friends, staff members, and associates of persons impersonated or otherwise associated with the project. It appears to be a daringly strong audience picture."

Then came the reviews. *Time's* critic wrote that "the picture seldom rises above cheery imbecility" and scolded Hollywood for "treating cinemagoers as if they were spoiled or not-quite-bright children." (Few reviewers, however, questioned the factual accuracy of the movie.) At least 75 films in 1947 grossed more at the box office than what MGM billed as "the story of the most HUSH-HUSH secret of all time."

The reaction of groups of scientists invited to special screenings was typically one of disappointed silence punctuated by outbursts of raucous laughter. Sam Marx had once al-

lowed that he was interested "not in how a scientist would talk but how the public thought he would talk." Hollywood's notion of how science was done—amid batteries of blinking lights and a cacophony of electronic noises—proved irresistibly comic to real scientists.

Ironically, had the reactions of Bohr and others not forced so much cutting and reshooting of scenes, MGM might have produced a box-office hit. At a sneak preview in October 1946, the first, uncut version of the film won an overwhelmingly enthusiastic response from the audience. Imagine the impact on popular memories of World War II if tens of millions of American moviegoers had watched the fictional Herr Doktor Schmidt disembarking from his U-boat in Tokyo Bay, with a blueprint for an A-bomb in his briefcase!

Did *The Beginning or the End* really matter? Not in any way that is easy to describe. Although its distortions went largely unremarked, they also went largely unseen. The making of *The Beginning or the End* is chiefly of value as a parable of sorts. And it may serve as a timely reminder that, as the years go by, Hollywood fictions sometimes take on lives of their own. "Engrossing account of atomic bomb development, depicting both human and spectacular aspects"—that is how *The Beginning or the End* is described in Leonard Maltin's *TV Movies* (1983–84 edition). The film gets three stars, no less.