

# The Atomic Sublime

Peter B. Hales

The central icon of the atomic culture is the mushroom cloud, rising above the lush tropical atolls of the South Pacific or the wastelands of the Great American Desert.<sup>1</sup> Today it has become so deeply imprinted in the myths and matrices of the postwar era that it has come to seem natural, a fundamental, even a necessary aspect of everyday life. But the atomic explosion was not always an inextricable part of the life of the planet. Indeed, it arrived as something close to what Roland Barthes has called a “pure sign”—a visual icon so unprecedented that, for a moment at least, it lay outside the webs of signification that comprised a watching culture.<sup>2</sup> Between that moment and the point at which it had become firmly imbedded in the consciousness (or, more accurately, the unconscious) of an age, lies a fascinating story, rich in information not only about the specific subject of the atomic culture, but about the process of enculturation itself, the ways in which “freedom” and “individualism” are hemmed in and defined by the surrounding net of history, institutions, beliefs and necessities peculiar to a momentary piece of space and time.

Let us begin with two pictures: the first (illustration 1) was made above Nagasaki with a smuggled camera by a rank amateur after the bank of scientific cameras designed to provide “accurate” information failed when the plane was forced to bank away from the unexpected force of the explosion.<sup>3</sup> The second (illustration 2) was made roughly a decade later, by a professional photographer for the Atomic Energy Commission, and was published in a pictorial spread on atomic testing in the May 30, 1955, issue of *Life* magazine.

At one level, the two pictures have strong similarities. Both seem to show the same general shape, a cloud formation of some sort. Today, or even in 1955, no one would doubt that these both portrayed the same phenomenon. But these similarities depend, I think, on the very historical process this essay explores; for



**NAGASAKI**  
**ATOM BOMB NO. 2**  
**DISEMBOWELED IT**

Seventy-five hours after the world's first atomic bombing, an interval marked by President Truman's demand for unconditional surrender, the second bomb was dropped on Nagasaki, shipbuilding port and industrial center. This bomb was described as an "improved type," easier to construct and productive of a greater blast. It landed in the middle of Nagasaki's industries and disemboweled the crowded city. Unlike the Hiroshima bomb, it dug a huge crater, destroying a square mile—20% of the city.

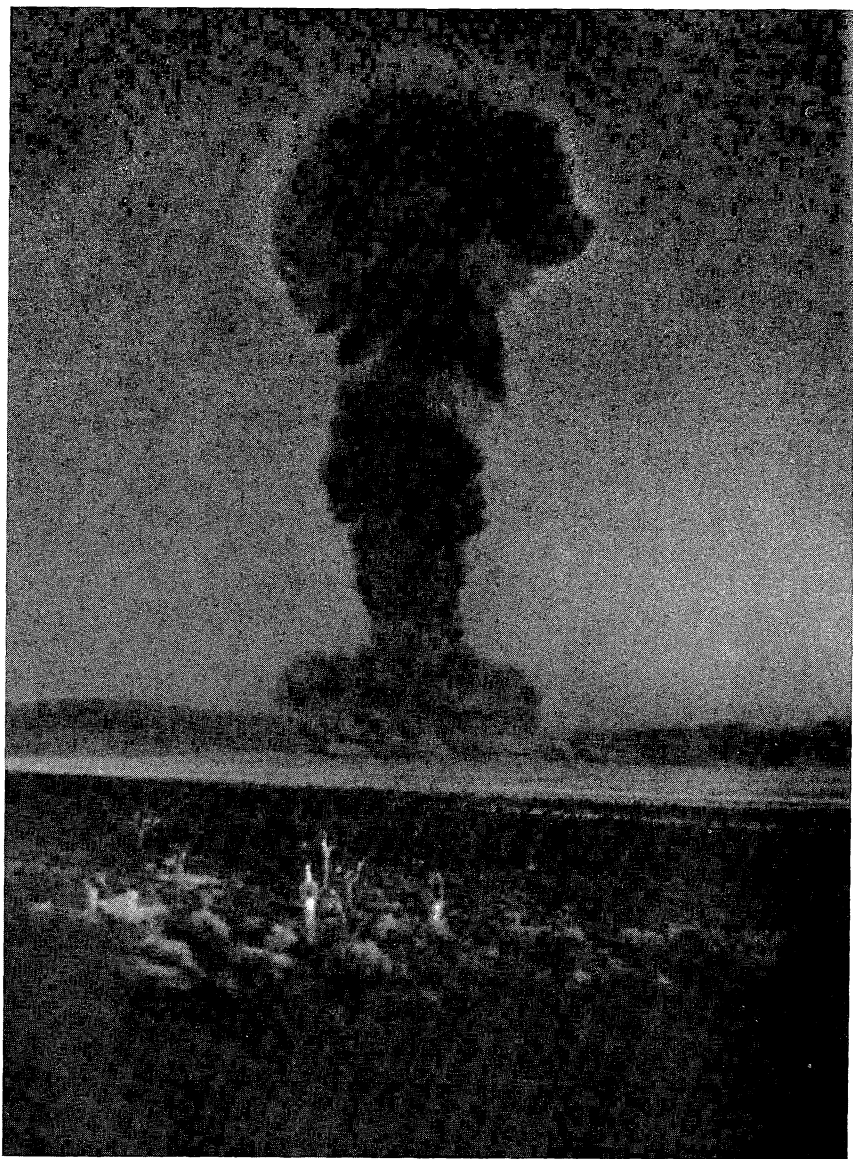
When the bomb went off, a fire on another mission 240 miles away saw a huge ball of fiery yellow erupt. Others,

nearer at hand, saw a big mushroom of smoke and that billow darkly up to 20,000 feet (*above*) and then the same detached floating head observed at Hiroshima. Twelve hours later Nagasaki was a mass of flame, pulled by aerial smoke, its puffs still visible to pilots 200 miles away.

The bombers reported that black smoke had shot up like a tremendous, ugly waterspout. Physicists at the bomber base theorized that this smoke was the pulverized fragments of the Mitsubishi Steel and Arm Works. With grim satisfaction they declared that the "improved" second atomic bomb had already made the first one obsolete.

Illustration 1. *Life*, August 20, 1945. Permission by Time-Life Inc.

a viewer back in August or September of 1945, our immediate assumption that both photographs described the same "subject" (conceived in the widest, most metaphorical sense) would seem farfetched. Instead, a viewer would notice the far more glaring differences between the two images: not simply that one is in



**Illustration 2. Credit: National Archives.**

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grainy, slightly blurred black-and-white, the other in color, but more broadly—the way that one records, while the other hems in, mediates, beautifies. In the first, there seems to have been no attempt to construct a set of cues as to what we are looking at, or why, or where and when the picture was taken. In the second, these

matters have developed enough importance that they seem to constitute significant parts of the essential stylishness of the picture. Note, for example, the way that the photographer has let the rising sun (or, equally likely, the photographer's own artificial lights) illuminate the cacti in the foreground, so that their shapes reflect and resonate with the shape of the atomic cloud above. Note how the exposure was timed to produce the most spectacularly moody and impressive of skies—a dark, cloud-flecked blue-purple that, had the exposure been altered one way or the other, would have washed into a daytime sky of no particular force or turned a pure, undifferentiated black. And the cloud itself: the photographer made the exposure at the precise instant when it was most a mushroom cloud, almost perfectly reflecting its descriptive ideal. How different from the angled, disintegrating cloud in that first picture! *There* the cloud could be the result of a tornado, a dust storm or some oil refinery fire.

But the differences between these two pictures are, I think, of two quite distinct types. In one case, the divergences are real and visible, and they are the result of equally real historical differences in their production and consumption, and in the cultures that engendered their producers, consumers, and the intermediary institutions between. At the same time, the images differ in the meanings attributed to them by their quite separate audiences. One arises from a wartime America experienced in firebombings, in conventional weaponry, in an elaborate, developed conception of wartime, disaster and death; the other emanates from a very different experience, in which fundamental conceptions underlying human experience have been transformed. One depicts the end of a cultural era; the other the dawn of a new one.

If I am right, then we must look at the transformations separating these two images as the products of two very different processes, both of them parts of the history of an atomic culture in America. One involves the changes in the meanings *projected onto* the skeletal shape these two pictures share—changes in the way the broad American audience for these images understood the “facts” of atomic destruction. The other concerns the way those changed meanings altered the images themselves, by providing an iconography of nuclear holocaust. This new iconography then mediated the “reality” of the atom bomb as viewers understood it, so that this new metaphor for absolute horror and destruction might coexist, however uneasily, in the web of significance that was and is American culture.<sup>4</sup>

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When Americans first saw an atomic explosion, it was not a mushroom cloud, an image of holocaust, or a moral indictment. Instead it was a fuzzy, dark cloud rising above an indeterminate landscape. But the process of making sense of that image was affected from the first by two peculiarities—one belonging to the thing itself, the other to the culture on which it burst. The first was the absolute magnitude, the near-infinite power that the atom bomb represented, a phenomenon that set it apart from all that had preceded it, even as it demanded some means

by which that infinitude could be harnessed and made comprehensible. At the same time, though, this new event, with its implications, came to Americans through a peculiarly narrow channel of communication—the result of wartime and then postwar censorship and of the more general consolidation of communications media during the period immediately surrounding the war. Hence Americans looking at the dominant media saw and read essentially the same report, no matter where they turned for information. The military and later the Atomic Energy Commission limited access to the test sites, information about the explosions and, for a time at least, regulated the production of visual artifacts to accompany any written texts. This meant that the process of absorption and adaptation into the existing culture was heavily controlled, and that the process of negotiation that usually characterizes such adaptation was severely limited. This was not an exclusive characteristic of the imagery of atomic explosion; rather it was an extension of the particular secretive, coercive economy of meanings that was imbedded in every aspect of the Manhattan Engineer District, from the ways in which information was withheld (and public information officers joked afterward about their roles as “misinformation officers”), to the more general incursions on individuality that demanded participants in the Project give over their rights to privacy, freedom of access and dissent, allowing the Army to engender and disseminate all information concerning everything from childbirth to highway route numbers.<sup>5</sup>

In light of these peculiarities of absolute power and government control, the earliest images—visual and written—deserve our careful attention, and reward it, presenting a series of relatively clear stages in the acculturation of this pure sign. The first stage was that of abstract visuality. The earliest photographic images were grainy, often ill-defined records of a giant column of smoke—images similar to traditional news photographs depicting catastrophic fires, industrial accidents and tornadoes. The difference here lay with the absence of any scale-markers. None of these images showed the ground, the city, the target or the destruction. In the writings that accompanied these pictures, the editors of *Life*, *Time*, *Newsweek* and the like read into this missing quality something more than absence. Instead, the absence became presence—the presence of absolute scale. The written descriptions in general focused on the visual. They were profoundly aesthetic, rather than ethical, moral or religious in tone. Here is *Newsweek* on Nagasaki: “The atoms of Nagasaki rise 50,000 feet high.”<sup>6</sup> A week later, describing the Alamogordo test that had preceded Hiroshima: “Its light equaled that of many suns; its smoke plume rose nearly eight miles.”<sup>7</sup> *Life* devoted much of its August 20, 1945, issue to the atomic explosions at Hiroshima and Nagasaki: “white smoke leaped on a mushroom cloud;” it was “a huge ball of fiery yellow,” and “a big mushroom of smoke and dust,” and later “a tremendous, ugly waterspout,” and “a pillar of swirling particles.” Two issues later, the bomb was “a white puff” that “floats over [the] dark volume of [the] atomic explosion at Nagasaki.” *Time* described the Alamogordo explosion—it was: “A large multi-

colored cloud of fire, smoke and dust” that turned “swiftly from ball to mushroom shape.”<sup>8</sup>

One surprising element of these descriptions is the fluidity, the unfixidness, of the imagery. The “mushroom cloud” that is today the only accepted visual sign, was but one among many. But certain elements were common to these early written descriptions. Most notable was the emphasis on natural imagery. By choosing such analogies, the writers did more than simply appropriate a language that could illuminate this new phenomenon. They bridged a previous gap between what was human and what was natural—the atom bomb became a man-made marvel of nature, and thereby the question of responsibility for the effects of the explosion remained slippery.

The written descriptions and the photographs both invoked this tendency—a process that pressed the atom bomb away from human responsibility, even as it imbedded it in a comprehensible historical heritage of destructiveness mixed with awe and beauty. Probably the most extreme version of this can be found in the first *Life* spread on the bomb, published on August 20, 1945.<sup>9</sup> Here the story began with a drawing; the atomic explosion looked like a catastrophic event, but had not yet settled into its accepted, mushroom-cloud form. In addition, although the explosion was shown with the city below it, the bomb looked considerably more like a giant storm than a human event. And it was (gratuitously, since this was a drawing) an aerial view, made from so far away that the destructive effects remained abstract, topographic rather than horrifying. Then came a two-page spread of the Hiroshima and Nagasaki bombs. Again, as throughout the public imagery, the clouds were without scalar reference, floating in an undefined atmospheric region.

Equally significant was the next section—a two-page interjection called “B-29s Almost Finished Job: “When the atomic bomb came,” it began, “the strategic bombing of the enemy by the B-29s of the US had already ripped the guts out of Japan’s great cities.” A pair of aerial panoramas of the conventional destruction of Yokohama and Kobe accompanied this statement. Only *then* did the reader turn the page to discover visual evidence of the destruction of Hiroshima. And these Hiroshima views were made from so far up that the city appeared not to be eradicated, but rather obscured by haze. The text ended: “The atomic bomb had blown three fifths of Hiroshima off the face of the earth.” But the overall effect of the entire spread negated this message in two ways. First, there seemed to be no connection between the glowing pillars of cloud and the hazy non-existence of the city below; second, the interjected passage on conventional bombing diminished the destructive effects, linking them to older bombing traditions, as later close-ups of the on-the-ground destruction would resemble every journalistic photograph of an urban disaster at least since the burning of Chicago in 1871.

This first picture-essay made the bomb historically and naturally legitimate; at the same time, a second essay at the back of the same issue interjected the rhetoric of heroic science that had become a phenomenon of the mass-market outlets from the 1920s onward. Here the editors of *Life* attempted to explain the

workings of atomic physics to a broad general public. To do so, they moved from macrocosm to microcosm. Drawings of atomic nuclei orbited by speeding electrons alternated with dramatic photographs of white-coated scientists. The overall effect was to present the atomic explosion as a “natural” consequence of “natural” phenomena on the one hand, and a “natural” extension of “normal” wartime weaponry on the other. Electrons slammed into atoms, releasing chain reactions; there was even a “gun” that set it all off. But what was absent was someone to point and shoot the gun.

All of these elements brought the atomic explosion into line with important modernist visions of science and warfare, and especially of their intersection. As historian Spencer Weart has pointed out, and as interviews of soldiers and civilians who were adults at the time of the conclusion of the war have confirmed, Americans “naturally” saw the atomic bomb as a continuation of modern warfare, rather than a violation of its norms. The concept of an all-encompassing, life-threatening explosive force found its immediate predecessor in Noble’s discovery of dynamite. The tradition into which *Life* placed the bombings at Nagasaki and Hiroshima involved successive stages in an evolution of “conventional” warfare possibilities—stages marked by often-cataclysmic leaps in destructiveness or atrocity: long-range artillery, trench warfare, mustard gas, “carpet” and fire-bombing of entire cities of civilians.<sup>10</sup>

As *Life*’s sequencing of that first picture-spread indicated, this was a far more comfortable and comforting image than its alternative, in which science placed a totally new and unparalleled force in the hands of the warmakers. This image, too, had its precedents, particularly in the literature of science fiction and futuristic horror that represented a small but vocal subgenre in popular literature from the end of the nineteenth century forward. Here, too, historian Weart’s researches have confirmed the earlier work of Paul Boyer; together they have unearthed an important trove of images and myths available to the atomic culture but drawn from a preatomic era. Still we must distinguish between what *might* have been appropriated, and what was. *Life*’s editors, and the representatives of mass culture more generally (as we shall see) rejected the fatalistic, horrifying vision of a science and scientists whose discoveries moved far beyond their moral capabilities, or those of their age. In their place lay the more reassuring vision of a rationalized, modernized, laboratory of control, in which the products remained sterile, controlled, threatening only to the transgressor.

If science remained comfortably rationalized, then the sphere of the visual became the realm of pleasure. And this realm, too, can be found in the earliest published records. Only one journalist was above the Japanese targets—William L. Laurence, the *New York Times*’ science writer, a man chosen long before by the government as the privileged representative of the public on the entire Manhattan project.<sup>11</sup> His report appeared in a number of venues, most publicly in *Life* on September 24, 1945. His description for *Life* was prophetically aesthetic in tone. It began with a string of metaphoric descriptions: “A giant flash

... a bluish-green light that illuminated the entire sky ... a giant ball of fire ... belching enormous white smoke rings ... a pillar of purple fire. ...”

Laurence then moved to focus on the observers’ own response:

Awestruck, we watched it shoot upward like a meteor, becoming ever more alive as it climbed skyward through the white clouds. It was no longer smoke, or dust, or even a cloud of fire. It was a living thing, a new species of being. . . . At one stage, the entity assumed the form of a giant square totem pole, with its base about three miles long, tapering off to about a mile at the top. Its bottom was brown, its center was amber, its top white . . . it was as though the decapitated monster was growing a new head. As the first mushroom floated off into the blue, it changed its shape into a flowerlike form, its giant petal curving downward, creamy-white outside, rose-colored inside. It still retained that shape when we last gazed at it from a distance of about 200 miles.”<sup>12</sup>

Laurence’s report is a rich document. But two elements seem to announce themselves most clearly: first, a focus on the aesthetic elements that brought about the “awe-struck” reactions of the observers, and a concurrent and complete repression of the horror down below; second, Laurence’s transformation of this man-made destruction into a *natural* event, “a living thing, a new species of being,” that was also analogous to other living things—sun, meteor, a mushroom, a decapitated monster, and, finally, a beautiful, delicate, roseate flower.

This description closely paralleled observations by nineteenth century American connoisseurs of the sublime,<sup>13</sup> that combination of terror and wonder that accompanied confrontation with the Infinite with a capital I.<sup>14</sup> But it was a peculiar sublime that Laurence invoked—not the response of self-eradication and humility that had characterized Edmund Burke’s sublime, nor the optimistic American version, wherein this emotion had served to link wild American nature to a divine covenant between God and American culture. Instead Laurence’s sublime represented the furthest extreme of a twentieth century American version of the term, its translation from terror to tourism. Laurence’s description introduced a new atomic aesthetic to Americans, one that converted holocaust to parlor show (illustration 3), and responsibility to mere response.<sup>15</sup>

That Laurence’s was the official version, constructed as much out of government desire as individual consciousness, is worth remembering here. There was much that the writer could have emphasized, and still remained within the realm of acceptable military propaganda. What seems so odd to a later generation is the fact that military censors passed—even, it seems, encouraged—Laurence’s choice of tone. But the military’s own internal reports of the very first atomic explosion, at Alamogordo, shared the writer’s exalted, aestheticized manner. Two declassified reports from military witnesses at Alamogordo—one of them by General Leslie Groves, dictator of the Manhattan Project and the high-



ranking officer on the site—seem to have been cut from the same overwrought manual of Romantic response.<sup>16</sup> And this correspondence suggests that Laurence's invocation of the sublime was more than simply a stylistic coup on the part of a professional writer with pretensions to literary skill. Instead, it seems, Laurence and his military cohorts shared a historical sense, an imbedded matrix of responses to extraordinary physical phenomena. Laurence, O. R. Frisch and General Groves all seem to have carried within them an implicit understanding of the category into which the atomic explosion might fit, an understanding Laurence, at least, was able to share with a broad audience of American readers.<sup>17</sup>

This combination of nature-worship, patriotism and religious righteousness, once the foundation of the American sublime, was by the 1940s a kind of alchemical universal in the American experience. One need only to look at the elementary and secondary school history and geography textbooks from the 1910s and 1920s (when these Army men were in school), to the 1930s, 1940s and beyond, to see how basic to the American character this combination was. Faced with an overwhelming, and radically new, phenomenon, these men fell back on the unconscious categories of their own cultural training, and since they shared that training with virtually all the members of their democratic audience, it made perfect sense—it became a “natural” explanation.

But this anchoring of the pure sign in an older sublime tradition also transformed the tradition itself. As Laurence and, over time, many others, described and redescribed the atomic sublime, these accounts came to fit themselves symbiotically within the broader constellation of ideas that had developed in nineteenth century America around the notions of blessed nature, landscape, religion, personal psychology and manifest destiny. Laurence and his fellows reinvoked the American doctrines of nature in a way that enabled this profoundly disruptive new presence to enter the language of American culture as an element of the mythic natural landscape. And so in the macrocosm as well as the microcosm, the atomic explosion became not a purely human circumstance (for which we must accept responsibility), but rather a part of that benign collaboration among man, nature and divinity that had defined American destiny, a predetermined, even foreordained event.<sup>18</sup>

Though dominant in mass culture, this mythic embedding of the Atomic Bomb in the grandeur of Nature, as the manifestation of God's will, had its vocal opponents from the first. Historians Paul Boyer and Spencer Weart, among others, have focused on the deeply felt strain of dissenting opinion that accompanied the first reports on the bomb, and continued from that time to the present. But this dissent was a profoundly elitist phenomenon. It emanated from individuals who had been educated outside traditional American public schools, or who had worked hard to transcend that education. It came from “intellectuals” and “thinkers” rather than journalists and everyday middle-class individuals. It appeared in dissenting journals, journals of intellectual pretension and strongly leftist heritages. And it reached a corresponding audience. Thus there grew up, from the beginning, two atomic cultures. One was the product and property of a



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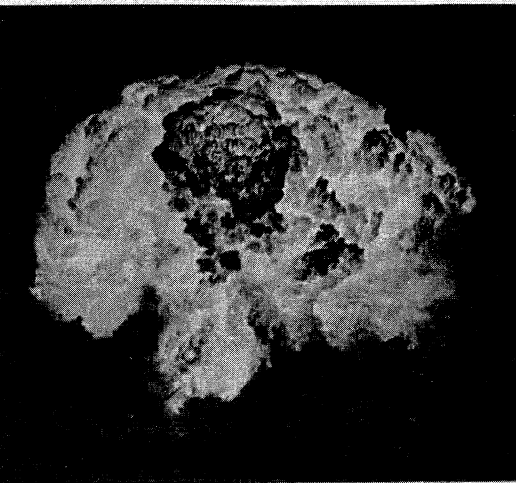
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**Illustration 3. *Life*, May 30, 1955. Permission by Time-Life Inc.**

dominant American culture that had, over the course of the twentieth century and before, increasingly separated itself from "high" culture. The other was the province of that marginalized group, a dissenting intellectuals' subculture.

But the dissenters were in a peculiar position *vis a vis* the atomic era. Because they were the prisoners of the military censors, they had available to them only the same reports as their counterparts in the dominant culture. Hence they could

# CLOSE UP TO THE BLAST



ONE-MILE-WIDE GLOWING MUSHROOM RISES AT YUCCA FLAT AS SHOCK CARRIES DUST OVER VILLAGE

## Color film records ruin as CD watches from afar

Last week, the hundreds of Civil Defense observers who had watched the churning, violent ascent of a fiery atomic cloud into the Nevada sky were back home, trying to convey to their communities the enormity of the explosion and educate them on the ways to survival in atomic attack. They had seen the explosion from eight miles off and, next day, went in to compute the damage. But much nearer to Ground Zero were LIFE's lead-shielded robot cameras, which recorded in color what no man could see and survive: the awesome close-up effects of the explosion as it was going on.

The Civil Defense people had gone to Yucca Flat to see the effects of atomic attack on the normal surroundings in which Americans work, play and live. Placed atop a 500-foot steel tower was a nuclear device that would unleash upon a simulated town an amount of energy equivalent to the detonation of 35,000 tons of TNT—nearly twice the strength of the Hiroshima bomb but only 1/500th the strength of the hydrogen thermonuclear weapon. On a clear, cool day after nine days of postponements due to bad weather, the device was set off at 5:10 a.m. To see what started happening 63/100th of a second later, turn the page.

IN BOMB'S LIGHT, OBSERVERS ON MEDIA HILL WATCH DETONATION THROUGH DARK GOGGLES. DURING FIRST FLASH THEY SHIELDED THEIR FACES



only rarely introduce facts to counter the developing atomic aesthetic. Their solution was to introduce irony—a telling weapon for intellectuals, a less useful one in everyday life.

Thus while the dissenters focused on the horrors, potential and actual, of the bomb, and while they looked below the cloud to the blistered ground and the mortally wounded, the communications-outlets of the dominant culture kept their



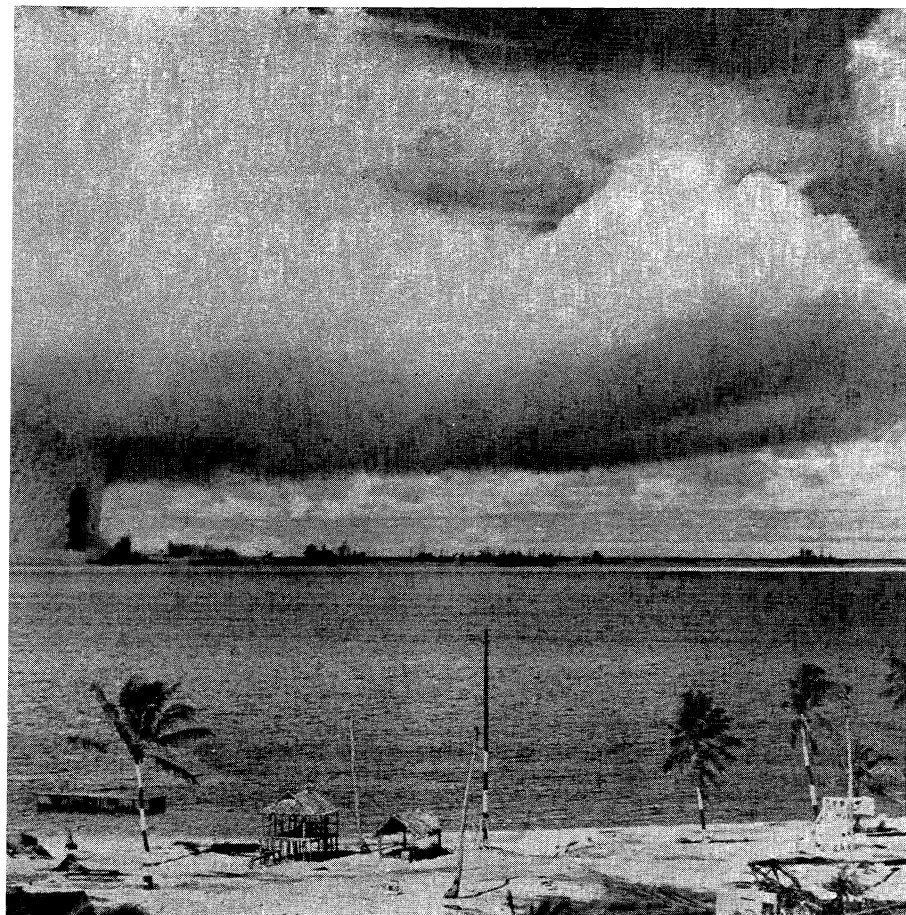
**Illustration 4. Credit: National Archives.**

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eyes on the cloud, and they were awestruck. They found a category of response for this new Absolute, based not on destruction but on power. And the moral implications of the bomb became correspondingly diminished, because that older tradition of American sublimity had always relegated to Divinity the moral purpose behind nature and its products, leaving man (especially American man) to act out a predestined role in which no ultimate responsibility need be taken.

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All of this was worked out, at least in tentative form, within the first months after the bombings at Hiroshima and Nagasaki. Then came the next stage in the mediating and Americanizing of the bomb: relocating the atom cloud from Japan to new regions—to the paradise of the South Pacific and the Great American



Desert stretching behind Las Vegas, Nevada. Bikini Atoll's suggestiveness is well-communicated in the most popular and most commonly reproduced of government photographs of the Operation Crossroads test explosion, the first in the South Pacific (illustration 4). Here the basic elements of a new Eden, west of the continental boundary, replacing California and Yosemite, could be clearly seen—the straw-and-bamboo huts, the palm trees, the sandy beaches, the transparent seas, the azure skies, even the lazy infinitude of the horizon. Here is the opening of the most popular and enduring description of this new Eden: “I wish I could tell you about the South Pacific. The way it actually was. The endless ocean. The infinite specks of coral we called islands. Coconut palms nodding gracefully toward the ocean. Reefs upon which waves broke into spray, and inner lagoons, lovely beyond description. . . .” This is James A. Michener’s, *Tales of*

*the South Pacific*, a bestseller in 1946, then a smash Broadway musical.<sup>19</sup> Michener encapsulated a paradise discovered by Americans during the War—by soldiers and journalists in the Pacific Arena, who sent home snapshots and letters, articles and photo-essays in magazines as diverse as *National Geographic* and *U.S. News*. When Michener's *Tales of the South Pacific* appeared in 1946, it served as an immensely successful distillation of this new paradise, but by then Bikini had already become the site for Operation Crossroads, the first public atomic test of the postwar era.

Military reasoning concerning the choice of Bikini as the site for Crossroads focused on its isolation from American shores, and its near-dearth of human occupants. But the written and photographic portrayals of the test, controlled and released by government censors, showed none of this understated factuality. Instead, they located the test securely in the mythic region of a new, *South Pacific* Eden. The *National Geographic*'s July, 1946, article, "Farewell to Bikini," (illustration 5) was only one of a number of outlets for a narrative that both justified the site and explosion, and imbedded the atom bomb in the lap of pristine, purifying, Edenic nature. This narrative described the natives as both malleable primitives and as Rousseau-ean "noble Savages" who could, in their transcendent, intuitive understanding of the importance of the experiment and the benevolence of the American military, serve as paradigms for the correct attitudes of more civilized readers. Author Carl Markwith was a Navy photographer assigned to the team that produced the propaganda documentaries recording the Navy's Bikini experiment; the essay, however, appears to have been a product not of Markwith's pen, but of the Navy's already-active propaganda wing. Here the



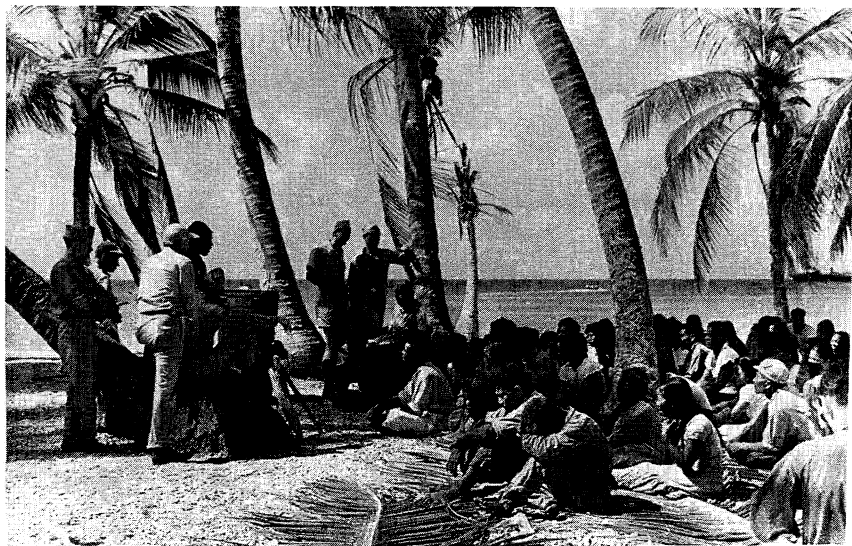
Household Goods Go Down to the Sea on Moving Day upon the Strong Heads of Bikini Women. Their husbands helped with advice and military supervision. Some bundles weighed more than 100 pounds. The woman in the lead carries her baby, too. (Heavier equipment was transported to the waiting LST in the *Sommer's Dark*, page 117.)

**Illustration 5. Courtesy of National Geographic Society.**

natives were portrayed as “brown people” who “had progressed to using kerosene lanterns and a few imported steel hand tools . . . [whom] modern civilization suddenly overtook.” Bikini “was something to remember . . . a long, narrow crescent of gleaming sand, well grown with palms and other vegetation and framing one side of a lagoon of incredibly blue and green water. As our PBM taxied across the lagoon to its mooring, a small outrigger canoe dashed past toward the beach, where sailing outriggers were drawn up and boys played in the water. . . . the setting was idyllic. . . .”<sup>20</sup>

The effect of this conjunction of South Pacific Eden and nuclear holocaust cannot be too heavily emphasized, for it was successful in continuing, even amplifying, the strain of aestheticism that had characterized the earliest attempts to anchor the atomic sublime. Terror and beauty, together, begot a terrible beauty, one that needed the guiding hand of an authoritative and authoritarian military father-figure (illustration 6).

At the same time, the Bikini test site located that response within a mythic landscape—of Bali Hai, of paradise. And, as with the reports on Nagasaki and Hiroshima, it succeeded in continuing the separation of the atomic cloud from its destructive effects. In the *National Geographic*, as in scores of other publications, the editors directed their energy toward maintaining layouts and articles that sequestered this image of beauty from the inevitable implications, often to an absurd extent. In the case of this essay, at least, the elaborate justifications seemed simply inadequate to explain the wholesale destructiveness of such a Romantic, evocative landscape—so the editors left it out. And that contradiction, that



Carrying the Message to Bikini! U. S. Navy Officers Tell of the Proposed Transfer of the Islanders to a New Home. Here the historic scene is reenacted for the benefit of Navy sound cameramen. Commodore Wyatt is staked on the palm bole, left foreground. When the proposal was made, Chief Jufka responded that the Bikinians were very proud to be a part of the undertaking, and would move elsewhere (page 97).

Illustration 6. Courtesy of National Geographic Society.

paradox, suggests the twin tugs on the developing mythos of the atomic sublime. On one side lay the desire to scrub it of its evil by placing it within a landscape of absolute innocence. But to do so meant bringing to consciousness the essential horror of the mushroom cloud—that it could only exist by destroying all that surrounded it.

The result was to present a second stage in the acculturation of the bomb. Whereas the images of Japan's destruction were contained within the historical matrix of conventional warfare, and of a long-term disgust with the enemy, the Other, the atomic tests began in a new era—an era of peacetime. Everywhere, in dominant and dissenting journals alike, the question had been asked: why are we doing this? Why is this necessary? The answer was profoundly unsettling—we were preparing for the next use, we were testing the effects on the next enemy. But this unacceptable answer came enfolded in a far different mythic response. The natural Eden of the South Pacific could and would “scrub” the bomb of its hellishness, would redeem it, would purify it. Once that was done, the bomb could be included among the weapons in the new heroic Grail quest that came to dominate postwar American discussion of America's purpose in the global community.

But this all occurred at a safe distance from American shores. If the atomic sublime were to come to the United States, a far different tack would have to be taken. Here the military's choice of Yucca Flats, Nevada, solved a host of problems, both tactical and mythical. Hypothetically, the site was safe from the dangerous possibility that the bomb might infect the American landscape.<sup>21</sup> Choosing Nevada over, for example, North Carolina or Southern California (two of the alternative sites considered) set the explosion in the Great American Desert, once a paradigm for wasteland, the stony horror that settlers had to brave to reach the paradise of the West.<sup>22</sup> Atomic explosions were not only safe in this allegedly worthless, uninhabited region; they served to make more stunning this hostile, already sublime landscape. Where once the geological forces of a divine Providence had carved evidence of His hand, now the Promethean hand of man would continue the process of creation, in a region once again enjoying a major resurgence of postwar interest, in vacation plans, in advertisements, and the like. Rather than devastating the landscape, rather than proving itself an agent of hell, the Nevada bomb would remain pristine, awesome, natural and divine.<sup>23</sup>

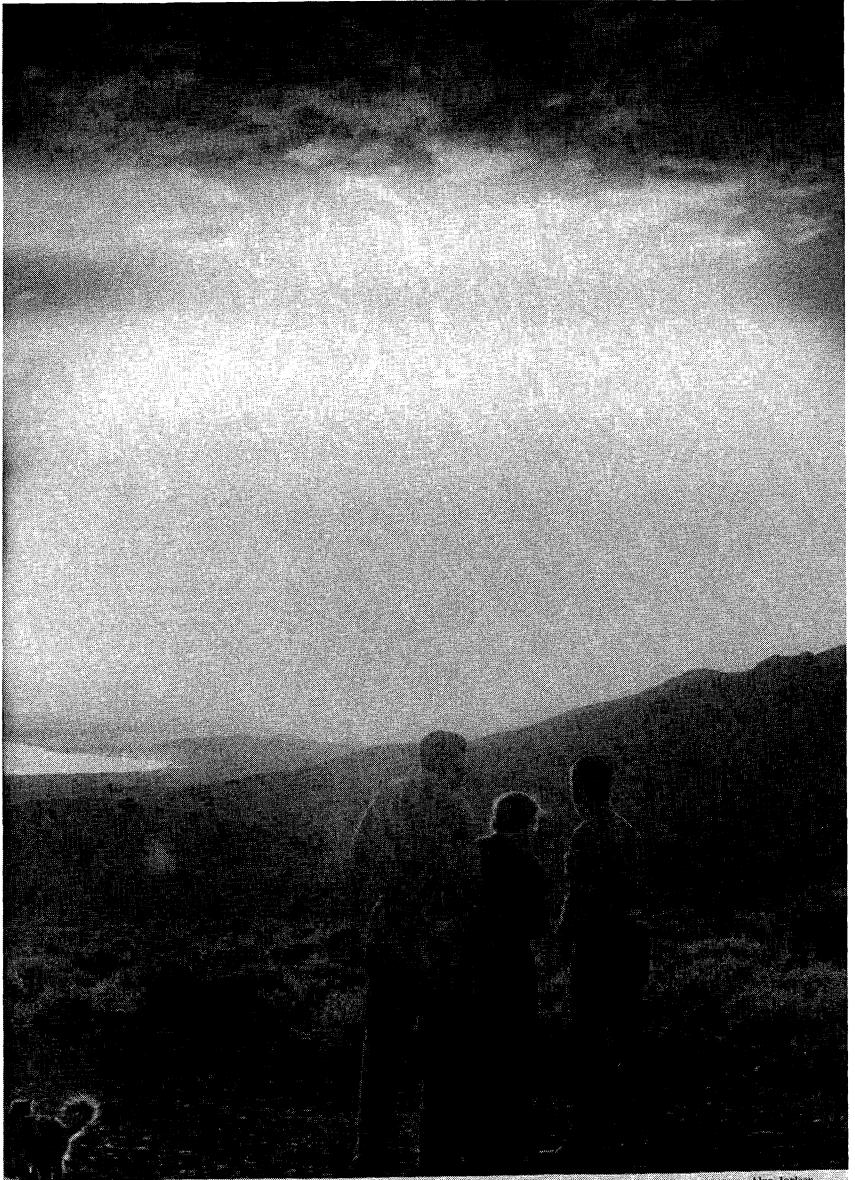
But there was even more to this site. For, as journalist after journalist echoed, here was a chance to *witness* the Absolute—to participate in what *New York Times* reporter Gladwin Hill would later call “the non-ancient but none the less honorable pastime of atom-bomb watching. . . .”<sup>24</sup> But before 1957, this process occurred by surrogate. Tests were secretive, and only “invited guests” and Nevada residents experienced them. Journalists, however, eagerly took on the role of mediator. And the response was a continuation of the process already at work in acculturizing the bomb—reports of tests became echoes of nineteenth-century reports from Niagara Falls or the Grand Tetons, so constantly repeated that the cadre of journalists at Yucca Flats named their witness-grounds “News



Nob,” and dubbed themselves “the trembling twenty” in an ironic reference to their place as permanently awestruck witnesses to this new sublime. Their reports followed Laurence’s earlier lead—they recorded the “facts,” but devoted their attention to the aesthetic effect of the explosion. And they succeeded in making the atomic explosion an accepted, “natural” part of the American West. “Atomic Bomb: Greatest Show on Earth,” trumpeted *Newsweek* in 1946 of Bikini;<sup>25</sup> now in Nevada, “a ball of fire blazed against the background of the purple mountains, briefly outshining the bright morning sun.”<sup>26</sup> In Nevada, said *Newsweek*, the thrill itself became workaday: “those A-bombs are Las Vegas’s alarm clocks.”<sup>27</sup>

A single image, made in 1953 by Las Vegas *Review-Journal* photojournalist Alan Jarlson and widely circulated in national newsweeklies and pictorials, is paradigmatic of this developing focus on spectatorship (illustration 7). The photographer set himself and his camera behind what the caption tells us were the members of the Sheahan family, who stood outside their home at Groom Mine, Nevada, in the early morning hours, witnessing an atomic explosion at the test site some 20 miles away. The picture in some ways repeats the rhetoric of nineteenth-century images of the American West made for the great government-sponsored Surveys of the 1870s—like the view of the Hayden Survey made by William Henry Jackson in 1872 (illustration 8). In both cases, the photographer’s decision to stand behind the scene focused viewer attention on the witnesses as much as the event, and in fact defined the significance of the moment as bound up in the process of spectatorship. And in both cases, the problem of describing an Absolute in a medium that must inevitably reduce, diminish and attenuate its subject, was solved by cuing the viewer to a proper response. But here the differences are also significant. Whereas in Jackson’s photograph the witnesses were part of an all-male cadre of heroic explorers, front men for their civilization, in Jarlson’s photograph the viewer saw the legendary nuclear family—father, mother, son—dressed in ordinary clothes, their faces turned away to increase their generality, their ability to stand for the American Everyman family of the 1950s. And the photographer quite pointedly included the family pet in the lower right corner of the picture, as if to emphasize not only the safety of this moment, but the almost caricatured ordinariness of the group that stands in for the viewing public.<sup>28</sup>

Jarlson’s picture was made in 1953, a season before the first hydrogen “super-bomb” would up the ante of atomic imagery. By 1953, the process of developing a consistent, fixed iconography was complete. A year before, *Business Week* editors had sent their reporter for an “Atomic Closeup;” they subtitled their essay, “Breathtaking beauty of blast offset terror of its historic impact.” This was an understatement. The author invoked the entire constellation of images contained within the atomic sublime. Yucca Flat was “cindery and lifeless”—a “dismal” spot fit only for the bomb. Under the header “*More Beauty Than Beast*,” the writer waxed poetic: “The outstanding impression from first hand observation of the explosion of an atomic bomb is this: How little there is in it of the horror and shock its historic importance would lead you to expect, how much of sheer



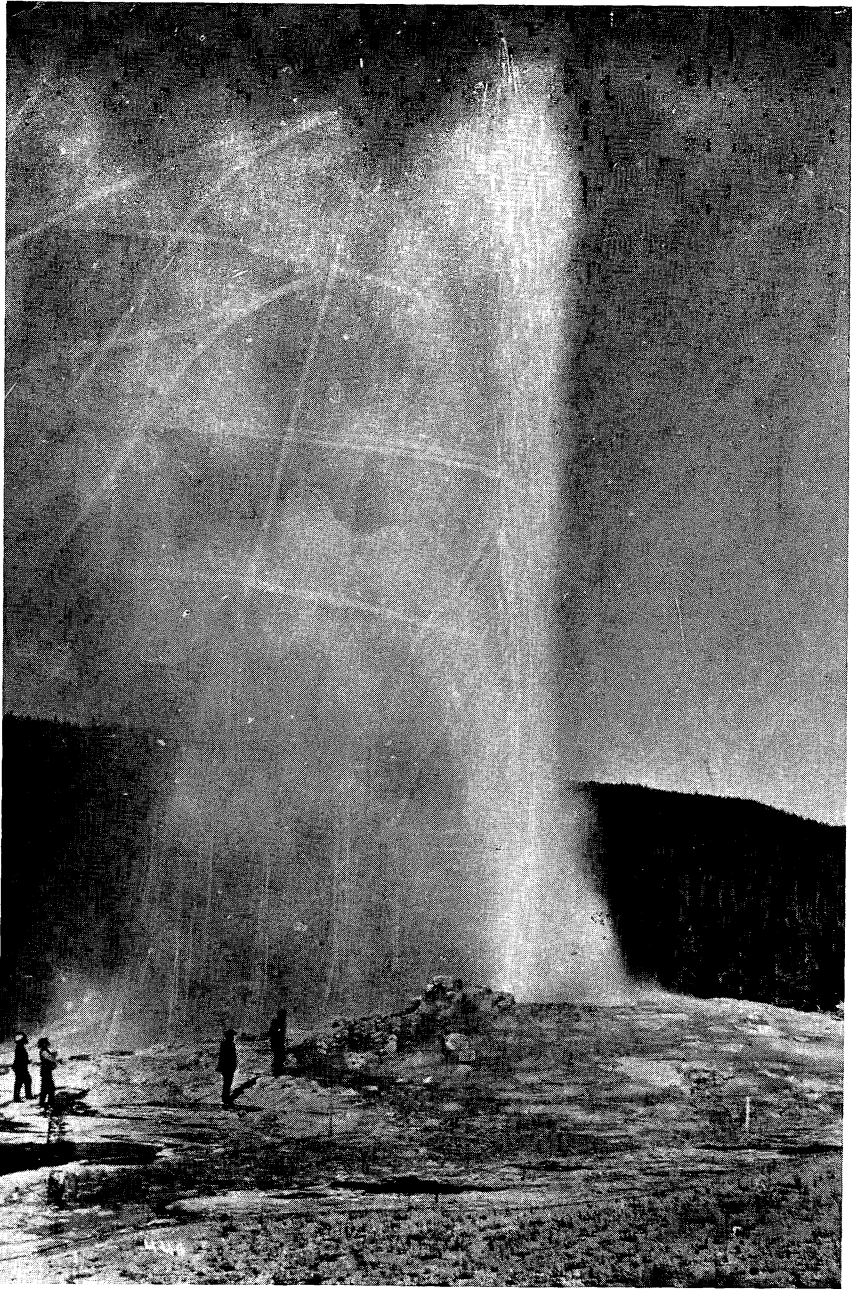
841

Alan Jarlson

**Atomic Dawn, Many Times Noon's Brightness, Greets a Nevada Family 20 Miles Away**

Nobody lives closer to the Yucca Flat test site than the Sheahans, who have watched a number of nuclear tests from their lonely Groom Mine property. Cleo the cat (left) let out a shrill meow and scurried for shelter after this blast. One Nevada atomic flash was seen as far away as Kalispell, Montana, 780 miles north.

**Illustration 7. Courtesy of Alan Jarlson and The National Geographic Society.**



**Illustration 8. Credit: U.S. Geological Survey**

breathtaking beauty and magnificence.” His final statement stands out in relief: “If there had been a city instead of sagebrush below that cloud, you realize later, half a million people might be dead or dying at this instant. But that’s not what you think at the time. You think fleetingly, ‘is that all?’ And then you suck in your breath and hold it because—welling up from the center of the cloud and spilling in easy, leisurely magnificence down the side comes a wave of glowing pink foam. . . . one of the most strangely beautiful of human creations.”<sup>29</sup> The essay’s point was clear. We *should* feel responsibility and horror, but instead, we feel only awe and pleasure.

The next few years would see the consolidating and fleshing out of this new myth of the atomic sublime. Articles would appear emphasizing the spectacle of atomic explosions as entertainment for rugged ranchers and Las Vegas gamblers. Travelogues would surface, reporting the Yucca Flats site as the latest wonder of a wondrous West, warning that “the chief hazard in atom-bomb watching is the . . . danger of automobile accidents,” and, after 1957, reminding Americans that “the Atomic Energy Commission’s Nevada test program . . . extend[s] through the summer tourist season, [and] the AEC has released a partial schedule, so that tourists interested in seeing a nuclear explosion can adjust their itineraries accordingly.”<sup>30</sup> And the visual images would powerfully reaffirm this aestheticism—from the early photographs and paintings reproduced in virtually every mass-audience pictorial outlet in America, to the boldly graphic sequences that developed as the pictorial magazines fought for “scoops” on this intensely visual subject, until, finally, the logo of the atomic sublime would be anchored.

But as early as 1952 the first dissension had begun. In September of that year, *Life* had published the first Japanese-made photographs of the minutes, hours and days after the Hiroshima and Nagasaki bombings.<sup>31</sup> While *Life*’s text remained relatively matter-of-fact, focusing on response to the publication of the pictures in Japan, the photographs themselves were utterly horrifying. With their peeling emulsion, their grainy, ill-focused, ungainly presence, they were smashing substitutes for the experiences of those “half a million” victim-witnesses *Business Week*’s writer had been unable to sense. *Life* ended its text with a telling statement: “To a world building up its stock of atomic bombs, the people of the two cities warn that the long-suppressed photographs, terrible as they are, still fall far short of depicting the horror which only those who lived under the blast can know.”

*Life*’s article introduced the beginnings of an alternative mythology—that of the gothic horror, wherein the witness was victim and not spectator, and in which the dominant psychological state was not awe and pleasure, but helplessness and pain. The disturbing maps of destruction *Life* would publish with its first spread on the hydrogen bomb would be followed by the electrifying story of the *Fortunate Dragon*, an innocent Japanese fishing trawler that found itself inadvertently under the cloud of radioactive dust that was all that remained of Eniwetoc Atoll after its eradication by the first H-bomb. As the sailors sickened and died, as the Japanese panicked over the possibility that the tuna-filled trawler

had been off-loaded onto the fish markets of Tokyo, as magazine after magazine recounted the stumbling, humiliating missteps of the American government, an atomic gothic emerged to compete for attention with the atomic sublime.

In the posing of this alternative, *Life* was the dominant institution within the dominant culture. With its terrifying images of mannequins akimbo in the desert, released in March 1955, with its recurrent series of pictures of houses and buildings spontaneously combusting miles from the epicenter of the explosion, with its close coverage of the fallout controversy, *Life* gave its readers a dark and terrifying vision of the atomic holocaust.

But again and again this terror had its salve, in exactly the aesthetic of the atomic sublime, a visual restorative that took terror and converted it back to beauty, took panic and transformed it to awe and admiration. So *Life*'s 1953 "A-bomb vs. House" introduced the destruction of a typical American home with a prefatory photograph of the mushroom cloud rising above the predawn desert, witnessed by the observers at News Nob.<sup>32</sup> And so article after article in the dominant voices of the era, each with its worrisome words, would be accompanied by the reassuring, sensual, awesome photographs of the atomic sublime. Implanted in the mythology of the American landscape for a decade, the atomic explosion had become inextricable from its surroundings. No gothic horror, it seems, could eradicate its majestic beauty, its resonance with the numinous Absolute, its freedom from moral imperatives.

And these pictures did not appear in a vacuum. Instead, they arrived at the American home packaged between pages extolling the womblike security of the properly managed, stocked and protected American home, or celebrating the landscape of consumer life, a landscape dependent upon a continued repression and denial of the nuclear threat (illustration 9). To glance at these images, just after an advertisement for insurance and just before a spread on Hollywood starlets, was to ingest the atomic threat as one more visual feat roped, tamed and brought to market for the American consumer.

*Life* recognized this strange conjunction of a reassuring ideal consumer life, an abstract, aestheticized atomic sublime, and an underlying condition of fear and perceived impotence. But it did not change its format to alter the effect. In 1954, an editorial accompanying photographs of the first hydrogen bomb explosion reported: "It is strange but true that pictures of that frightening holocaust mushrooming up from the waters of the South Pacific with the vaporized remains of Elugelab Island in its incandescent interior truly seem to be abstract. The pictures resemble nothing else on earth because there has never been anything on earth like them."<sup>33</sup> Yet *Life*, like its competitors and fellows in the business of disseminating and mediating the elements of postwar American culture, was itself too deeply imbedded in the atomic culture of the postwar era to attempt to wrest the atomic bomb from its now-fixed place in the webs of meaning and myth into which it had been placed over a decade. "P.S.," the editors ended, "As this issue went to press, we were still alive."<sup>34</sup>

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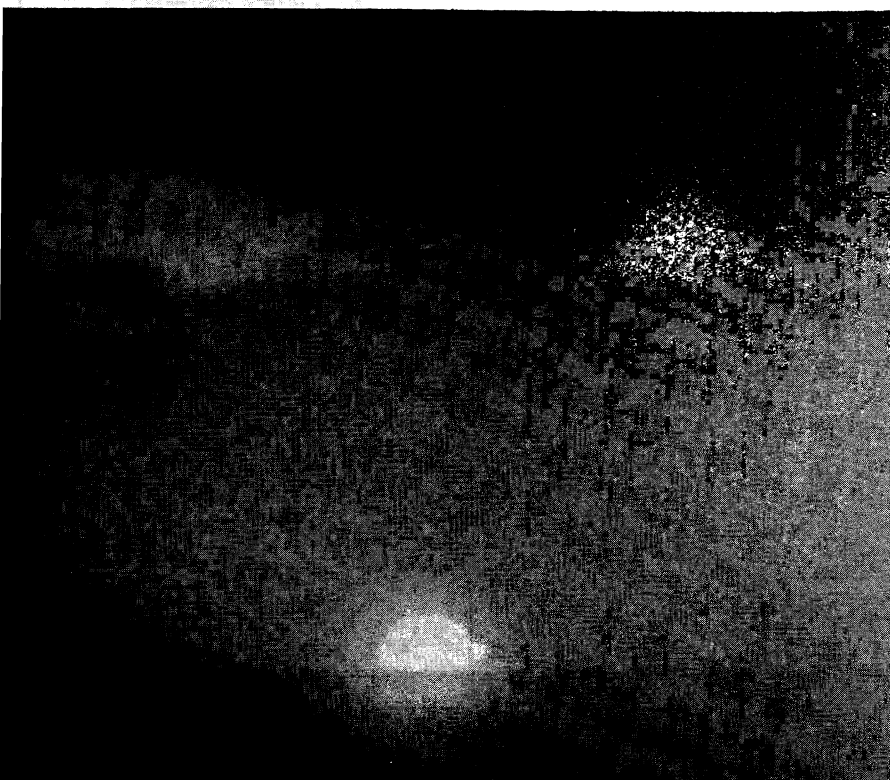
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Illustration 9. *Life*, April 19, 1954. Permission by Time-Life Inc.



## COLOR PHOTOGRAPHS ADD VIVID REALITY TO NATION'S CONCEPT OF H-BOMB

...nation's awareness of the hydrogen age, to which it was introduced  
...weeks ago, grew in intensity last week as civil defense workers  
...other groups saw a different version of the televised film of "Open-  
...to 13." This was in color. Instead of a black and white shadow  
...an explosion, viewers saw in glaring redness the bulging fireball  
...of hydrogen device which vaporized Elugelab Island at Eniwetok  
...Nov. 1, 1952. Photographed through filters so dark they excluded  
...trace of the bright Pacific sunlight, the fireball lit up the clouds

above and the sea around as it seared away sands and coral beneath it.  
...The Ivy color film has an "unclassified" security status, which means  
...that it contains no information of use to a possible enemy. LIFE pre-  
...sents scenes from it in the spirit of President Eisenhower's address  
...last week on the subject of the fears raised by threatening aspects  
...of the world today, including the hydrogen bomb: "The greater any of  
...these apprehensions, the greater is the need that we look at them clear-  
...ly, face to face, without fear, like honest, straightforward Americans...."

Still, something happened to the atomic sublime. Despite the efforts of the Atomic Energy Commission to capitalize on the spectacular fireworks of the mushroom cloud, despite the estimate of Jack Pepper, public relations chief of the Las Vegas Chamber of Commerce, that “the explosions draw two percent of all tourists who come here” and that more would soon be coming, atomic tourism was an insufficient force to counter the rising tide of resolve against nuclear testing. The result was an unexpected triumph of abstraction over visual concreteness. No one could photograph the devastations of strontium-90 or describe with persuasive resolve the invisible clouds of radioactive fallout that circled the global landscape. Yet even as Gladwin Hill wrote his vacationer’s celebration of the atomic sublime, the debate over an end to atomic testing had begun to have a real effect. By 1960, the mushroom cloud, rising above the predawn desert floor, spontaneously combusting cacti for miles in every direction and stilling the doubts of witnesses with its awesome infinitude and its promise of promethean power, had faded from inevitability to memory. Still, its imprint remained on the American landscape and its mythology, not simply in the fused glass of the Nevada desert but in the changed imagination of infinitude that would include human responsibility in its conjunction of divinity, and nature, and redemption.

Though the poetics of the atomic sublime might reassuringly couch its explosive potential in the language of nature, still it *was* a product of man, of culture. And the replacement of a natural sublime with an atomic one changed the relation of Americans to their landscape in fundamental, if subtly manifested, ways. From the moment of Bikini’s eradication onward there would be no unmodified sign of nature, nothing completely outside of us. We would build our suburbs, write, produce and watch our television programs, and take our vacations in a radically altered mythic environment, a new American landscape, in which even the search for a place free of man’s traces would only bring to consciousness the utter universality of the traces of man, in which the grand infinitude of the atomic cloud would counter and be countered, in its terror and its beauty, by the obsessive enclosed spaces of the model homes, the frantic plenitude of food and drink, and the continuous reminders of mortality and promises of transcending it that graced the pages facing those awesome images. Truly we had created a new culture; we could run from the responsibility this entailed—and we have, so far—but we could not eradicate this perilous new icon and all it implied.



## Notes

1. This essay was originally written as part of a session I organized at the American Studies Association Convention in 1985. That session included the commentary of Paul Boyer, and presentations by Jeffrey Meikle, Pamela Hunt Steinle and David Tanner, all of whom commented tellingly on the early draft. Since that time, I have delivered the paper at the University of Miami, Purdue University and the University of California, San Diego. In each case, the audience of students, scholars and interested listeners has provided me with important and compelling commentaries. In addition, Dennis Doordan, once my colleague at the University of Illinois, Chicago, read and commented helpfully on an earlier written version. This final paper reflects most of those suggestions, and I am grateful to all of them for their cogent, impassioned help. My thanks also to Russell Malone of the Special Collections Library at Northwestern University, who had the foresight to retain pristine unbound copies of all of *Life* magazine, and the kindness to allow me to photograph from them.

2. Roland Barthes, "La Tour Eiffel," published in English as "The Tour Eiffel," in *VIA* 2 (1973), 162-184.

3. This information comes from a fascinating essay by Vincent Leo, "The Mushroom Cloud Photo: From Fact to Symbol," *Afterimage* (Summer 1985), 6-12.

4. To understand this subject and this era, I think, we must look not to propaganda of such government institutions as the military and the Atomic Energy Commission, nor to the protests and prognostications of the small, intellectually elite dissenting journals like *The New Yorker* and the *Saturday Review of Literature*. Rather we must look to the communicating institutions of the era—to the picture magazines, the illustrated press, and the newsweeklies that, together, spoke to and for the dominant core of postwar America. This essay, then, is the result of research into the top 30 mass-market magazines of the period between 1945 and 1960, with particular focus on those journals that illustrated their articles.

My emphasis on *Life* magazine in the choice of illustrations is not the result of aesthetic choices on my part, but rather an attempt to show those pictures that were most widely seen by the largest number of Americans during the period in question. *Life* was certainly the most popular journal of its type throughout the era; in addition, it was a journal that boasted an audience far in excess of its circulation, as its advertising salespeople loved to point out—it had a huge pass-around readership. In addition, *Life* is a significant journal to the student of visual culture because it often appropriated and recirculated visual material from other sources, particularly newspapers and wireservices, augmenting these images with its own.

5. The cultural history of the Manhattan Engineer District is the subject of a larger project-in-progress, of which this essay is the sequel. The best sources of information on the District are the Army's official histories of the Project and its surroundings, especially Vincent Jones' *Manhattan: the Army and the Atomic Bomb* (Washington, D.C., 1985). Extraordinarily well researched, exhaustive in its treatment, it is, however, completely and unashamedly informed by the desires of its patrons and publishers. Of extraordinary interest is the collection of 36 bound typed volumes comprising the *Manhattan District History*; a copy is held by the National Archives and Records Division.

6. "Victory!" *Newsweek*, August 20, 1945, 19ff.

7. *Newsweek*, August 27, 1945, 67.

8. "The First Atomic Bomb Blast," *Time*, August 27, 1945, 65.

9. "The War Ends: Burst of Atomic Bomb Brings Swift Surrender of Japanese," *Life*, August 20, 1945, 25-31, 87b-d, 91-95.

10. Spencer Weart's *Nuclear Fear: A History of Images* (Cambridge, Massachusetts, 1988) is a valuable, if sprawling and incompletely considered text. Weart's book, more than 500 pages in length, never once describes the visual context, and includes no illustrations—a strange condition for a book subtitled "A History of Images!" In addition, the author's search for overarching connections among "images" has led him into the cul-de-sac of Campbellian/Jungian archetypal theory, from which few historians have emerged with their reputations for intellectual rigor intact.

Where Weart's work is invaluable is in the huge array of sources he has unearthed and displays for us. In this respect, an even more valuable, if more difficult, work, is Paul Boyer's *By The Bomb's Early Light: American Thought and Culture at the Dawn of the Atomic Age* (New York, 1985), which covers only the 1940s. Boyer served as commentator at a session of the American Studies Association National Convention in 1985 at which I read an early draft of this essay, and his comments have proven invaluable.

Weart locates the vision of dangerous science and scientists in the conflict over status between established "shaping" professions and the newly elevated profession. See Weart, 31-32.

11. Laurence was hired by General Leslie Groves, head of the Manhattan Project, to serve as sole press source for the project. Laurence then went on the Nagasaki bombing raid.

12. William L. Laurence, "Nagasaki was the Climax of the New Mexico Test," *Life*, September 24, 1945, 30ff.

13. The history of the Sublime begins with Edmund Burke's *Philosophical Enquiry into the Origins of our Notions of the Sublime and the Beautiful*, published in 1757; but Burke was reclaiming a concept that reached back to the philosopher Longinus, in his work *On The Sublime* (New York, 1985); Burke's position concerning the necessary presence of an edifying terror was countered by Kant's more sensational determination of the state—see the *Critique of Judgment* (New York, 1951), 99-100. An important general reference on the term and its meaning is Thomas Weiskel, *The Romantic Sublime* (Baltimore, 1976). On the American Sublime, see Mary Arensberg, ed., *The American Sublime* (Albany, 1985); Elizabeth R. McKinsey, *Niagara Falls: Icon of the American Sublime* (New York, 1985); and Earl A. Powell, "Luminism and the American Sublime," in John Wilmerding, ed., *American Light: The Luminist Movement* (Washington, D.C., 1980).

14. Vincent Leo, an Ohio-based art critic, also noted the similarity of descriptions by General Groves of the atomic bomb to earlier literature of the sublime. However, Leo does not discriminate among categories of the sublime, nor the historical changes through which the term evolved. See his account of the consumption of the Nagasaki and Hiroshima explosions in "The Mushroom Cloud Photo: From Fact to Symbol," *Afterimage* (Summer 1985), 6-12.

15. Laurence's monopoly on information concerning the atomic bomb set a pattern that would continue for decades. First the Navy, then the AEC limited access to the test sites, information about the explosions, and for the most part completely controlled the production of visual artifacts to accompany any written texts during the first years—roughly 1945-1951. The loosening of restrictions on press access and photographs, however, only occurred after the dominant style of treatment had been set into place.

16. These eyewitness accounts are excerpted in Robert C. Williams and Philip L. Cantelon, eds., *The American Atom: A Documentary History of Nuclear Policies from the Discovery of Fission to the Present, 1939-1984* (Philadelphia, 1984); see O. R. Frisch, "Eyewitness Account of 'Trinity' Test, July, 1945," 46-47; and General Leslie R. Groves, "General Groves's Report on 'Trinity,'" 47-55.

17. One of the most interesting, if tellingly self-vindicating, memoirs of the atomic era is General Leslie R. Groves' *Now It Can Be Told: The Story of the Manhattan Project* (New York, 1962).

18. See Ira Chernus, *Dr. Strangegod* (Columbia, South Carolina, 1986) on the acculturation of the atomic bomb into the larger ideology of "the numinous" which forms the religious backdrop for the American connection between religion and expansionism.

19. James Michener, *Tales of the South Pacific*, (New York, 1946, 1973), 9.

20. Carl Markwith, "Farewell to Bikini," *National Geographic* 90 (July 1946), 97-116.

21. That this was not the case is amply documented in a number of primary and secondary sources, including the extraordinary books by Howard Ball, *Justice Downwind: America's Atomic Testing Program in the 1950s* (New York, 1986), and Richard Miller, *Under the Cloud: The Decades of Nuclear Testing* (New York, 1986).

22. It is, I think, significant that the Yucca Flats site was not one of those considered by the Los Alamos team for the first, 1945, test. See A. Costandina Titus, *Bombs in the Backyard: Atomic Testing and American Politics*, (Reno and Las Vegas, 1986), 10-11. On the potential sites themselves, see also Richard Miller, *Under the Cloud*, 80-81.

23. The postwar "rediscovery" of the American West as a locale for tourist consumption is reflected throughout the pages of such journals as *National Geographic* and *Travel and Leisure* as well as more widely-ranging magazines. Here is a representative sample of the early descriptions of the Nevada test site:

North of the city lies a 5,000 square-mile area of mountainous desert which is posted by the signs of the Air Force notifying the world to keep out. It is a bombing and gunnery range connected with the Nellis Air Force Base, located in Las Vegas. The land is dotted with sagebrush and here and there with the dirt piles of abandoned mine diggings. Surrounding the tract is a natural wall of mountains which, with the assistance of Air Force bomb craters on the plateau floor, has created a landscape with the lorn and dismal quality of one of those artists' impressions of the surface of the moon."

Gladwyn Hill, "Atomic Boom Town in the Desert," *New York Times Magazine*, February 11, 1951, 14. Hill's position was easily integrated into an atomic tourism, as witness his travelogue, discussed later in this paper.

When, some six years later, Hill wrote a third essay for the magazine, "Fifty-five Miles from the Bomb," *New York Times Magazine* May 26, 1957, 10-11, his tone, and that of the *Times*, had become something close to ban-the-bomb. Yet here again Hill used the mythology of the western landscape to make an opposite point. Now a Stetson-hatted native appeared in a photograph, worried expression on his face, and strontium-90 on his mind.

24. Gladwin Hill, "Watching the Bombs Go Off," *New York Times*, June 9, 1957, sec. 10, 43.

25. "Atomic Bomb: Greatest Show on Earth," *Newsweek*, March 11, 1946, 62.

26. "Ball of Fire," *Newsweek*, November 5, 1951, 28.

27. "World Blew Up: Tests in Nevada," *Newsweek*, February 19, 1951, 25.

28. I have detailed the earlier history of the American sublime, its transformation, and its relationship to the makers of icons and myths, in *William Henry Jackson and the Transformation of the American Landscape* (Philadelphia, 1988).

29. "Atomic Closeup," *Business Week*, May 3, 1952, 108-112.

30. Gladwin Hill, "Watching the Bombs Go Off," June 9, 1957, section 10, 43.

31. "When Atom Bomb Struck: Uncensored," *Life*, September 29, 1952, 19-25.

32. "A-Bomb Vs. House," *Life*, March 30, 1953, 21.

33. This *Life* editorial deserves extensive quotation and analysis.

Finally, there is the bomb. It is strange but true that pictures of that frightening holocaust mushrooming up from the waters of the South Pacific with the vaporized remains of Elugelab Island in its incandescent interior truly seem to be abstract. The pictures resemble nothing else on earth because there has never been anything on earth like them.

If we knew that we couldn't take refuge in the comforting philosophy that this was an abstraction and not real at all, we knew also that release of these first pictures carried top news priority this week. But we are not among the doom-shouters who wail that this means the end of everything, so we note that such easily recognizable journalistic symbols as dogs, kids, and pretty girls are still around . . .

"Some Realities, Abstract and Otherwise," *Life* April 12, 1954, 23.

Most noticeable here is the way the editors balanced the frightening aspects of the H-bomb test with the problem of its abstractness, and their further awareness that the pictures, and their publication of them, contributed to the dissociation of image and reality. Finally, their recognition that the atom bomb picture had become as much a "journalistic symbol as dogs, kids and pretty girls" suggests that much of what we might now assume to have been cultural processes operating at unconscious levels, may well have been clear enough to the participants at the time. But, finally, *Life* found itself unable, despite its perceptiveness, to break free of the chains of inevitability that required publication of the pictures—in those contexts I have described.

34. "Some Realities, Abstract and Otherwise," *Life*, April 12, 1954, 23.