

Through the Lens of Ed Westcott

Through the Lens of Ed Westcott
A Photographic History of World War II's Secret City

Front Cover: Traveling Library, 1946

Catalogue of the 2005 exhibition made possible through a partnership between the Ewing Gallery of Art and Architecture, The University of Tennessee, and the American Museum of Science and Energy, Oak Ridge.

The inaugural showing of this exhibition was held jointly at the Downtown Gallery, The University of Tennessee, and at the American Museum of Science and Energy, Oak Ridge, as a component of the 2005 Tennessee Valley Homecoming.

THE UNIVERSITY of TENNESSEE | **ur**

EWING GALLERY
OF ART & ARCHITECTURE

THE UNIVERSITY of TENNESSEE | **ur**
**DOWNTOWN
GALLERY**



Editor: Sam Yates

Copy Editor: Adam Alfrey

Exhibition Curators: Baldwin Lee and Sam Yates

Catalogue Design: Adam Alfrey and Sam Yates

Printing: The University of Tennessee Graphic Arts Services

Photographs: Courtesy of the United States Department of Energy,
Oak Ridge Office, Photography Archives

ISBN: 0-9761663-1-3

© 2005 The University of Tennessee. All rights reserved.

The University of Tennessee is an EEO/Title VI/Title XI/Section 504/ADA/ADEA institution in the provision of its education and employment programs and services.

R01-1007-015-002-05

Through the Lens of Ed Westcott

A Photographic History of
World War II's Secret City



Contents

7	The Coincidence of Ed Westcott and Oak Ridge, Tennessee Sam Yates
13	Acknowledgements Sam Yates
15	James Edward Westcott: Photographer Baldwin Lee
33	Through the Lens of Ed Westcott
78	Oak Ridge Photographers: A Legacy Lynn Freeny
79	Growing Up with Ed Westcott Ed Westcott, Jr. Contributors to the Catalogue
80	Bibliography

Opposite Page:
James Edward Westcott in His Darkroom, May 4, 1945



Elza Gate Military Police, 1945



Captain O'Sullivan, 1944

The Coincidence of Ed Westcott and Oak Ridge, Tennessee

Sam Yates

Oak Ridge has a unique history. Although other communities in Tennessee were outgrowths of company towns or government projects such as Ducktown (mining), Etowah (railroad), Townsend (lumber), and Norris (Tennessee Valley Authority), Oak Ridge alone had a secret, wartime beginning. Shortly after the United States' entry into World War II, the federal government established the Manhattan Project—a massive wartime effort to develop and produce the world's first atomic bomb, named for the location of its headquarters in New York City. Only three locations across the United States were selected as official sites for the project, each becoming a remote, secret community—Oak Ridge, Tennessee; Los Alamos, New Mexico; and Hanford, Washington.

In 1905, Albert Einstein advanced his *Special Theory of Relativity*, $E=Mc^2$, which established the fact that vast amounts of energy could be obtained from very small amounts of matter, a concept that eventually caused physicists to begin to think about splitting the atom and releasing energy in the form of atomic bombs. Einstein was a victim of Adolph Hitler and the Nazi regime, losing rights to his property and his German citizenship. In 1933, he immigrated to the United States, accepting a Professorship at Princeton University's Institute for Advanced Studies.

Einstein kept abreast of nuclear advancements made in Europe. He learned that in late-1938 the German scientists, Otto Hahn and Fritz Strassman, had "split" the uranium atom, an achievement verified by Austrian scientists Lise Meitner and Otto Frisch. The process of

splitting the atom was called "fission," and it opened the door to the concept of releasing large amounts of energy from a small mass.

As Nazi Germany was continuing its aggressive actions toward its European neighbors, Einstein was compelled by fellow physicists Leo Szilard and Eugene Wigner to write President Franklin D. Roosevelt in August of 1939, warning that the Germans were in the process of refining nuclear fission technology, which could lead to production of "extremely powerful bombs." Shortly thereafter the government made available initial funding for uranium research, but it was not until the country's entry into World War II at the time of Pearl Harbor that the United States became serious about this effort, and the Manhattan Project was established.

Headed by Brigadier General Leslie R. Groves, who had directed the early stages of construction for the Pentagon Building in Washington, D.C., the Manhattan Project's goal was to develop and produce atomic bombs, using enriched uranium and plutonium as "fuel." On December 2, 1942, Enrico Fermi and his staff at the University of Chicago produced the first controlled nuclear chain reaction under the west bleachers of the abandoned Stagg Field, a critical step in the production of plutonium. Although Oak Ridge would develop a small reactor, which would become a "pilot plant" for the large-scale plutonium-production reactors being built at Hanford, the Tennessee location was primarily planned to become the production site for enriched uranium. (Only the relatively rare isotope of uranium, uranium-235, will "split" to release energy, so it must be separated and "enriched" from the more abundant isotope, uranium-238.) Approximately 59,000 acres of farmland, some 25 miles west of Knoxville, Tennessee, was the location of the first site selected as part of the Manhattan Project. The small farm communities of Elza, Robertsville, Scarboro, and Wheat, populated by approximately 1,000 families,



*Brigadier General Leslie R. Groves Speaking to Service Personnel,
August 29, 1945*



Civil Engineering Works Housing: Hutments, 1945

were displaced by the government's "power of eminent domain" to make room for the massive buildings that would house equipment for the three uranium-enrichment methods—gaseous diffusion, thermal diffusion, and electromagnetic separation. As construction needed to begin as quickly as possible, some families had only a few weeks to move off their properties.

This site in Tennessee was chosen because it was located in an isolated mountainous area and had an adequate water source with the nearby Clinch River. Also, raw materials could be supplied via the L&N Railroad, and the recently constructed hydroelectric plants of the Tennessee Valley Authority, established in 1933, could fulfill the extreme demand for energy. The Tennessee site was initially called the Clinton Engineer Works, a name soon replaced by "Oak Ridge." Thus, the production of the nuclear fuel for construction of the atomic bombs at Los Alamos, under the direction of J. Robert Oppenheimer, occurred at both the Oak Ridge (enriched uranium) and the Hanford (plutonium) sites, and all this took place from early-1943 to August 1945.

The Manhattan Project needed a photographer to document the early construction and development of the Oak Ridge site, and the United States Army Corps of Engineers had in mind the man for the task. Months earlier, James Edward Westcott, a young photographer from Nashville, Tennessee, was hired by the Corps for various assignments including a secret mission to photograph a classified location in Middle Tennessee intended to become a prisoner of war camp. Westcott's photographic abilities did not go unnoticed by his superiors who recommended him for a new, and certainly more expansive, assignment in East Tennessee. With camera in-hand, Westcott relocated to the future Oak Ridge site in 1942, becoming one of its first fifty residents. He thus was being afforded the opportunity to document some of the earliest developments in



Lucia Carter Interviewing Women's Army Corps's Ruth Clancy, October 12, 1945



From Left to Right: Sam Sapirie (Oak Ridge Operations Manager); Jacqueline Kennedy; Senator John F. Kennedy; Alvin Weinberg (Director of Oak Ridge National Laboratories); and Senator Al Gore, Sr. at Oak Ridge National Laboratories, February 24, 1959

the United States' nuclear program and to document the daily lives of the citizens of this ever-expanding community.

For the next four years, Westcott served as the official photographer for the Oak Ridge site of the Manhattan Project. Because of the secretive nature of this massive wartime effort, the entire city was fenced, and traffic in and out of the gates was highly monitored by armed guards. In an attempt to maintain the "atomic city's" secrecy, communication with the outside world was limited, and no personal cameras were allowed. Thus, as Oak Ridge grew to 75,000 inhabitants, Westcott became the sole photographer of construction and operations, as well as the city's recreational and social life, filling his government controlled archives with numerous images ranging from children playing horseshoes to the interiors of private homes. Westcott was present when World War II ended, capturing the joy and relief of the city's residents; he was also on-hand to record the pageantry that accompanied the gates of the "secret city" being opened to the American public on March 19, 1949.

As Oak Ridge continued as a postwar nuclear research center, its administration shifted from the Army Corps of Engineers to the civilian managed Atomic Energy Commission (AEC), and Westcott continued as its photographer. In 1966, he was transferred to Washington, DC where he was designated Chief of Still Pictures for the AEC. As the agency was promoting peaceful uses of atomic energy, Westcott was called upon to travel to various locations across the country. His assignments ranged from photographing twenty-three different nuclear reactors to accompanying the AEC commissioners on White House visits. In total, Westcott photographed seven United States Presidents: Kennedy, Johnson, Nixon, Ford, Carter, Reagan, and Bush (Sr.). In 1974, the newly established Energy Research and Development Administration assumed the duties of the AEC. Westcott retired from the agency in 1977 and lives in the city he helped make famous—his beloved Oak Ridge.



Horseshoes, 1945

The goals of this exhibition and its accompanying catalogue are to bring recognition to the photography of Ed Westcott and to portray its artistic excellence. During the years of his greatest creative production, Westcott was a federal employee of either the Army Corp of Engineers or the AEC. As these agencies were overseeing highly secretive and sensitive material relative to the security of the United States, Westcott's photographs were generally filed away and few were ever published (if they were, they were done so without the photographer's name), exhibited, or made available for public or private collection. The photographs remained government property, and the man behind the camera remained largely anonymous.

It was almost 40 years later that the photographer who created these images was finally acknowledged. In 1981, the Children's Museum of Oak Ridge organized *Oak Ridge Seen 1943-1947: 20 Photographs by Edward Westcott*. In that same year, the museum also published "An Encyclopedia of East Tennessee," which included Westcott photographs. With the passing of time, many of the subjects in the photographs had been declassified, allowing the Department of Energy to permit their use for exhibition and publication with Westcott's name. However, since the exhibition was only on view in Oak Ridge and the encyclopedia only had regional interest, Westcott remained relatively unknown outside of the Oak Ridge community.

Through The Lens of Ed Westcott: The Photographic History of World War II's Secret City is intended to introduce Westcott to a national audience and to credit him for the contribution he has made to the history of photography. Not only have his photographs recorded significant events in our nation's history, but they have also become significant works of art—revealing the sensitivity and genius of the man behind the camera.

Acknowledgements

I gratefully acknowledge the financial support for this project by Oak Ridge's American Museum of Science and Energy, U-T Battelle, the City of Oak Ridge, and the Oak Ridge Convention and Visitors Bureau. I am grateful to the exhibition's co-curator and author of the enclosed essay, Baldwin Lee, Professor of Photography in the School of Art at The University of Tennessee. Adam Alfrey, Ewing Gallery Exhibitions Coordinator, is recognized for his assistance throughout this project, especially for his role as copy editor and co-designer of this catalogue. Lynn Freeny, Director of Photography and Video Services for the United States Department of Energy, gave generously of his time and expertise in the digital re-touching and printing of all of the photographs included in this project, and he is also commended for his recent portrait of and comments on Ed Westcott. James Edward Westcott Jr. is recognized for his touching remarks about his father. Stephen H. Stow, Director, and James Comish, Program Manager, of the American Museum of Science and Energy are recognized for their support from the project's preliminary planning phase to its fruition. This project would not have happened without the initial support of Mary Miltenburger of the Knoxville Tourism and Sports Corporation and of Joe Valentino, Director of the Oak Ridge Convention and Visitors Bureau. I am also thankful to Dr. Teresa Smith Welsh, a former Museum Studies student at the University of Tennessee, who brought the story of Ed Westcott to my attention.

Finally, special gratitude is extended to the photographer himself, Ed Westcott, for his generosity and commitment to excellence that has created a wealth of images for public appreciation.



In the Days of Mud, September 1945



James Edward Westcott,

James Edward Westcott: Photographer

Baldwin Lee

On the occasion of an event worthy of being remembered, the services of a photographer are sought. If the event is modest, such as a family picnic, any of the participants can be handed a camera and an adequate photograph—a photograph which will serve as a visual reminder—will probably be made. But if the event is one that will assume historical significance, the requirements demanded of the photographer are enormous.

On December 15, 1942, one year and eight days after the attack on Pearl Harbor, James Edward Westcott, a photographer for the United States Army Corps of Engineers, was transferred from Nashville to Knoxville. The reasons for selecting Westcott are not clear; they may have included his proximity to East Tennessee, his demonstrated competence in photography, or his youthfulness and enthusiasm. By the age of twenty, he had cultivated a sizeable amount of experience in photography, working and learning as a teenager in three portrait photographer studios in Nashville and working for the Corps prior to his East Tennessee reassignment. He had also photographed in the German prisoner of war camp located in Crossville, Tennessee and had been given assignments where he traveled to many parts of the United States to make pictures of dams and airports. There was, however, nothing in his resume that indicated he would have the skill necessary for the momentous task at hand.

The aftermath of the Great Depression had established the golden age of American documentary photography. Some of the most important figures

in documentary photography produced their greatest work while working for the federal government, including Walker Evans, Dorothea Lange, Russell Lee, Arthur Rothstein, Ben Shah, Marion Post-Walcott, and Gordon Parks. These photographers demonstrated their ability to produce photographs worthy of the importance of the subject each was assigned to document.

Ed Westcott's qualifications, on the other hand, were more modest. In 1942, he was a hard working young man with more potential than achievement. His background was typical of those young men who grew up in average conditions during the Depression. He was one of two sons born to Jamie and Lucille Westcott. His father was employed in the accounting and bookkeeping offices of a railroad company, and his mother was a homemaker. The family lived in an apartment in Nashville, where the young Ed Westcott was nourished and supported by parents whose child rearing seems progressive, even by today's standards.

It is fair to assume that while in the Depression there was a great deal of stress placed on education and preparation for a stable career. By his own admission, though, Ed Westcott was not a stellar student; school did not capture his interest. His father, undeterred by his son's academic disinterest, supported him in ventures where he did show moments of curiosity. As a boy, Ed Westcott showed some passion for the game of golf, which prompted his father to build a makeshift golf course in the backyard of their apartment building by digging holes and burying tin cans in the ground. With Ed's curiosity still not completely satisfied by golf, Jamie Westcott purchased a German Foth Derby camera for his son's Christmas present in 1933. From that moment forward, Ed Westcott's passion for photography was initiated. With the instruction and support provided by a college student who lived in the same apartment building, Ed was introduced to the rudiments of darkroom processing.

Jamie Westcott's faith in his son was soon confirmed when Ed, at the age of thirteen, started a business developing film for neighbors, friends, and railroad colleagues. Young Westcott's enterprising sense was demonstrated when he acquired a "pie wagon" (similar to today's lunch wagons) and painted it with

'Centennial Photography,' the signage of his developing service business. He charged 50 cents per roll of film. Ed Westcott's adventurousness and confidence were further nurtured by his parents' willingness to allow him to hitchhike from Nashville to the Smoky Mountains for the purpose of scaling the 6,593-foot Mt. LeConte. In the 1930s, accessibility to Mt. LeConte was at best challenging.

Unlike many photographers who received formal training in photography, Ed Westcott was largely self-taught. Although opportunities existed for the purpose of bolstering his background knowledge of documentary photography, Westcott was not interested in such edification and, consequently, did not engage in research. Although Westcott attended a presentation made by Edward Weston in Nashville, he expressed little interest in the work of other photographers except one, the American photographer William Henry Jackson. Jackson was a photographer whose fame is based on his landscape work done in the American West between 1870 and the mid-1890s. As would be the case for Westcott, Jackson had the opportunity to photograph under the auspices of a federal government agency, the Geological and Geographic Survey of the Territories. Many of his photographs involved making documents of the construction of railroad lines, including those of the Mexican Central, Baltimore & Ohio, and New York Central. Westcott was undoubtedly inspired by Jackson's monumental 18 x 22-inch glass plate derived albumen prints.

When Ed Westcott arrived in Knoxville in 1942, he discovered that he was the twenty-ninth person selected to become a member of a team of individuals—a team of individuals that would quickly swell to 75,000 by 1945. Of these 75,000 individuals, there would be countless scientists, engineers, soldiers, cooks, drivers, pilots, carpenters, mechanics, welders, plumbers, painters, butchers, telephone operators, librarians, policemen, doctors, nurses, pharmacists, and teachers. There was, however, only one photographer—Ed Westcott. Between the years of 1942 and 1946, only one person was authorized to utilize a camera among this select group; in fact, no photographic record of this era exists, unless it was first seen either through the view finder of Westcott's

Speed Graphic or on the ground glass of his 8x10 Deardorff view camera.

In retrospect, the enormity of this responsibility would have intimidated even the most self-confident photographer. But there was something about the make-up of Ed Westcott that not only allowed him to function productively but also to bring out his best. His assignments were typical of those of many other professional photographers; on a daily basis, he was told where to go and what to photograph within the secure borders of the 59,000-acre parcel that would come to be called "Oak Ridge." What he was not told, however, was the purpose of the monumental efforts undertaken within the fenced boundaries of the city—efforts to produce the world's first atomic bomb. Ed Westcott's employers, the United States Army Corps of Engineers and eventually the Atomic Energy Commission, would have been more than satisfied if he had merely done a competent job. Little did they know, and probably little did Westcott himself know, that he not only would produce photographs that would bear witness, but he would also produce images that evoke grace, beauty, hope, and above all, exuberance.

When Ed Westcott is asked to explain the excellence of his photographs, he simply states, without the slightest ingenuousness, that it was his job. When asked more specifically why he made particular decisions in taking certain photographs, he again matter-of-factly states that he did so to make the picture better. When asked further if his decisions in picture-making were based on the precedent, or lessons, of previously seen photographs, he answers with a simple 'no,' for he admits he was only doing what he knew to do.

To those who have had only a passing interest in photography, it seems that it is an easy and simple discipline. One often assumes that once a certain degree of familiarity with the camera is acquired, the rest of the photographic process is unchallenging. There is also the assumption that if one is in the presence of an individual, a group of individuals, a place, an event, or a thing then a competent handling of camera will produce an acceptable photograph. These suppositions are largely true

if one's expectations of the photograph are pedestrian. If one wants nothing other than a photograph that factually represents its subject, such as a catalogue photograph of a lawn mower, a focused and clear image would be all that is required. It is an entirely different matter to want to convey, beyond aspects of physical description, the significance and meaning of the subject.

An example of the difficulty of this task is to look at the common genre of the vacation photograph. The fact that few vacation photographs are capable of describing the pleasure or excitement of far-away places to others than those who were there illustrates that good intentions, access to the subject, and adequate camera skills are not sufficient to express the shape or importance of the experience. In fact, there are few invitations that are as unwelcome as those whose purpose is to sit through a friend or neighbor's presentation of the three hundred snapshots of a wonderful vacation.

When photography is practiced by those who call it a profession, there is the expectation of certain hallmarks of professionalism: greater clarity, better lighting, more precise framing, and fewer unintended facial expressions or awkward gestures. Photographs that meet these standards, although competent, are still common and largely uninteresting and uninspired. These are the kinds of photographs that appear on the middle pages of newspapers, newsletters, annual reports, brochures, and publicity packages. The defining characteristic of these kinds of photographs is that they are all made anonymously. There is no need to know the identity of the photographer; these photographs are labeled by their subject, not by their maker.

What distinguishes Ed Westcott's photographs of the Manhattan Project in Oak Ridge is that they describe with precise accuracy the facts of his subjects, thereby satisfying the demands of his employers, and that they do so by capturing the qualities of wonder, amazement, surprise, delight, sorrow, humor, affection, knowledge, understanding, compassion, sympathy, respect, and gravity. These are entities that for all but the most talented photographers exist beyond the bounds of the photographic medium. In fact, there are countless manuals in existence that

explain how to make good photographs of any imaginable subject or situation. These books concentrate on the technical aspects of camera operation or darkroom practice, but there is no source in existence that can explain how one makes photographs that contain these ineffable qualities. Ed Westcott's photographs transcend anonymity because they describe their subjects with grace and meaning.

How grace and meaning can become the content of a photograph is at best speculative. Are grace and meaning inherent in the subject, and if so, is it the task of the photographer to reveal them? If these are not contained in the subject, does the photographer then instill them? In either case, the photographer is required to be cognizant of these issues. Ed Westcott knows about grace and meaning; these are part of his being, an essential part of his beliefs and value system.

When Ed Westcott is asked if he is an optimist, he emphatically answers 'yes.' This is a crucial part of his character, and it influences how he responds to the world. Today at the age of eighty-three, his optimism is palpable; at the writing of this piece he announced his engagement to Ethyl Steinhauer, a friend of fifty years. One can only imagine the level of his optimism when he was twenty and began photographing the Manhattan Project. Life was beginning for the young Ed Westcott; his love of photography had translated into wonderful opportunities to experience the excitement of travel, the thrill of making pictures of new subjects, and the assurance of the viability of producing income. What is more, Westcott's personal life paralleled his professional life; he had been married for less than two years and had just become a father to his first son. (He would have four more children, each of whom would be born and raised in Oak Ridge.) Therefore, when he was assigned to make a photograph in Oak Ridge, the positivism of his own life strongly influenced how he would proceed.

Ed Westcott was assigned to make records of the successful progress of construction of various Manhattan Project facilities. Successful progress meant more than fulfilling deadlines, but also ensuring among other priorities, the safety of the members of the Oak Ridge community.

In the photograph of the Girl Scouts marching down a ruddy road in front of the X-10 facility, the Public Information Office of the Atomic Energy Commission instructed Ed Westcott to make a photograph showing that X-10 could function as designed and not have detrimental effects on the community. Designed and built in ten months, X-10 was a graphite reactor that went into operation on November 4, 1943. X-10 used neutrons emitted in the fission of uranium-235 to convert uranium-238 into a new element: plutonium-239, the highly radioactive substance that was the key to the development of the atomic bomb.

In the making of this photograph, Ed Westcott chose to depict one of the boundaries of the 2,900-acre facility. The point of view selected is not one that offers the best description of X-10's purpose; that is, it does not show the main structure in which the conversion of uranium to plutonium occurred. This vantage point, however, offered Westcott the opportunity to use X-10 as a visually menacing tangle of powerlines, barbed wire fences, smoke stacks, mounds of dirt, a water tower, and a sign that declares "Restricted Area" in stark contrast to the delicate vulnerability of the youthful Girl Scouts.

It is important to recognize that, in spite of how inevitable a photograph may appear, it is the product of an infinite number of variables, each of which would profoundly change its outcome and appearance. The eight Girl Scouts depicted range in age up to pre-adolescent. They are wearing their dress uniforms including berets, white scarves, dresses, ankle socks, and buck shoes. At first glance, one logically accepts the presence of these girls in this landscape. This is probably due to the fact that the vertical elements, including the smoke stacks, the powerlines, towers, and water tower, mimic and reflect the verticality of the scouts marching in procession. Upon further consideration, though, logical inconsistencies appear. The ground upon which the Scouts are marching is particularly rough. Note the two girls in the middle of the group who have to turn sideways to traverse the mud rut. If the Scout leader (trailing the girls) had planned this event, she would have dressed the Scouts quite differently. Their dresses, scarves, and buck shoes would have been replaced with appropriate hiking attire.



Girls Scouts March in Front of the X-10 Plant During Their Visit to Oak Ridge National Laboratories, June 9, 1951

The comparison of the delicateness and frailty of the girls against the threatening industrial complex represents a brilliant and sensitive solution to a mundane assignment. The brilliance of this photograph was predicated on the imagination and inventiveness of Ed Westcott. The improbability of this juxtaposition and the convincingness produced defy common expectation. This was not a photograph that was taken; it was a photograph that was made. This distinction is a crucial one to be explained in the photographs of Ed Westcott. Many viewers of his photographs arrive at the conclusion that the interest and success of his work was predicted on the uniqueness of the subject matter and the time. In other words, it is assumed that because of the historical significance of World War II, the development of and the unleashing of the atomic bomb, and the massive effort required in this development that any photograph would have to be successful. There is no truth in this belief. Westcott's photographs are documentary and factual to the extent that any clearly focused and well-exposed photograph bears witness to what was in front of the camera, but an essential component of his photographs did not derive from the subject; his photographs reveal his intelligence and acknowledgement of grace and meaning. In the end, this photograph is about the reconciliation of fear and tenderness.

Photography differs from painting or drawing in that photography allows for an image to be produced of something that already exists as opposed to something that is imagined or invented. On this basis one could draw the conclusion that photography is much less demanding a discipline than painting. But, this point bears closer scrutiny. Each time a photographer releases the shutter of the camera he is saying 'yes'. The moment before, the view to the left or the change in light may have caused him to delay saying 'yes.' One could say 'yes' all the time and to everything, but

this sort of equalitarianism would result in a non-discriminatory meaningless blur. Simple minds with simple ambitions say 'yes' to the predictable—a mechanical smile, an obvious gesture, or an easy notion of beauty. Saying 'yes' to the surprising, the telling, the insightful, and the important is a higher and more demanding art.

What it was that Ed Westcott said 'yes' to in the photograph made at the army post exchange reveals as much about his sensibility as it does about his subject. In response to the question as to the degree to which this scene was choreographed, Ed Westcott responds by saying, "Ninety percent." In other words, this was a posed photograph. Two issues immediately arise once it is known that the photograph is posed. First, posing has a negative connotation in that it implies the act of fabrication, which is contrary to the mission of documenting the truth. Second, posing produces inferior photographic results because natural spontaneity is always preferable to posed.

When Ed Westcott arrived at the store, the people depicted were already there. Therefore, any photograph made of the subject would have been adequate, but this was insufficient for Ed Westcott to say 'yes.' His ambition for the situation was greater. The assignment for this photograph was to depict service personnel making purchases at the post exchange—a complicated situation involving twelve people. These twelve people, if they had been treated indifferently, would have simply become an anonymous group. Ed Westcott was more demanding; he wanted to choreograph a scenario that would describe more fully what purchasing items at the post exchange was about.

The female clerk was already behind the counter, and she was directed to stand facing the three female soldiers. She was instructed to place her left hand on the glass counter and to extend her right arm and hand, as if preparing to accept payment for the goods on the counter top. Westcott himself arranged the jar of Planter's Mixed Nuts, the two Nestle chocolate bars, and the other items. Mimicking this gesture of serving the customer, the male store clerk is similarly extending a box of cigars to a very

grateful sergeant whose hand is reaching into the box. But of all the figures depicted in this photograph, there is one who has been given the heaviest burden to bear: she is in the middle of the photograph with her face almost fully exposed to the camera and her weight resting on her left elbow. If this piece is based on choreography, Ed Westcott has made it entirely clear that the diva of this production is this woman. The grace and ease with which she assumes her physical pose indicates a person who possesses great self-awareness and great self-confidence. The openness of her face and the willingness she demonstrates to have viewers fix the demands of their gaze upon her shows that she is a marquee headliner.

There are certainly other interesting figures in this photograph: the two soldiers on the far left, one with a dollar bill in his hand ready to complete his transaction and the other holding his cigar. It is the woman in the middle, however, who is the lynch pin for this photograph. How did Ed Westcott know that she would be capable of performing in this role? How did he single her out and direct her into her starring performance? How did he know that he would not say 'yes' until the star was shining and the supporting cast was contributing as well? When asked about these questions, Ed Westcott responds demurely, saying that it was simply his job to make a good photograph. I do not believe that he is being falsely modest; his response is to be taken at face value. Speculation about how these complex decisions were made will shed light on the attributes of Westcott that made him an extraordinary photographer.

In addition to demonstrating substantial skill in the craft of photography (this photograph was shot from a high vantage point with a handheld 4 x 5-inch Speed Graphic camera, employing multiple off-camera flash bulbs), what is revealed is a special kind of intelligence. The outcome of this photograph, that it would be so complete and fully descriptive, came about because Ed Westcott had the kind of intelligence to recognize that the precise configuration of gestures and expressions was exactly right. It is important to note that not everyone presented with the same conditions would have made this recognition, for as Walker Evans was fond of stating, "Looking is harder than it looks." The



Army Post Exchange, 1945

configuration to which Westcott said 'yes' was the product of his imagination and intuition, and the photograph demonstrates that the size of his imagination and intuition are considerable. Photographers of limited imagination and intuition make photographs that are not only banal and dull, but much worse, they do not show viewers anything that they already do not know. Ed Westcott's gift is that he would consistently be able to make viewers believe they are witnessing an original and significant event even when depicting commonplace activities.

The most common type of photograph is most likely the portrait. In spite of the fact that it is ubiquitous, it may be argued that it is also the most difficult form of photography. To prove this, all one has to do is to produce the identification card or drivers license from one's wallet to produce a shudder. What is it that makes a successful photographic portrait? To what extent is its success dependent on the subject being photographed? What role does the photographer have in its outcome?

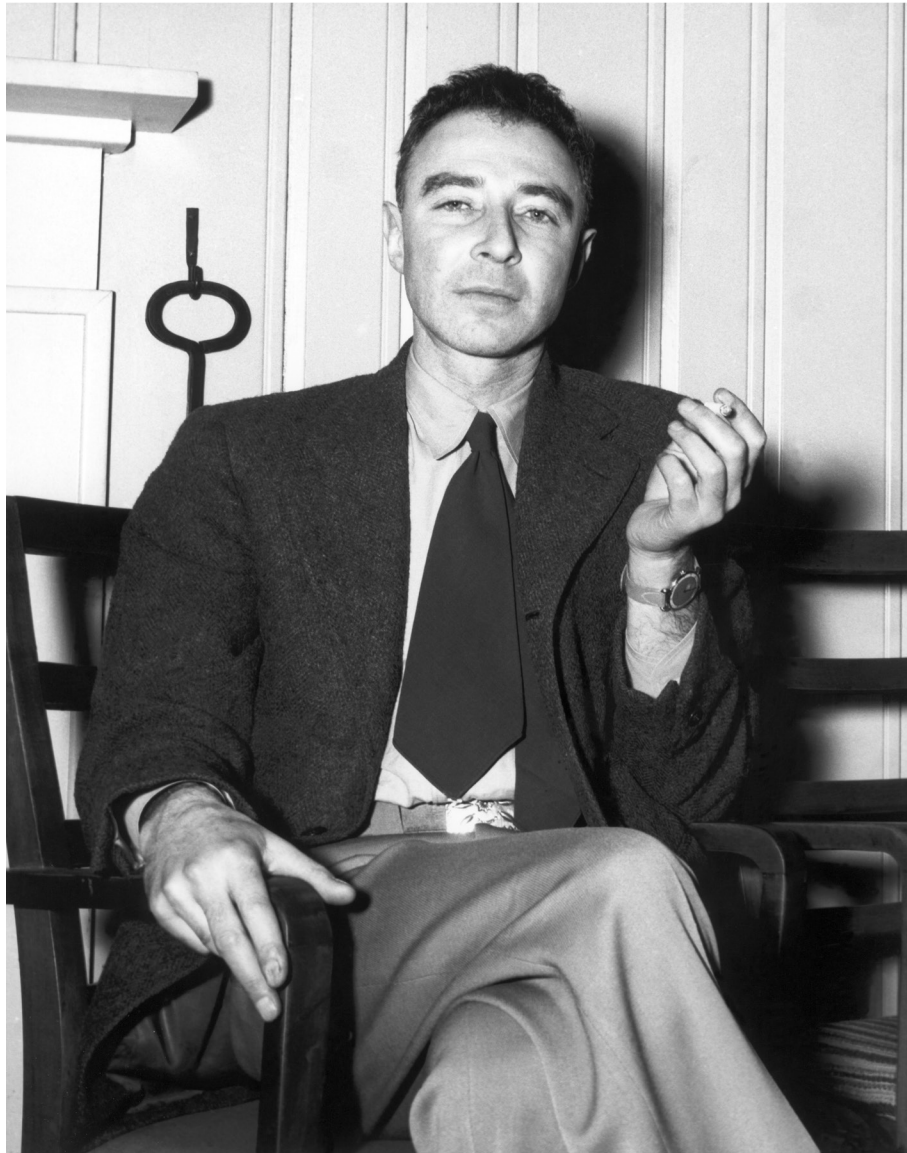
When Ed Westcott was given an assignment to make a portrait, he was given an opportunity to demonstrate several disparate skills. First, he had to convince his subject that what he was about to experience would not be similar to a visit to a doctor's office. The comparison between having one's photograph made and being examined in a doctor's office is apropos. In each case, you are being asked by a third-party individual to expose yourself in the most intimate way for the purpose of analytical scrutiny involving complex equipment and procedures. Many individuals can recount horror stories about being subjected to dreadful experiences in a doctor's examination room. A common thread in these bad experiences is the doctor's demeanor more than the procedure utilized. If a doctor's bedside manner is lacking, a dismal experience is surely result. But, many individuals are surprised and delighted when a procedure that once was feared becomes so painless that it is over before one can grit his or her teeth. A confident, skillful, and empathetic doctor whose bedside manner is polished has the ability to dispel fears and doubts.

When Ed Westcott was asked to make a portrait, it is clear that he relished the occasion to show his photographic bedside manner.

One can imagine that his demeanor and tone must have had a calming effect. One can further imagine that in observing his actions that he instilled confidence because he did everything with a sense of ease. Above all, one can imagine that Ed Westcott presented himself in such a way that he won trust. The spirit of the man, his obvious good will, and his optimism had to have been infectious. People who possess these traits must always find that they are readily accepted by others from all walks of life and in all sorts of different situations. In short, Ed Westcott could win one over simply by being himself.

Being won over is necessary, but insufficient, to ensure a successful portrait. The photographer is at that point responsible for almost everything else that will transpire during the photographic session. Once the subject has agreed to be photographed, he is expected to ask the following question: "What do you want me to do?" The spotlight then shifts to the photographer who had better be prepared to respond to the question. Unacceptable answers would be to tell the subject to be himself, to act natural, or to pretend the photographer was not present. These answers do not work because telling someone to be himself implies that he is not himself presently and only causes him to become more self-conscious and anxious. Similarly, telling the subject to act naturally implies he is unnatural, and it is not possible to pretend that the photographer is not there. The photographer has to answer the question authoritatively. He has to be able to issue directions to the subject. He has to first fulfill the role of a director before he can become a photographer.

Where does one learn how to direct absent experience in the theater? If the direction given is inadequate, the resulting portrait will make the subject look awkward and will forfeit any chance of revealing anything about the subject. The art of direction is the art of being able to understand the nuance of the subtlest change in glance or the slightest physical movement resulting in a modulation of expression or shift in weight. The human body is capable of an infinite number of different physical permutations. Each of these can connote meaning or just as easily be random or clumsy. The photographer may ask the subject to look this way or that, lean this way or that, but without the ability to judge and



Dr. J. Robert Oppenheimer, 1945

analyze the consequences of the direction, there will be no chance that the photograph will become anything other than a snapshot or a school yearbook portrait.

In the famous portrait of the physicist Dr. J. Robert Oppenheimer made in 1944, Ed Westcott has been able to convey a sense of weight and consequence. He accomplished this not by asking Oppenheimer to resonate importance—he was a scientist, not an actor. Instead he asked him to sit in the chair slightly askance and to lean forward a small amount. With each direction, Westcott had to instantly determine if what he had asked for was what he wanted. If it was not, he would have to immediately issue a mid-course correction. Oppenheimer was told how to position his arms and what to do with his hands. In fact, the cigarette he is holding with his left hand was given to him by Westcott himself. The key to this wonderful photograph is in the combination of the low vantage point selected by Westcott and the slightest lift of Oppenheimer's chin. The low vantage point makes the viewer physically look up at the man. When one looks up at a man, one acknowledges the hierarchy of his status. When one looks up even further, one is challenged to explain where or toward what Oppenheimer's glance is directed. When one carefully examines Oppenheimer's eyes, one discovers he is not looking at anything that is in the room within which he sits. In fact, he is not looking at anything at all. What he is looking at is something very distant and something only he can see.

The photograph titled *Cart*, *Associated Press*, *September 29, 1945* captures a man operating communications equipment and serves as an example of how the imagination and the will of the photographer are more important than the momentary comfort of the subject. In order to understand the paradox of this photograph, emulate the physical stance of the subject. Lean way over, almost to the point of losing balance; turn your



Cart, Associated Press, September 29, 1945

shoulders, twist your torso, and rest the majority of your weight on one elbow. Now tilt your head forward and simultaneously rotate it on its axis toward your right shoulder. Now extend your right arm. Place your index finger on the button, while keeping that elbow tucked against your ribs.

This is a demanding pose to hold, and its difficulty belies how beautifully poised it looks in the photograph. This is a particularly assertive photograph made by Westcott. The decisions he made and the willfulness with which he implemented these decisions are very visible. This photograph contains marvelous aspects such as the aggressive positioning and cropping of the man, his tie flying over his shoulder, his reflection in the chrome cylinder directly below his elbow, the ballet-like beauty of the flowing cables, the picture of the young child rising up out of the carriage of the typewriter, and last but not least, the portrait of the American photographer Edward Weston, who Westcott met and photographed, holding onto one of his own photographs. The decisions implemented in the making of this photograph serve as an announcement to the world that the photographer was operating at the top of his game.

When a professional photographer is given a routine assignment, a routine result is to be expected. Ed Westcott did not know how to make a routine photograph. His personal standards would allow only his best effort. In the assignment he was given to document the construction progress of the recreation hall and library, he could have reflexively produced a perfectly adequate "real estate" style photograph—one that would give you a description of the physical attributes of the structure. Ed Westcott, however, saw this as an opportunity to challenge himself for the purpose of exceeding expectations. The vantage point he chose, an oblique and low point of view, is interesting. A less ambitious photographer would have allowed the architecture to dictate a simple centered frontal camera location.

The reason why Ed Westcott stood to the side was two-fold. One, he was acknowledging the direction from which the sun was striking the recreation hall and library. Showing the shadowed sides of the building places greater emphasis on the facades

facing the sun. Second, this positioning allowed him to introduce the three figures into his composition. Each of the three figures has been strategically located and precisely posed. The middle figure, caught at the moment where a stride begins, eloquently describes the steepness of the hill upon which the structure is being built. The figures on either side are similarly posed in mid-stride. Their function is to provide a sense of scale so we know more about the physical aspects of the building, but these figures also serve a surprising and clever visual function. They are tiny beacons of light contrasted against darker fields. They bring a measure of visual spiciness to an otherwise bland piece. If the viewer of this photograph were to cover up one of the figures with his fingertip, one would see how the flavor of the experience would diminish.

Among the situations Ed Westcott liked to photograph most were crowd scenes. The excitement of clusters of people swept away by a common emotion was of great interest to him. Photographs of crowds, although related to photographs of single individuals, demand very different abilities of the photographer. The photographer is no longer able to function in the role of a director; he cannot intervene and steer the subject into a more desired configuration. He becomes an observer whose controls are limited to where he stands, what he includes in the frame, and when he releases the shutter. The greatest difference between making a photograph of an individual, as compared to making a photograph of a crowd, is that it is not possible to simultaneously look at and evaluate each figure. If the photographer cannot be cognizant of all that is happening, what factors must be in place before he says 'yes' and releases the shutter?

In the famous photograph of the people thrusting their Knoxville Journals with the headline "War Ends," Ed Westcott said 'yes' at precisely the best instant. The effervescence and elation of the moment are depicted with force and convincingness. It is insightful to examine this photograph more carefully. Look at the boy in the middle of the photograph. Of all the figures portrayed in this piece, it is clear that he deserves the premium location within the frame: the very center of the photograph. Of all the figures, the suspension of his animation is easily the most dynamic.



Oak Ridge Recreation Hall and Library, 1944



'War Ends,' VJ Day, Jackson Square, Oak Ridge, August 14, 1945

The extension of his arm holding the newspaper, the turn of his torso, the lifting of his left knee, the craning of his neck, and the presentation of his face to the camera make us think of him as if he were suspended by strings operated by a puppeteer.

The primary figures, those closest to the camera, in this photograph are all wonderful. But the faces and the expressions of those in the background are equally interesting. Directly above this boy is a marvelous head of an older man. This head is the apex of a group of diagonally arrayed heads that are aligned toward a vanishing point. There are two fantastic characters in this photograph who are barely visible. The viewer has to make an effort to find them. To do so, first locate the little girl directly above the letter "S" of the headline in the newspaper on the far left edge of the photograph. Now look at the two heads flanking the girl. The one over her right shoulder is a fantastic drawing of a one-eyed skeptic who serves as a counterpoint to the enthusiasm of the crowd. The other who is over her left shoulder is an utterly original and frightening cartoon-like character. His heavy brows and mustache look as if they had just been glued in place; his cross-eyed, stunned stare make the viewer wonder why it is that he does not get it as does everyone else.

Did Ed Westcott see these details? To what extent do we attribute the success of this photograph to serendipity? The success of any photograph will always be due in part to luck. Photographers will never be able to lay claim to the entirety of the success of a piece as can a painter. Luck, though, is a very interesting quality. Not everyone is equally lucky; some are luckier than others. Luck is not based solely on statistical probability. Luck favors those who are prepared, diligent, cognizant, ambitious, and daring. Luck especially favors those who possess intuition. Ed Westcott has as much intuitive ability as he does the ability to direct. This intuition, when combined with his willingness to assume risk, gives rise to the successes he experienced consistently when he photographed crowds. When standing in front of a crowd, he knew when to say 'yes' because it was for him an instinctive reflex reaction.

Successful photographers must possess certain attributes; they must be able to see clearly, they must understand what it is

they see, they must be able to enhance what they see through direction or intuition, and they must have mastery over their medium. Ed Westcott certainly embodies all these prerequisites. In addition, he brought with him one other quality: heart. Much of the world can be defined as being categorized by reason and logic, but beyond reason and logic, there are matters of the heart. However important facts may be, they have no meaning until they become the province of the heart.

Ed Westcott's photography was guided by his heart. When he said 'yes,' it was an affirmation of his heart. In this marvelous photograph, *Elementary School Art Class, 1944*, there is depicted an uncanny orderliness. At each table, on each chair, at each desk, and in front of the easel, the ideal activity is occurring in its most perfect form. The young students could not engage in reading any better, they could not draw or paint any better, and they could not have paid attention to their teacher any better than in this photograph.

If Ed Westcott's goal was to produce a photograph that could be used in a textbook to describe an ideal classroom, this photograph far exceeds those requirements. This photograph, if made by a lesser photographer, would have been sterile and mechanical. It would have been nothing more than an illustration in an instruction manual. This world that has been created by Ed Westcott is not the world that individuals know. Ask any teacher of this age group, and he or she will tell you that chaos, not order, is the rule. What makes this photograph so terrific is that one knows with absolute certainty that each of the children was thought of and dealt with from a source of tender affection and knowledge.

One knows that the photographer adored the little girl wearing the smock who applies paint to a wild image. One knows that the photographer was delighted when he saw how the curled lock of hair of the girl at the far right gracefully falls in front of her shoulder. One knows that, after the exposure, the photographer would want to immediately give a hug to the shirtless little boy wearing overalls, to the right of the easel, who is doing his very best to demonstrate resolute concentration. Ed Westcott has in this photograph created a world that is perfect. This world is



Elementary School Art Class, 1944



Marbles, May 16, 1945

inhabited by perfect beings engaged in ideal behavior. It is a world based on harmony and order. It is a world so full of hope that it is about to burst. It is how Ed Westcott sees the world.

When asked if he had any regrets about the photography he produced in Oak Ridge, Ed Westcott states that he wished he had taken more photographs of "ordinary, day-to-day life." Westcott's photographs can be roughly divided into two categories: first are those photographs that describe the efforts involved in the developing the atomic bomb, and second are those photographs that describe the normal social, domestic, and recreational aspects of living within the fences that surrounded the secretive project.

When a photographer is given the freedom to be his own client—to work on his assignments—a great deal is revealed. What one chooses to stand in front of and how one decides to describe it are very telling. Ed Westcott did not have to make this photograph; he wanted to make it. What results is a photograph that describes the game of marbles so fully there is no need for additional photographs, captions, explanations, embellishments, or anecdotal reference. Each of the three boys on the right have been posed in such a way to emphatically remind one of how, among the infinite ways that our skeletal and muscular structure can be arranged, that certain ways are compellingly beautiful. An artist who engages in figure drawing or making life-sculpture would be delighted in working from any one of these three boys. The ability to imagine one of these poses would speak glowingly of the imagination and sensitivity of the photographer, but to have, in the same piece, invented these three progressively different poses defies belief.

These three boys and their marbles in the foreground would have more than sufficed in the making of a good photograph, but Ed Westcott's ambitiousness was not yet satisfied. He invited the older boy, who originally was not part of the game, to pose. This decision accomplishes two goals. First, his presence as an older more experienced boy further convinces us that this game of marbles is very serious and, therefore, worthy of our attention. Second, his positioning completes the visual composition by

providing ballast to weigh against the other boys and the marbles. The height of the camera chosen by Ed Westcott was motivated by his desire to have the older boy's dark hair become an extension of the line of trees in the background.

Ed Westcott, when working for himself, often selected children as his subject. It was through children that he would be able to reveal his knowledge, affection, and compassion for the condition of childhood. Too many adults lump all children and their activities into a generic category. It takes an expert to appreciate the subtle distinctions. In this photograph, viewers are being taught a lesson about the activity of play. When adults engage in play, they do so for reasons of escape and relaxation. When children play, they engage in the most meaningful and important activity imaginable—they play for all the marbles.

Photographs have the power to persuade one into believing that what is depicted is the same as what is experienced and, consequently, what is remembered. This, however, is not always the case. Since photographs traffic in reality, individuals are often seduced into believing that how a photographer sees and understands a subject is the same from everyone's vantage point. The Oak Ridge photographs made by Ed Westcott from 1942 to 1946 do far more than document an era; they shape and influence memories of World War II's "secret city." What one remembers, because of the enduring power of Ed Westcott's photographs, is a place and a time that was not only important historically but personally heartening. What one remembers is not only the fact but also the inspiration



'The Beginning of the End,' Grove Theater, 1947



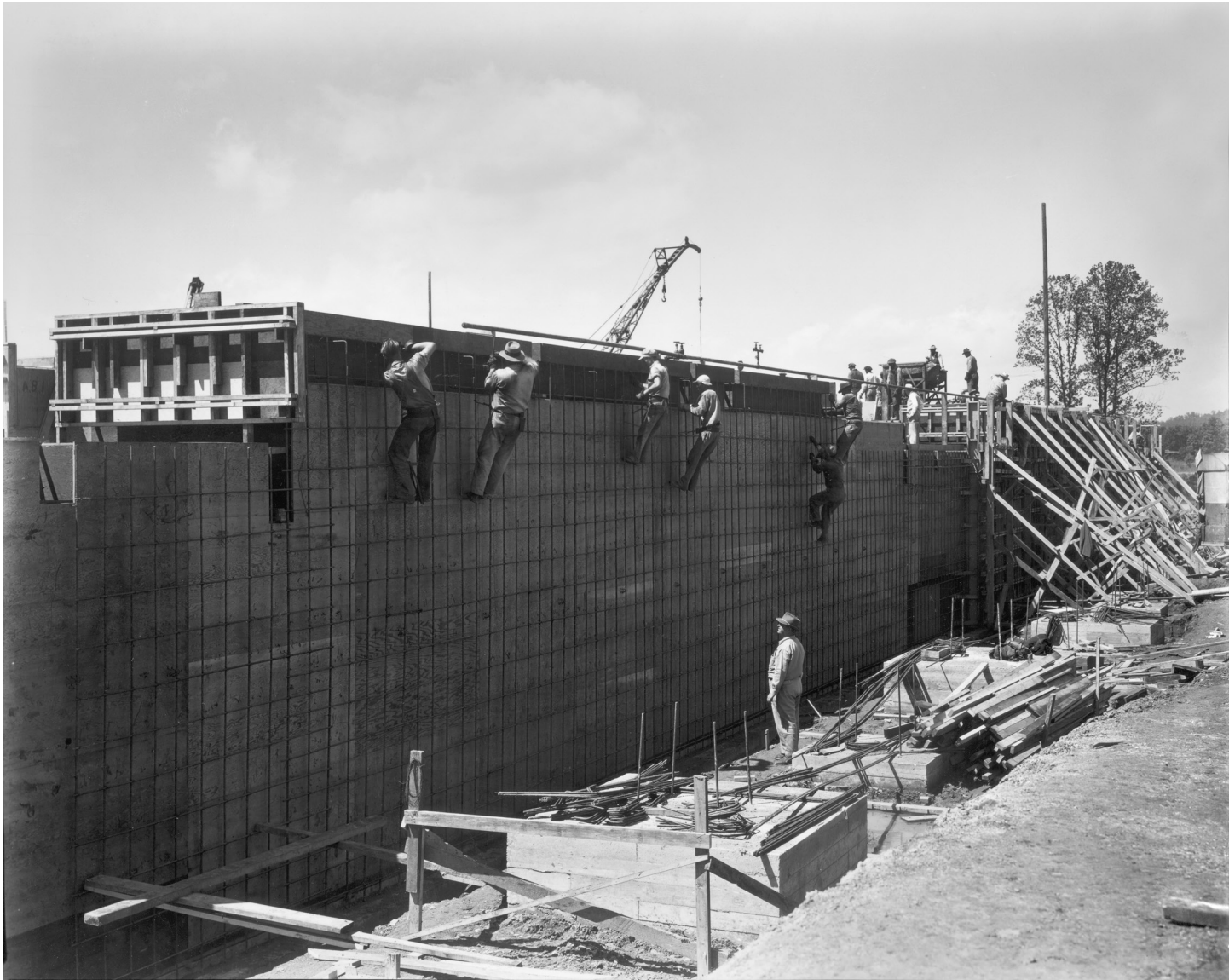
James Edward Westcott,

Through the Lens of Ed Westcott

There are numerous publications that document the history of the Oak Ridge and the Manhattan Project. It is not, however, the intention of this catalogue to duplicate these works; rather, the following photographs are intended to portray the personal vision of Ed Westcott. His photographs straddle the nebulous line between history and experience. Although both are artifacts dealing with the past, history is the record of facts measured against the baseline of time, whereas experience is the effect of memory measured by the change of our lives. Ed Westcott's photographs are his gift to experiential history.



Early Construction of the K-25 Plant with One of the Original Oak Ridge-area Houses in the Foreground, 1942



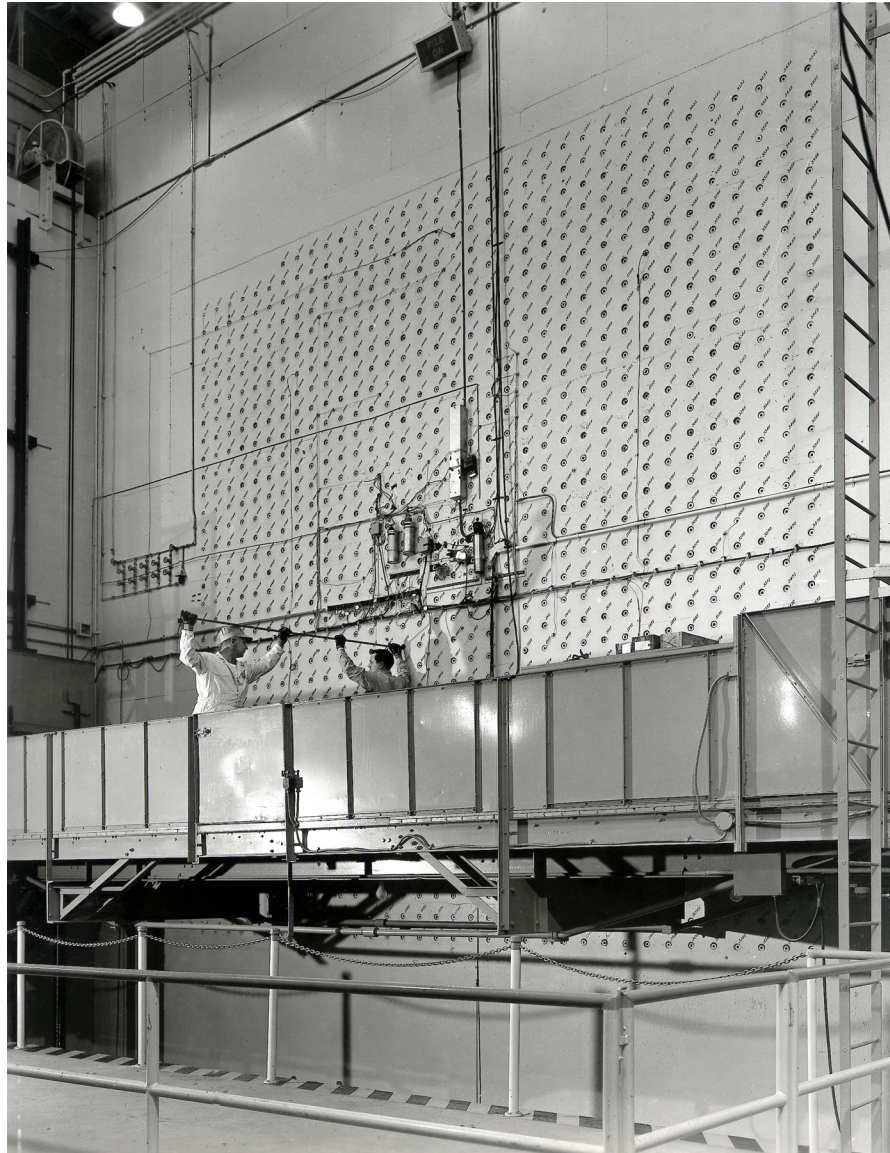
Early Construction at the K-25 Plant, 1943



Brigadier General Leslie R. Groves Speaking to Service Personnel, August 29, 1945



Shift Change at the Y-12 Plant, August 11, 1945



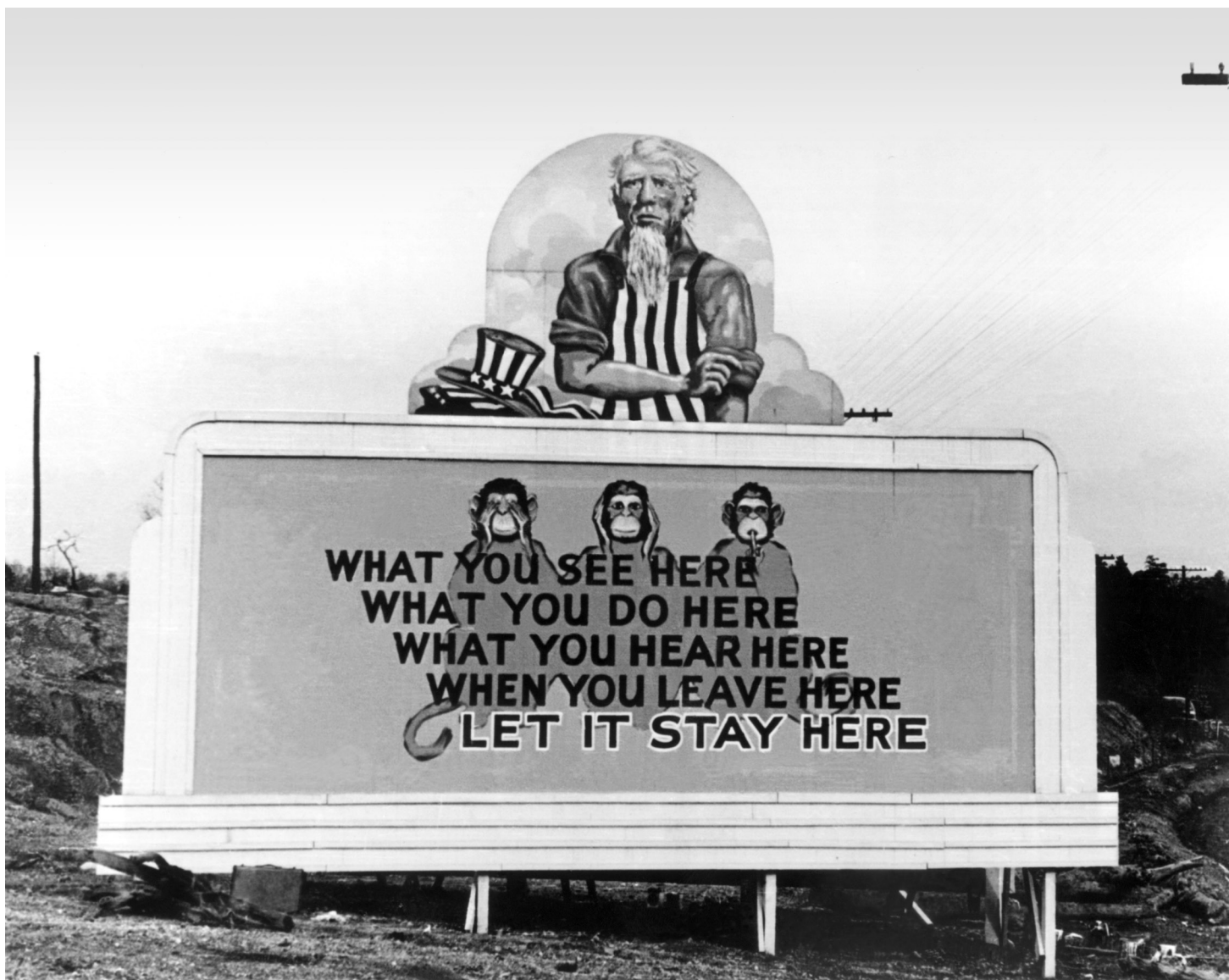
*Graphite Reactor East Landing, Oak Ridge National Laboratories,
January 2, 1952*



Close-up of Welding in the Fabrication Shop, 1944



August 1947



Billboard Posted in Oak Ridge, December 31, 1943



Billboard Posted in Oak Ridge, January 21, 1944



Air Medal and Oak Leaf Cluster Being Awarded to Sergeant Jasper J. Richardson; Mrs. Richardson, a Tennessee Eastman Company Employee, Receives the Award from Lieutenant James E. Thornton, United States Army Air Force, June 7, 1945



View From Water Tower of Housing in Oak Ridge, 1945



Civil Engineering Works Housing: Oak Ridge 'Flat Tops,' 1944



Chicken Farm, February 22, 1945





Construction Equipment, August 8, 1945



Garbage Collection, July 1945



Jefferson High School Band Fundraiser, 1947



Security, 1945



Women Army Corps Members in the Day Room of Their Dormitory, 1946



Army Post Exchange, September 1945



Bill Pollock, 1945



African-American Teen Dance, 1945



Coal Yard, January 13, 1945



Privies at the X-10 Plant, 1943



Worker at the Gaseous Diffusion Plant, 1945



Control Room Panels with Operators, 1944



Easter Egg Hunt on the Lawn of the Atomic Energy Commission Building, April 12, 1966



Civil Engineering Works Type Playground, 1944



Chapel on the Hill, First Church Built in Oak Ridge Built by the Army



First Communion at the Catholic Church, June 3, 1943



Civil Engineering Works Housing: African-American Hutments, August 10, 1945



Girl Scouts Tea, May 29, 1948



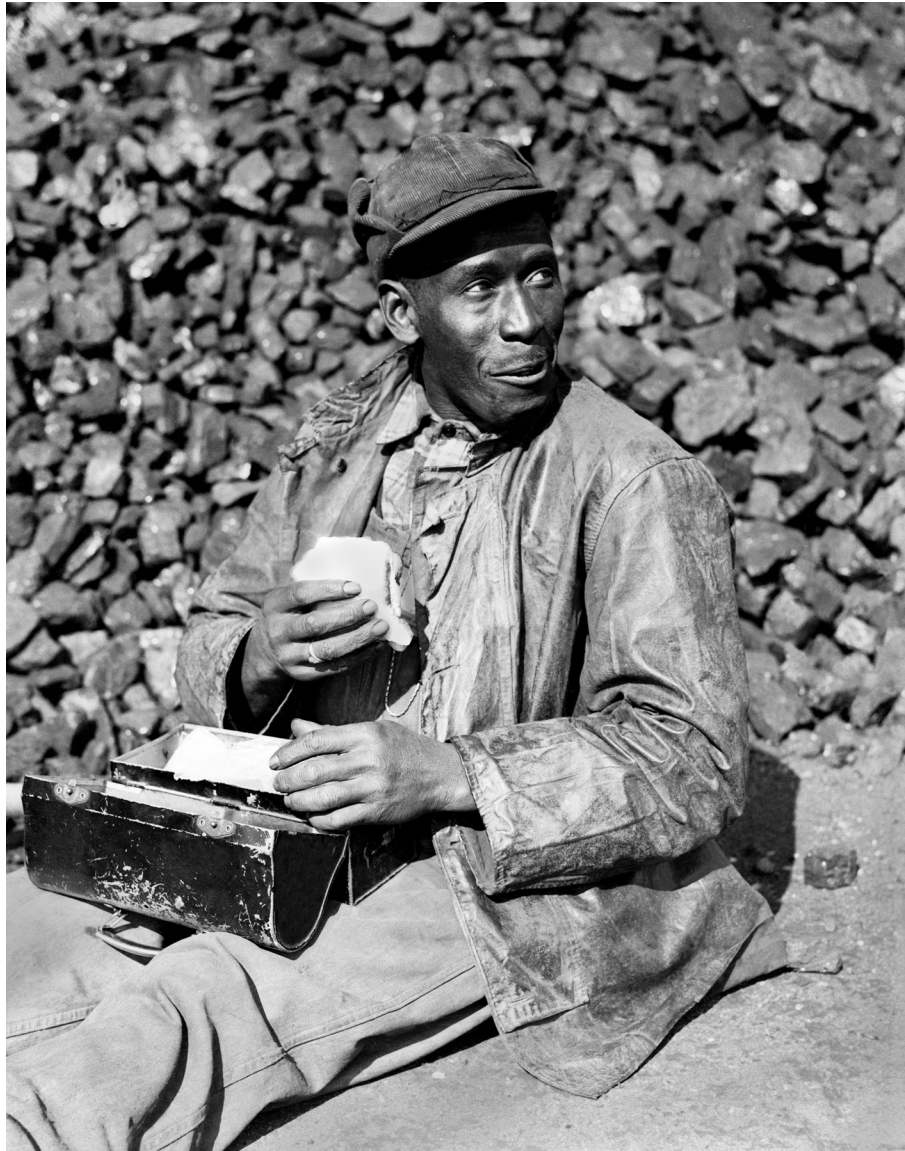
Mr. and Mrs. Tirpak and Their Dogs, 1947



Link Trainer, September 1945



Civil Engineering Works Housing: Hutment Interior, February 1945



Coal Worker, Coal Yard, 1945



Oak Ridge High School Football Practice, 1944





Football Team Initiation, December 28, 1945



Miniature Golf Course, Jefferson Center, April 26, 1945



Kiddy Club, Midtwon Recreation Hall, January 6, 1945





Boy Scouts (Henry King, Bill Trimby, Bob Lindsay), June 28, 1946



'War Ends,' VJ Day, Jackson Square, Oak Ridge, August 14, 1945

Oak Ridge Photographers: A Legacy

Portrait of James Edward Westcott, taken on April 27, 2005 by Lynn Freeny, current Director of Photography and Video Services for the United States Department of Energy, who also wrote the following:

As a young photographer working at Oak Ridge National Laboratory in the early-1980s, the workload in the photography office had become so demanding that the decision was made to hire someone part-time to do darkroom work. My negatives that were being printed by this part-time person looked amazing, better than when I was printing them myself. I wanted to know: "Who is this person?" It was none other than Ed Westcott.

Since that time, Ed and I have had a long friendship with photography as our bond. I am very grateful to Ed for making photography an important part of Oak Ridge. His masterful skills as a photographer have paved the way for other photographers in Oak Ridge. In the history of this job, there have only been three photographers: myself, Frank Hoffman, and Ed Westcott.



Growing Up with Ed Westcott

As a kid growing up in the “secret city” in the early-1940s and 1950s, life in the Westcott household was never dull or routine. Dad’s work as the Manhattan Project photographer didn’t stop once he reached home, and it seemed to us that he always had a camera in his hand. I received my first introduction to the photographic darkroom and photographic chemicals at about the age of eight when Dad would give me a sheet of photographic paper, so I could place my tiny hand on it while Dad turned the lights on and off, developing the sheet of photo paper into a vignette of my hand.

At about the age of ten, Dad turned all the neighborhood kids into silent film actors by setting up an old hand crank 16mm camera and having all of the kids lift a large empty box off of a wagon so we could climb through the bottom of the box while it was lying on it’s side, giving the appearance of hundreds of kids coming from inside the box. While my brothers, sister, and I were all too young to appreciate the significance of his historical photographs of Oak Ridge during our youth, we have all been blessed with the thousands of memories that he created over the past 64 years, both at work and at home.

James Edward Westcott, Jr., May 2, 2005

Contributors to the Catalogue

Baldwin Lee:

Baldwin Lee is Professor of Art in the School of Art at the University of Tennessee in Knoxville. He has a Bachelors degree from the Massachusetts Institute of Technology, where he studied photography under Minor White. He also holds a Masters degree from Yale University, where he studied under Walker Evans. Lee has been the recipient of a John Simon Guggenheim Memorial Fellowship and two National Endowment for the Arts Fellowships.

Sam Yates:

Sam Yates is Director and Curator of the Ewing Gallery of Art and Architecture and the Downtown Gallery at the University of Tennessee. During his professional career, he has originated numerous acclaimed exhibitions that have been displayed at major universities and museums throughout the United States. Yates has also been recognized for his achievements as an exhibit design consultant for regional historical museums. He received his Masters degree from the University of North Carolina-Greensboro.

Bibliography

American Museum of Science and Energy

Stephen H. Stow, Director
James Comish, Program Manager

The University of Tennessee

Dr. John D. Petersen, President
Dr. Loren Crabtree, Chancellor

College of Arts and Sciences

Dr. Harry McSween, Interim Dean
Paul Lee, Director, School of Art

Ewing Gallery

Sam Yates, Director
Cindy Spangler, Collections Manager
Adam Alfrey, Exhibitions Coordinator

Sincere gratitude is expressed to Mike C. Berry, Manager of the Downtown Gallery, for his assistance in matting and framing the photographs for exhibition.