


THE LONG ISLAND HISTORICAL JOURNAL



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Photograph © Arnold Newman.

**The Long Island
Historical
Journal**



” Starting from fish-shape Paumanok where I was born...”

Walt Whitman

Spring 1991

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Cover: Jackson Pollock at work on *Number 6, 1949*, on the floor of the barn studio. Photograph © Arnold Newman.

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EDITORIAL COMMENT

This issue completes our third year of analysis of Long Island as America. As we say thank you to every subscriber we also remind you that your continued support is vital. When you receive our renewal brochure, please do the right thing once again—this journal depends on your support.

The current edition offers another assortment of articles by distinguished scholars. Helen A. Harrison examines the work and life of Jackson Pollock; Robert P. Crease begins a series on Brookhaven National Laboratory; Quashawam, the daughter of Wyandanch, is the subject of a biographical essay by Lara M. Strong and Selcuk Karaba; Robert J. Hefner recounts the history of Montauk Point Lighthouse; Long Island goes to the auto races in Geoffrey L. Rossano's version of the Vanderbilt Cup controversy of 1904; and Anthony Cucchiara and Sandra Roff review the origin and growth of the Pratt Institute Library School.

We resume our "State of the Island" department with Lee E. Koppelman's cogent study of MAGLEV, a technology of transport with enormous potential for our economy; at the same time, we begin "Lost and Found," a feature aimed at reviving obscure but significant books about Long Island, with John A. Strong's examination of two forgotten novels, and Wilbur R. Miller's summary of a Long Island Civil War soldier's account of Andersonville and other prisons.

Once more we present an informative review section, with two longer-than-usual pieces on Long Island newspapers—a topic not covered before. Peter B. Boody, the editor of the *Southampton Press*, takes an East-End's critical look at a book about *Newsday*, and Barbara E. Austen, the curator of the Suffolk County Historical Society, evaluates a famous weekly, the *East Hampton Star*.

As we prepare for Volume Four—Fall 1991 and Spring 1992—we pledge to maintain our high standards of style, substance, and scholarship. We solicit your articles, reviews, suggestions, and, good friends and readers, your all-important subscriptions. With your help, we will shed new light on Long Island's past and help to mold its future.

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An interdisciplinary membership group of scholars, teachers, librarians, archivists, historians, and others interested in the study of Long Island and its heritage, invites readers of the *Long Island Historical Journal* to its dinner-lecture meetings and site visits.

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ON THE FLOOR

By Helen A. Harrison

...the threads of communication between artist and spectator are so very tenuous that the utmost attention is required to get the message through.¹

In *Let Us Now Praise Famous Men*, James Agee gives literary form to the subjective impact and immediacy of first-person observation. He characterizes the work as an “effort to recognize the stature of a portion of imagined existence, and to contrive techniques proper to its recording, communication, analysis, and defense.”² Those are my aims also in this examination of the paint-spattered floor in the former studio of the Abstract Expressionist artist Jackson Pollock (1912-1956). The studio now is part of the Pollock-Krasner House and Study Center, operated since 1988 as a historic site and research facility under the aegis of the Stony Brook Foundation Inc., a non-profit affiliate of the State University of New York at Stony Brook.

Agee expressed a profound mistrust of art, and especially of art that gained official acceptance, “the one unmistakable symptom that salvation is beaten again.”³ As an antidote to complacency, he suggested listening to a recording of a great symphony played at extreme volume, and concentrating on it totally. “You won’t hear it nicely,” he warned. “If it hurts you, be glad of it. As near as you will ever get, you are inside the music; not only inside it, you are it; your body is no longer your shape and substance, it is the shape and substance of the music.”⁴

This piercing focus is the motivation and chief strength of Agee’s complex and deeply empirical book, which recounts his 1936 visit to the homes of three tenant farm families in Alabama. His primary tool for “recording, communication, analysis, and defense” is description, but to call the work descriptive would be misleading. In detailing the material character of his surroundings—the environment and its inhabitants—Agee found a literary equivalent to turning up the volume. For him, the perception and narration of inescapable physical reality liberated his dependence on superficiality, enabling him to probe the spiritual dimensions of actuality. Or so he hoped.

Apparently it burdened Agee that his language was less concrete than his subjects; he spent a great many words on the recording part of his effort. But his purportedly artless record—“above all else: in God’s name don’t think of it as Art”⁵—is full of reaction, response, and personal interpretation. No matter how dedicated he was to factual rendition and

objectivity, he failed magnificently to live up to that self-imposed but sterile ideal. His failure is the inspiration for this essay.

I use Agee's method as a model because its advantages and limitations suit it to my purpose. The primary benefit is Agee's humility in the face of his subject. He tried to purge any tendency toward arrogance in his approach to the hermetic culture he wrote about, not by play-acting as a sharecropper, pretending to kinship or adopting a false camaraderie, but by respecting that culture's otherness. Similarly, I do not aspire to the status of a surrogate for Pollock. The mind and heart of the artist are as closed to the outsider, no matter how sympathetic, as were the farmers' to Agee. In examining their reality, as deeply as he was able to perceive it, Agee explored his own truth; this revelation is the function and value of his work.⁶

Agee also recognized that to write about a subject, however intensely felt, is to distance oneself, and by extension, the reader. Words are by nature approximations, and another arrogance he shunned was the implication that they can substitute for genuine experience. But here is where I differ from Agee's aim. He conjures his images knowing that his readers are unlikely ever to invade the life of a tenant family, and thus measure his observations against their own; I intend my words to provoke the readers' desire to experience Pollock's studio for themselves.

THE HOMESTEAD

The building, an adapted barn on what originally was a small homestead established in the late nineteenth century, is in the hamlet of The Springs, some five miles north of East Hampton village.⁷ Historically, the community focused on agriculture and fishing, but since World War II there has been an influx of homeowners whom the local people describe as "from away." Many artists have found to their liking the quiet rural atmosphere, and the area is increasingly popular with seasonal residents from the New York metropolitan area.

The Springs still retains a measure of the unpretentiousness that attracted Pollock and his wife, the painter Lee Krasner, to buy their property late in 1945. The story of their relocation from Greenwich Village and its effect on their lives and art is told in several books, and does not warrant repetition here.⁸ It is enough to say that the move was decisive to their careers. The new home offered them isolation from the pressures of the New York art world, where Pollock, an alcoholic subject to prolonged fits of depression, often felt ill at ease, alienated, and competitive. It also brought both artists into constant contact with the natural environment, which provided them with inspiration for their work.

The newly-married Pollock and Krasner took title to the property on 5 November 1945. Although they were able to invite the family for Thanksgiving dinner, their first winter was a difficult time of transition, described by Krasner, a lifelong city dweller, as "hell, to put it mildly, for me."⁹ Pollock, raised on small farms in Arizona and California, had

lived in Manhattan since 1930, and characterized himself as a "city slicker" who found the rigors of country living "a little tuff."¹⁰ Nevertheless, their decision to purchase the property (with a \$2,000 loan from Pollock's dealer, Peggy Guggenheim, and a \$3,000 mortgage) signaled a commitment to break off daily contact with the urban art world.

Hardships the couple encountered were offset by the potential, if not immediate, benefits. Clearly, the move was not so much to the country as it was away from the city, where Pollock's drinking, bouts of depression, and desperate financial circumstances threatened his potential as an artist and perhaps even his survival. Krasner, with whom he had lived since early 1942, was dedicated to furthering his development, and must have believed that the initial discomforts of roughing it in The Springs were outweighed by the necessity of removing Pollock from a damaging and possibly destructive milieu.¹¹

After struggling through their first winter with only coal stoves for heat, and with primitive plumbing, the couple began to modify the property to serve their needs as artists. At first, both worked in the house—Krasner in the front parlor and Pollock upstairs in the small but well-lighted north bedroom—but he earmarked the barn for his studio. Krasner, whose career, by her own choice, was secondary to that of her husband, took over the bedroom studio when Pollock relocated his working quarters to the barn.

THE BARN

After the rigors of winter subsided, Pollock made plans to move the barn, which was dragged into its present position with the help of a local haulseiner's winch. Although modest in size when compared to its spacious New England counterparts, the barn is large in relation to the bedroom. The main work area is a little more than twenty-one feet square. The structure, which also comprises a fourteen- by twenty-foot storage area, originally stood directly behind the house, where it blocked the pastoral view across the fields and salt marsh to Accabonac Creek. A measure of the artists' responsiveness to nature is their decision to open up the vista by moving the building before converting it for use as a studio. Pollock reportedly spent the spring of 1946 sorting through the old machinery and junk it housed. In the early summer, he enlisted the help of friends to drag it to its present location several yards from the original foundation, which is still visible amid a tangle of poison ivy, honeysuckle, and wild grapevine.¹² A new foundation was laid up, and a wooden floor installed to replace the barn's concrete slab, which Pollock later used as an outdoor painting platform.¹³ No effort was made to insulate the walls, through which many chinks admitted daylight and the other elements.

Pollock oriented the gable end to the north, and installed a large, high window, giving the interior a vital source of even, unshadowed, natural light. An existing sash window opened to the easterly view, but was often covered by finished canvases and works in progress stacked against the

wall. Whatever inspiration he took from the landscape, Pollock did not work directly from nature; his often-quoted statement, "I *am* nature," expresses a feeling of oneness with the primal forces underlying nature's generative power, rather than a dependence on nature-derived imagery.¹⁴

IN THE BARN

Pollock worked primarily in this studio from the late summer of 1946 until his death in an automobile accident on 11 August 1956. Almost as soon as he moved in, he began to explore the so-called drip technique with which he executed his most celebrated canvases, including *Reflection of the Big Dipper*, 1947 (Stedelijk Museum, Amsterdam); *Number 1A*, 1948 (Museum of Modern Art, New York); *Autumn Rhythm: Number 30*, 1950 (Metropolitan Museum of Art, New York); *One: Number 31*, 1950 (Museum of Modern Art, New York); and *Blue Poles: Number 11*, 1952 (Australian National Gallery, Canberra), among many others. He described this method in a 1947 statement for the only issue of the magazine *possibilities*:

My painting does not come from the easel.... On the floor I am more at ease. I feel nearer, more a part of the painting, since that way I can walk around it, work from all four sides and literally be *in* the painting.... I continue to get further away from the usual painter's tools such as easel, palette, brushes, etc. I prefer sticks, trowels, knives and dripping fluid paint or a heavy impasto with sand, broken glass and other foreign matter added.¹⁵

A 1950 film of Pollock painting, made by Hans Namuth and Paul Falkenberg, and Namuth's famous series of still photographs document the extraordinary process by which the artist generated pictorial imagery, the source of which he believed to be the unconscious mind.¹⁶ Seldom touching the canvas in the conventional way, he allowed the inherent fluidity of the commercial enamel paint he favored to dictate the character of the marks made by drizzling, flicking, trailing, or pouring it onto the surface. Yet these effects are by no means random or accidental. Rather, they exploit the fundamental qualities of the material as manipulated by Pollock, to whom paint was a medium in more than that term's technical meaning. It serves as the vehicle that carries color and form in the tangible sense, and also as the agent through which the artist's intangible energy is transferred from himself to his work. Because Pollock's process hinged on the action of the paint between the time it left the brush, stick, or other applicator in his hand and landed on the canvas, the mediating role of the material was a paramount concern.

Whether applied with slow, deliberate movements or with quick, vigorous thrusts, the paint moved independently of the artist, however briefly, during the interval when it traveled under the influence of gravity. Thus every stroke, no matter how calculated, to some degree relinquished Pollock's authority to the dictates of the material. Few artists would accept

this condition because much of their training involves learning to master this or that medium, with the aim of subduing its inherent characteristics and transforming it into the appearance of something else, as when oil paint is made to imitate foliage, crockery, or human skin. In Pollock's case, he rejected his early grounding in traditional methods in favor of direct confrontation with the material on its own terms. Nevertheless, his insistence that "technique is just a means of arriving at a statement"¹⁷ indicates that he was far from naively enamored of house paint as a cheap, convenient substitute for artists' colors.

Pollock could have applied whatever paint he used to his canvases in the time-honored way—indeed, during most of his early career and again in his last years he painted traditionally on an upright canvas with standard brushes. Apart from a few proto-drip paintings and the unrecorded projects he may have undertaken during his association with the Siqueiros experimental workshop in New York, where paint-flinging sessions and other iconoclastic activities have been described by fellow students,¹⁸ Pollock's surviving paintings of the 1930s and early 1940s are technically conventional. Never giving up oils altogether, he combined tube colors with enamels throughout his "drip" period. But if he limited use of oil paints for economic reasons, why did he virtually abandon the brush as an applicator?

An answer is suggested by his evident rejection of the notion that a painting is intended to represent a pre-existing visual phenomenon. According to this orthodoxy, the paint is the vehicle by which the thing observed is translated into pictorial form. As Pollock's art matured, the exterior, observable world played an increasingly subordinate role and eventually disappeared from his imagery. He was not alone in pursuing this goal in the immediate postwar years; but in contrast to the then-dominant theoretical abstractionists, who asserted the primacy of the painting as its own object in terms of form, color, plane, and line, Pollock was among the minority of abstract artists who concerned themselves with finding pictorial equivalents to psychic and emotional states. This impulse, as much as the technique developed by Pollock to realize it, makes his studio floor so affecting a testament to his achievement.

TOWARD THE FLOOR

The floor's residual value will not be discovered by comparison to any of Pollock's finished paintings. Its importance is as a document in its own right, recording the process, rather than the end product, of creation. Yet there are obvious, direct correspondences between the paint splatters that cover the floor surface and the dominant colors in particular canvases; and the edges of several paintings are evident on the raw wooden planks. Nevertheless, despite its undeniable resemblance to Pollock's art work, the floor is not analogous to a painting, for its randomness is genuine. It is a composite of the careless spills and unplanned marks that surrounded his deliberately constructed compositions.

Although Pollock disliked Harold Rosenberg's coinage of the term "action painting," and his characterization of the canvas as an "arena" in which the artist functions,¹⁹ he once described his own work as "energy and motion made visible."²⁰ This statement bears out Rosenberg's assertion that action had replaced depiction as the artist's motivation. A close examination of the floor reveals the validity of this claim, precisely because its character is so reminiscent of Pollock's finished works. The peripheral marks around a conventionally-executed canvas tacked to a studio wall seldom resemble the imagery within the work. Even the "ghosts" of Krasner's gestural paintings of the late 1950s through the early 1980s, when she worked on the walls of the same space, are little more than abbreviated splashes, quite unlike the dense, swirling strokes and thickly layered surfaces of her finished canvases. By contrast, Pollock's peripheral gestures are extensions of those found in the paintings. The build-up of paint layers on the floor is similar to the interwoven skeins of color and line in his "drip" or "poured" paintings.²¹

The floor signifies the importance of movement—not arm action alone, but the choreographic sweep of full-body motion—in the development of Pollock's compositions. The evidence shows that the flow is not confined to the canvases' dimensions, but extends beyond them, moving out and in again with a continuous energetic rhythm. Pollock's resistance to Rosenberg's description of the canvas as the artist's arena may have been, in part, because his field of action is not the canvas alone but the entire working surface of the studio floor. His activity around and outside the painting is inseparable from that which went on inside its borders.

This background information is merely a prelude to the real business at hand, the detailed scrutiny of a deeply fascinating and revealing artifact. Again I invoke James Agee by claiming that words are no substitute for personal experience—they represent at best a poor attempt to come to terms with the ineffable feelings generated by intense observation. My purpose will be accomplished if this description encourages readers to make their own first-hand observations.

TOWARD THE FLOOR II

The studio is entered by way of an attached shed, the original dirt floor of which has been covered with a layer of green-painted concrete. Shelves on the west wall hold the remains of Krasner's materials: tubes of artists' colors; shards of glass from mosaic murals she designed in 1958-59 for the Uris Building at 2 Broadway in Manhattan; and jars of dried pigments, some of which may be Pollock's. Below is a makeshift arrangement of drawers and flat files for paper storage. On the opposite wall are wooden painting racks built for Pollock's work and later used by Krasner. The racks rest on a low platform, one section of which is made of the masonite also used to cover the floor in the main studio.

This material, in squares measuring a little more than twenty-two inches, is actually the board for a baseball game manufactured by Pollock's

brother, Sanford McCoy, who was a commercial screen printer. Reportedly, McCoy's client reneged on the deal, leaving him with hundreds of the printed boards, which he gave to Pollock to paint on.²² The game itself, decorated with facsimile signatures of major league players of the era, is a curiosity that often intrigues visitors to the studio. Installed over the pine planks in the main working area, which is eighteen inches above ground level, the game boards were underlaid with a layer of tar paper and were painted white, shielding the evidence of Pollock's most productive and innovative period of painting, from the late summer of 1946 through perhaps the middle of 1953. Apparently the homosote that now covers the barn walls was also added at that time.

By August 1953, when Pollock was photographed in the studio with visiting neighbors, the new floor bore the evidence of some painting activity. But Pollock's productivity declined sharply thereafter, and at the time of his death three years later, the surface was relatively unmarked.²³

After the masonite was removed late in 1987, the original floor was revealed to be in an excellent state of preservation. Apart from a small amount of black residue from the tar paper blanket, mostly evident on the bare wood around the room's periphery, the colors are as fresh and brilliant as when Pollock applied them. Indeed, unlike the paintings, which were exposed to decades of light, the floor was protected from fading. Its exhumation is illustrated at the end of the didactic exhibition of photographs and text that now lines the studio walls and documents aspects of both Pollock's and Krasner's careers after their move to The Springs. These pictures and explanatory panels often overlap with the feathery paint splashes left by Krasner on the homosote, to which she pinned her canvases. Although she periodically obliterated the marks with fresh coats of white paint, their ghosts can still be discerned beneath the surface.

On the north wall, a case displays some of Pollock's paint cans, which also are shown in photographs of the studio. Most of Pollock's favored brands—Devoe "Mirrolac," Pittsburgh floor paint, and other commercial enamels—still bear the labels that identify the colors he used, such as mitis green, burnt sienna, red lead, ultramarine, sage green, tile red, and aluminum. Unidentified cans of orange, white, and pink are there, together with the shiny black enamel floor paint that features prominently in his oeuvre. Protruding from the open cans of hardened paint are the worn-out brushes and sticks from which the paints were trickled, dribbled, or flung onto the canvas. Krasner even saved samples of the glass basting syringes with which Pollock sometimes squirted the liquid paint in bursts that enhanced the spontaneity of its application.

ON THE FLOOR

Upon entering the studio one is introduced to Pollock's gestures by a pair of orange filaments and a trailing thread of yellow, colors that dominate his two masterworks of 1952, *Blue Poles*, and *Convergence* (Albright-Knox Gallery, Buffalo). Because they are the last major canvases

painted here before the floor was covered, the remains of their execution occupy the uppermost layer. Beneath and around these brilliant flashes, strands of the ubiquitous black enamel weave sensuous patterns. To the left, it has accumulated in an ebony puddle, puckered like the skin of an ancient tar pit and embellished with a startling scab of white. The dark pool has been invaded by a tinge of yellow, which bleeds over its surface in a translucent haze. To the right, a row of thin black streaks, bristling electrically, slashes across the planks. The two areas—the poured one somnolent and dense, the flung one airy and vivacious—define the extremes of Pollock's technique.

One of the liveliest sections is framed by a narrow white rectangle, forty-eight inches wide and more than seven feet high, its uppermost end obscured by a dense crust of pigment. Within its borders, the full range of Pollock's palette—from the intensity of fire-engine red, sky blue, spring green, and shimmering silver, to the low-key pulsing of khaki, dove grey, powder pink, and earthy brown—can be appreciated. Unifying the disparate segments, lashings of black dance obliquely toward the center of the room and joyously pirouette back on themselves. At the far right, inside a brushy, greyish rectangle that may be evidence of underpainting, veils of blue, green, and yellow float in miasmatic limbo. A patch of black mixed with sand flashes its mineral facets and enamel sheen.



Interior of the barn studio, showing interpretive exhibition, Pollock's painting materials (in case) and his painting floor. Photograph by Noel Rowe (April 1990).

The variety of gestures is a delight. Wide, sweeping arcs of white balance the dashing black streaks. Silver apostrophes accentuate the staccato rhythms of gold, red, and green spatters. White curlicues escape from a multicolored tangle punctuated by a yellow exclamation point. Of course, there is no inherent organization to this potpourri of baggage from a seven-year journey into the aesthetic territory Pollock staked out as his own. Yet the overall effect is not as disjointed as one would expect. Inadvertently, the linear grid of the floorboards supplies a stabilizing framework for the random panoply.

About eight feet from the north wall is a line of encrustation that marks the boundary of Pollock's largest canvases. Working with the light behind him, he stood here to confront the two giant paintings with which he wrestled in 1952. At one end, a dazzling medley of blue, red, orange, yellow, white, and gold illustrates the hues with which he magically transformed an earlier black enamel painting into *Convergence* by topping its intricate linear web with a juicy icing of candy color.

His struggle with *Blue Poles* was darker, more agonizing. Desperate blotches of subterranean blue, roughly applied to the composition with a paint-smear two-by-four, emerge from a muddy, almost sinister buildup of pigment. A ribbon of orange flicks back and forth impatiently. Frenzied splashes of silver bear witness to the intensity of his efforts, as do the shards of broken glass—whether from a baster smashed on the floor in frustration or from one of the bourbon bottles reportedly littering the studio—embedded in the thick globs of dried paint.²⁴ Anger and sadness inhabit this quadrant, shouldering aside the upbeat relics of *Convergence*. Here, and again on the far side of where the seven-by-five-and-one-half-foot canvas lay, appear Pollock's bare footprints, recalling the prehistoric handprints on cave walls and, like them, reaching across lost time to bear startling testimony to the human presence.

Spent matches trapped in paint pools like insects in amber, hardened blobs that may be crushed cigarette butts ground into the puddled pigment, rings where dripping cans were slopped down hastily, bristles from a battered brush protruding grotesquely from a mole-like lump—such details enhance the impression of activity focused on the canvas, heedless of incidentals. Whatever fell outside its borders remained there unnoticed; yet that residue represents a continuum of the energy that was too expansive for the canvas to contain. Were we to examine some of the finished works as minutely, we would find the selfsame debris enriching their surfaces. In and out, out and in again, in rapid explosions or with slow, deliberate pacing, the generative flow manifested itself on canvas and floor alike.

ON THE FLOOR II

What prompted Pollock to cover this haunting chronicle of his supreme creative efforts? Had he intended to obliterate it, a thick coat of white enamel would have sufficed. One may assume that the primary motive

for installing the masonite was practical, as part of an effort—which also involved adding the homosote wallboard—to winterize the studio. But was that coupled with an impulse, unconscious perhaps, to preserve what lay underneath? This is an unanswerable question.

Although she never revealed it, we do know that Krasner was aware of what was beneath the new surface, which an artist neighbor scraped and repainted for her before she occupied the workspace.²⁵ The marks she thereby removed were minimal—mute declarations of the dearth of Pollock's output during his last three years, and a painful reminder of his decline. In the nearly thirty years between Pollock's death and her own, she kept the secret of the hidden floor. And so another unanswerable question arises: by suggesting in her will that the property be maintained as a museum, if a suitable sponsor could be found, was she setting the stage for the floor's rediscovery? We can but guess.

As director of the Pollock-Krasner House and Study Center, I can neither imagine that Krasner was unmindful of the floor's potential historical interest, nor can I resist the speculation that she hoped it would be uncovered. Her likely reaction to my "recording, communication, analysis, and defense" of the floor is another matter. She probably would disapprove of my intensive scrutiny of its nuances, just as she disapproved of so much else that was written about Pollock and his work. On the other hand, as James Agee might say, unless you turn up the volume and concentrate, your experience is superficial. And, as Agee realized, experience is colored by what we bring to it of prior knowledge and personal empathy. Pollock's means of expression is closely linked to his psychic condition, which drove him to expose interior depths that make us uneasy, knowing what we do of his struggle with the demons that possessed him.

Pollock's elation is on the floor but so is his anguish; both must be perceived as we imagine his existence, complete with its overabundance of sensitivity. Truly to "enter" the floor is to open the floodgates of that psyche.

NOTES

The Pollock-Krasner House and Study Center is open to the public by appointment from May through October, and to scholars and students year-round. Its purposes are to preserve and interpret the home and studio of Jackson Pollock (1912-1956) and Lee Krasner (1908-1984), two of the foremost Abstract Expressionist painters; and to provide facilities for research on twentieth-century American art, with special emphasis on the artists' community of eastern Long Island. The Center sponsors a variety of educational and scholarly activities, including lectures, seminars, exhibitions, workshops for young people, a residency program, and an oral history and archives project.

1. Robert M. Coates, review of a Jackson Pollock exhibition, *The New Yorker*, 17 January 1948, 57.

2. James Agee and Walker Evans, *Let Us Now Praise Famous Men* (Boston: Houghton Mifflin, 1941; reprint, London: Panther Books, 1969), xiv (text by Agee. photographs by

Evans). For incisive analysis of this book, see William Stott, *Documentary Expression and Thirties America* (New York: Oxford Univ. Press, 1973), 259-314.

3. Agee and Evans, *ibid.*, 14.

4. *Ibid.*, 15.

5. *Ibid.*, 14.

6. In addition to being close contemporaries, both Pollock and Agee (1909-1955) were addicted to alcohol and tobacco, both were believed by friends to have strong self-destructive tendencies, and died prematurely in their mid-forties. Pollock, driving drunk, was killed when his car overturned; Agee died of a heart condition.

7. The property first was recorded in an 1878 land transfer from Phebe Miller (widow) and Elizabeth Schellinger to James S. Corwin. Corwin and his wife sold the 1¼-acre parcel, now "with dwelling," to Adeline H. King in 1888. John Quinn, from whose heir the Pollocks purchased the farm, acquired it in 1926. I am indebted to Carlton Kelsey, East Hampton Town Historian, for undertaking the title search at the County Clerk's office in Riverhead. For information on the early history of the community, see Ferris C. Talmadge, *The Springs: An Eastern Long Island Town in The Old Days* (1970; reprint, Wainscott: Stanchard Press, 1983).

8. The principal biographical sources are B. H. Friedman, *Jackson Pollock: Energy Made Visible* (New York: McGraw Hill, 1972); Francis V. O'Connor, "The Life of Jackson Pollock, 1912-1956: A Documentary Chronology," in Francis V. O'Connor and Eugene Victor Thaw, eds., *Jackson Pollock: A Catalogue Raisonné of Paintings, Drawings, and Other Works* (New Haven and London: Yale Univ. Press, 1978) vol. 4, 201-277; Barbara Rose, *Lee Krasner: A Retrospective* (Houston: The Museum of Fine Arts/New York: The Museum of Modern Art, 1983); Jeffrey Potter, *To a Violent Grave: An Oral Biography of Jackson Pollock* (New York: G. P. Putnam's Sons, 1985); Deborah Solomon, *Jackson Pollock: A Biography* (New York: Simon and Schuster, 1987); and Stephen Naifeh and Gregory White Smith, *Jackson Pollock: An American Saga* (New York: Clarkson N. Potter, 1989).

9. Lee Krasner, videotaped interview (1983), for *Strokes of Genius/Jackson Pollock: Portrait* (New York: Cort Production, 1984), 54 minutes, color. Distributed by Direct Cinema, Ltd., Los Angeles.

10. Postcard from Jackson Pollock to Ed and Wally Strautin, 29 November 1945, quoted in O'Connor, "Documentary Chronology," 236.

11. Their initial meeting during the WPA Federal Art Project, and their later romantic involvement are described in rather lurid terms in Naifeh and Smith, *Jackson Pollock*, 391-408. The authors' construction of the "saga" is disputed by other authorities and even by those quoted in the text, but the book fills in many useful biographical details. Friedman quotes a long statement by Dan Miller, a local shopkeeper who befriended the couple: "Pollock didn't basically move to the Springs—he was moving away from something more than he was moving to something. He told me that himself openly...." (Friedman, *Jackson Pollock*, 217-19).

12. Francis V. O'Connor, *Jackson Pollock* (New York: The Museum of Modern Art, 1967), 38. The barn-moving project is described by Pollock's friend, Roger Wilcox, in Naifeh and Smith, *Jackson Pollock*, 518-19.

13. Pollock is shown painting outdoors on this surface in the 1950 film, *Jackson Pollock*, by Hans Namuth and Paul Falkenberg (ten minutes, color), released in 1951. Earlier, Namuth made a short black-and-white film, never released in its entirety, of Pollock at work in the

barn.

14. As related by Lee Krasner in an interview for Francine du Plessix and Cleve Gray, "Who Was Jackson Pollock?" *Art in America* (May-June 1967), 48-59, quoted in Friedman, *Jackson Pollock*, 65.

15. Jackson Pollock, "My Painting," *possibilities I* (Winter 1947/48): 79.

16. Pollock notes this in a draft for his statement cited in n.15 above; see O'Connor, *Jackson Pollock*, 40.

17. Namuth and Falkenberg, *Jackson Pollock*. From Pollock's narration, compiled by Namuth from Pollock's published statements and edited by the artist; cf. O'Connor, "Documentary Chronology," 262.

18. The workshop was operated by the revolutionary Mexican muralist David Alfaro Siquieros (1896-1974). The activities in question are described in Axel Horn, "Jackson Pollock: The Hollow and the Bump," *Carleton Miscellany* (Summer 1966): 237-46. Pollock appears to have initiated his drip technique in a collaborative painting project in 1940 or 1941. See Jeffrey Wechsler, "Surrealism's Automatic Painting Lesson," *Art News*, April 1977, 44-47. He used areas of dripped paint in the 1942 canvas, *Male and Female*, and in a series of small paintings the following year.

19. Harold Rosenberg, "The American Action Painters," *Art News* (December 1952): 22ff.

20. Undated holograph statement (ca. 1950), Jackson Pollock papers, Archives of American Art, Washington, D.C., reproduced in O'Connor, "Documentary Chronology," 253.

21. The appropriateness of these two terms is a hotly debated issue among Pollock scholars. William Rubin, O'Connor, and others have argued for the use of "poured"—presumably because "drip" sounds pejorative rather than in the interest of accuracy. There is no dispute that Pollock dripped his paint from sticks or brushes more often than he poured it from the can. Pollock used both terms in describing his painting method, and the residue on the floor shows more evidence of dripped paint than of pouring. *Time's* reference to Pollock as "Jack the Dripper" ("The Wild Ones," 20 February 1956, 70-75) contributed to the adoption of the less haphazard-sounding word "poured," which implies deliberate planning and control. However, Pollock was equally in command of both aspects of his technique.

22. O'Connor and Thaw, eds., *Catalogue Raisonné*, vol. 2, *Paintings, 1948-1955*, 79. McCoy, the actual family name, was changed when LeRoy McCoy, Jackson's father, was adopted by a couple named Pollock; among LeRoy's five sons, only Sanford took back the McCoy surname, which he used after 1935 (unpublished letter, Sanford McCoy to Reuben Kadish, 16 July 1935, quoted in Naifeh and Smith, *Jackson Pollock*, 274).

23. The photographs, taken by Tony Vaccaro in August 1953, and by Hans Namuth one week after Pollock's death on August 11, 1956, are included in the didactic exhibition now installed in the studio.

24. A first-hand account by Pollock's close friend, the architect and sculptor Tony Smith, of the inception of *Blue Poles* appeared in Stanley P. Friedman, "Loopholes in 'Blue Poles,'" *New York* 29 (October 1973), 48-50; cf. O'Connor and Thaw, eds., *Catalogue Raisonné*, vol. 2, 193-198, for the controversy surrounding the work.

25. Potter, *To A Violent Grave*, 276.

The History of Brookhaven National Laboratory

Part One: The Graphite Reactor and the Cosmotron

By Robert P. Crease

A scientific laboratory is a unique kind of institution. It is a site specially constructed to facilitate the performance of experiments. Thus the history of a laboratory is a unique kind of history. It must simultaneously weave together 1) a narrative of science itself, and why particular experiments are regarded as crucial to perform; 2) a narrative of the instruments and skills used in such experiments, to whose demands the laboratory responds; 3) a narrative of the individuals who direct, work at, and contribute a vision to the laboratory and its experiments; and 4) a narrative of the laboratory as a social institution operating with certain constraints and freedoms amid other social institutions.

It is often useful to pursue one or more narrative independently, which generally has been the case in literature about science. Popular accounts may be based around stories of individuals, while academic accounts may pursue social or scientific narratives and comparatively neglect the role of individuals. A history of a laboratory, however, must try to incorporate all of these narratives, for as each evolves so does the laboratory and the research done in it.¹

Brookhaven National Laboratory (BNL), where many of the most important discoveries of high-energy physics were made in the period following World War II, played a seminal role in the development of laboratories as independent institutions. In what follows I can only sketch how the narratives mentioned intersected during Brookhaven's earliest years. At the birth of the idea that grew into BNL, the scientific background consisted of the physics of the atomic nucleus and of cosmic rays; the principal instruments were nuclear reactors and particle accelerators; the institutional background was framed by Columbia University and the Manhattan Project, or Manhattan District, code names for the project to build the atomic bomb, so-called because the early activity took place at Columbia's Manhattan campus; and the leading individuals who promoted and steered the idea, Isidor I. Rabi and Norman Ramsey.²

Forming an Institution

Like most scientific ideas, the one that became Brookhaven took shape not full-blown but gradually—even backhandedly—emerging from

Ramsey and particularly Rabi's "discouragement, jealousy, and frustration" on their return to Columbia University in fall 1945.³ Rabi spent the war years at the Massachusetts Institute of Technology Radiation Laboratory working on microwave radar research, while Ramsey was at the Los Alamos Scientific Laboratory, in New Mexico, where the atomic bomb was designed and built. Outspoken and aggressive, Rabi had been associated with Columbia for over two decades, first as graduate student and then as professor. He was one of the nation's most prominent scientists, who had won the Nobel Prize in physics the previous year.⁴ Ramsey, who worked under Rabi as a graduate student in 1938, received his Ph.D. from Columbia three years later. Younger and more amiable than Rabi, Ramsey's fame was ahead of him; he, too, would win a Nobel, but some forty years later for his work in the late 1940s.

Rabi was angry about the state of Columbia's physics program. Before the war, Columbia was in the forefront of institutions for nuclear research. The atom was first split artificially on American soil in the basement of Pupin Hall, the building housing its Physics Department, and Columbia played an instrumental role in the initial stages of the Manhattan Project. When the Project moved to Chicago and then to Los Alamos, many of Columbia's star faculty followed, including Enrico Fermi and Harold Urey. Many never returned. Rabi felt that Arthur Compton, director of the University of Chicago's Metallurgical Laboratory, where the first nuclear reactor was built under the Manhattan Project, unfairly used his position to beef up Chicago's physics program with two new major facilities—Argonne Laboratory, twenty miles west of Chicago (Fermi stayed on as its scientific director), and the Institute for Nuclear Studies (where Urey remained). Of the four large laboratories created or built up by the Manhattan District—the other two were Clinton Laboratories at Oak Ridge, Tennessee, and the Radiation Laboratory at Berkeley, California—none was easily accessible to Columbia's scientists. Nor did Rabi know of plans to establish a laboratory in the Northeast; what he knew of planned new projects concerned an expansion of Clinton Laboratories. To Rabi, Columbia not only had not been rewarded for its wartime efforts, but unjustly had been stripped of faculty and facilities.⁵

At this time nuclear reactors appeared to be the principal tool of basic physics research. For several weeks in early fall 1945, Rabi and Ramsey discussed the idea of the Columbia Physics Department's building its own reactor, concluding that it would be possible but undesirable—an enormous undertaking, exhausting most of the department's resources. Columbia's remaining physicists were engaged in other important research, which probably would have to be reduced or discontinued; the Department would end up distorting its priorities.⁶ By the end of 1945, Rabi and Ramsey decided that Columbia would need to collaborate with other local institutions, although they envisioned its acting as principal sponsor. They compiled a list of New York City-area scientific laboratories that might be interested in reactor research, and convinced Columbia's Dean George B. Pegram to call a meeting of representatives of twenty-one of those on

16 January 1946.

The meeting was held in the Trustees' Room at Columbia's Low Library. Thirty-five people appeared, representing sixteen institutions including colleges and universities (such as Brooklyn College, Columbia, Fordham, New York University, Princeton, and Yale); hospitals and medical colleges (Memorial Hospital, Long Island College of Medicine, Rockefeller Institute of Medical Research), and profit-making corporations with major research facilities (Bell Telephone Laboratories, Research Corporation). Pegram was elected chair; Ramsey took notes. All present at this upbeat and happy meeting agreed on the need for a New York-area nuclear research laboratory, spending most of the time going over a letter drafted by Ramsey to General Leslie R. Groves, head of the Manhattan District, seeking approval of such a facility.

The letter, sent on 17 January, requested that instead of expanding Clinton Laboratory, "a regional research laboratory in the nuclear sciences be established near New York City,"⁷ within eighty miles of which lived more than one-fifth of the members of the American Physical Society. Groves replied five days later, suggesting that Pegram and a few other representatives of the proposed laboratory meet with Groves's deputy, Colonel K. D. Nichols, on 8 February.

Word of the proposal spread to Boston, where another group of physicists, including Jerrold R. Zacharias and John C. Slater of M.I.T., had their own idea about the location of a Northeast nuclear research institution, and passed it on to Groves. Slater's "Proposal for Establishment of a Northeastern Regional Laboratory for Nuclear Science and Engineering" observed that "nuclear research has entered an altogether new order of magnitude," whose "scale is too large to be carried out by even the largest university organization." It made much of M.I.T.'s experience with its Radiation Laboratory as a potential model, and of M.I.T. as a potential sponsor.⁸

When Nichols met with Pegram and Rabi (accompanied by Henry D. Smyth and Hugh S. Taylor of Princeton) on the 8th, they were told that Groves probably would support one but not two laboratories. Nichols also passed on a piece of free advice from Groves. The Manhattan District, he pointed out, was in its dying days as an institution, and at the end of the year its functions would be taken over by a new organization established by Congress, the U. S. Atomic Energy Commission (AEC). Unless Northeastern scientists wanted to spend a great deal of time cooling their heels, they had better act quickly.

Eight days later, the New York-area scientists met again in the Trustees' Room, this time with their Boston rivals (industrial laboratories were not represented, and soon a mutual decision removed them from further deliberations). The atmosphere was tenser than at the previous meeting. The factions knew they had no alternative to working together; "It was sink or swim," Ramsey said.⁹ But it also was clear that site selection was potentially a divisive issue. Rabi cunningly had solicited the interest of scientists in more distant institutions, so that among the sixteen people

present were representatives of Johns Hopkins and Cornell. New York still was the geographical center.

Those assembled agreed on the importance of a nuclear research laboratory in the Northeast. In addition, the possibility of building a particle accelerator was raised but discussion was deferred, because several of the universities had plans for such machines, which did not yet require a cooperative venture. Joint action to obtain a nuclear pile was assigned first priority. As for the looming and all-important site question, the group agreed that the laboratory be "accessible in an overnight trip from all major laboratories between Washington and Boston," and near a good institution of higher learning. Climate, proximity of power and water, a large land area, and procurement of labor and materials also were mentioned. A committee was appointed to write to Groves, expanding on points made by Pegram and Slater.¹⁰

On 3 March Pegram sent the letter to Groves, assuring him that the New York and Boston-area groups were working together harmoniously, and that nine universities (Columbia, Cornell, Harvard, Johns Hopkins, M.I.T., the University of Pennsylvania, Princeton, the University of Rochester, and Yale) were interested in sponsoring a Northeast nuclear research facility. The letter proposed a laboratory "operated by a single institution as contractor, preferably a single university," but with the scientific direction "in the hands of a board representing the sponsoring institutions and appropriate government agencies." The final section asserted that "we see no virtue in waiting until an atomic energy commission is set up...Everything is therefore to be gained by action."¹¹

On 23 March, representatives of the nine universities (later nicknamed the "holy nine") met at Columbia to organize what became known as the Initiatory University Group (IUG), its planning committee consisting of one representative from each university. For the time being the fledgling organization would be managed and supported by Columbia through supplements to its existing contract with the Manhattan District.¹² Office space was taken in Pupin Hall. Within days, Ramsey hired the laboratory's first employee, Mariette Kuper, and gave her her first assignment—to discover how, under Columbia's Manhattan District contract, she could be paid. Kuper was an ideal choice, a determined and elegant woman who turned heads when she entered a room. Not a scientist but an administrator, who supervised a war-time M.I.T. Radiation Laboratory training program, she had social skills; she and her husband Horner, a physicist at the Radiation Laboratory, were known for their elaborate parties. Years later, she described her principal task at Brookhaven as "keeping people happy." The task would prove formidable.¹³

On 30 March, the IUG Planning Committee met and promptly appointed subcommittees to pursue six aspects involved in setting up the laboratory. One subcommittee, chaired by Smyth, would create an institution to manage the lab and negotiate its contract with the government (i.e., first the Manhattan District, then the AEC). Another, chaired by Rabi, would iron out issues of personnel policy, such as an envisioned

scheme for scientific staff members to “float” between the laboratory and a given university department. A third, chaired by William W. Watson of Yale, would work out issues regarding clearance and classified research. A fourth, chaired by Ramsey, would handle site selection. Two additional subcommittees were created to plan and construct the two major kinds of research tools for the laboratory; one for reactors, chaired by Robert F. Bacher of Cornell, and the other for “electronuclear machines,” an early name for particle accelerators, chaired by Zacharias.¹⁴

The subcommittee on contract had to decide whether the contractor for the lab should be a single university, an industrial or non-profit organization, or a new corporation formed by the universities. It settled on the last. After unsuccessful attempts to fashion a palatable acronym from the initials of the nine universities (“Pyjohmitch Corp.”), or to find a consonant abbreviation (“Phytch Corp.”), the group chose the name “Associated Universities, Inc.” (AUI). It was decided to seek incorporation wherever there were likely sites, and on 8 July, AUI, a corporation with eighteen trustees (two each from the nine universities) was incorporated in New Jersey. The trustees held their first and only meeting of AUI as a New Jersey corporation two days later, in Low Library. On 18 July, AUI was granted a charter as an educational institution by the Board of Regents of the State of New York, where it remained.

Site, Personnel, Contract

The present site of the laboratory, near the geographical center of Long Island, was not a strong contender at first. It did not fit the criteria well and was unenthusiastically regarded. Despite Rabi’s gamesmanship, its eventual triumph was mainly because of the attrition of other candidates.

The original stipulation that the site be a sizeable piece of vacant land that was easily accessible to all major Northeastern research institutions amounted practically to a contradiction in terms. At the subcommittee on site’s first meeting, its members—one each from Columbia, Cornell, Princeton, and M.I.T.—half-facetiously suggested that the ideal site would be ten square miles of land adjacent to Grand Central Terminal.¹⁵ The closest reasonable alternative would be to take over swamp or military land. With the help of Major Emery L. Van Horn, an engineer and liaison officer with the Manhattan District, seventeen possible sites were listed, of differing proximity to the various universities. A site at Lake Zoar, Connecticut, was thirty miles northwest of Yale, while a New Jersey site at Millstone River was fifteen miles north of Princeton. Several sites near Columbia included one bordering Palisades Park, New Jersey, and another at Fort Slocum, in Long Island Sound near New Rochelle. The Boston-area scientists had their own candidate, Fort Devens, thirty miles east of Cambridge.

The site most remote from a university became the eventual victor—Camp Upton, a former army base in Yaphank, 100 minutes from Columbia, the closest major institution. Tens of thousands of recruits

passed through Camp Upton in both World Wars, including Irving Berlin, who was inspired to write a musical, *Yip, Yip, Yaphank*, the hit song of which was "Oh, How I Hate to Get Up in the Morning." When the list of site candidates was reduced to eight on 15 April, Camp Upton was not among them; it was too far from any major research institution (USB did not yet exist). The planning committee narrowed the field, in order of preference, to Fort Slocum, Untermeyer Lake (near Boonton, New Jersey), and Bear Lake (near Suffern, New York). On 3 May, the IUG Planning Committee selected Fort Slocum.¹⁶

The military was not ready to give up Fort Slocum. Moreover, it would be difficult for the lab to move rapidly into Millstone, Untermeyer, Zoar, Bear Lake, or any site lacking an infrastructure. Several sites came back into contention, including Camp Shanks, on the Hudson, a half-hour drive north of Columbia; Fort Hancock, on Sandy Hook, New Jersey; Fort Devens; and Camp Upton. It seemed politically unwise to try to take over Camp Shanks, the site of a planned public housing project, and Fort Devens also appeared to be unavailable. An engineering firm, Stone and Webster, was engaged to survey the remaining developed candidates, Camp Upton and Fort Hancock, with the latter attracting more attention. But the Stone and Webster report disclosed that many of Fort Hancock's buildings were still in use, leaving only a few undesirable ones available for the lab. Moreover, the site was not wide, and housing and water supplies were poor.

That left Camp Upton. But, while Camp Upton was due to be vacated and had an extensive network of buildings, it was dismal looking. When Mariette Kuper and Clarke Williams, a newly-hired reactor physicist, drove to the site they were shocked to see an old army camp full of muddy roads, pitched tents, temporary wooden shacks and barracks, and other facilities hastily thrown up to accommodate casualties from the expected invasion of Japan. At one end was a prisoner-of-war stockade surrounded by barbed wire and watchtowers. The vegetation consisted of pitch pine and scrub oak. Moreover, the site was in the vicinity of a defunct real estate development.

This did not suit the Mariette Kuper style. On the way back, she and Williams sat in the car in stony silence.¹⁷ When Ramsey visited the site with his wife he, too, found the place disappointing and was inclined to reject it for its appearance alone.¹⁸ Camp Upton's appearance was no small problem; an unpleasant site would make it difficult to attract a strong staff. Ramsey's wife insisted they visit Bellport, on the South Shore, where she spent summers as a child. Its beauty revived Ramsey's spirits; after he brought the planning committee to Yaphank he took them later to Bellport, where, on the town dock, they resigned themselves to the "equalization of disappointment" and proceeded to choose Camp Upton.¹⁹ In July, during AUI's brief term as a New Jersey corporation, the trustees voted to ask the government for the site.

Ramsey attempted to compensate for the site's drab appearance in choosing a name for the laboratory. His list of candidates included

Yaphank Laboratory, Upton Laboratory, Suffolk Laboratory, Long Island Laboratory, and Brookhaven Laboratory. He settled on the last one, in hopes that its pastoral connotations of "quiet, shady streams" might make the place sound attractive.²⁰ A new executive committee (which played approximately the same role for the AUI as the planning committee had for the IUG) ratified the name on 9 September. In January 1947, the laboratory staff housed at Pupin, and the AUI staff (which had rented office space in Manhattan) moved out to the site; in March, the property was transferred from the government to the laboratory—3,500 acres in two packets, one consisting largely of the present location, the other a target range (which no longer belongs to the lab) across Route 25.

The site problem was only one concern depressing lab planners that spring and summer; another was the choice of a director. In April, Milton G. White of Princeton turned down an offer; the next month F. Wheeler Loomis, who helped build up the Physics Department at the University of Illinois, was approached and was initially encouraging.²¹ But Loomis feared that the new lab could not provide adequate retirement and annuity plans; he also was concerned about possible government influence in its operation. His declination, in June, was a general disappointment. Eventually Phillip Morse, a professor of theoretical physics at M.I.T., accepted the lab directorship.

Ramsey, appointed head of the Physics Department, was in charge of much of the recruitment, a challenging process as illustrated by the cases of G. Kenneth Green, Maurice and Gertrude Goldhaber, and John and Hildred Blewett. Green's study of accelerator physics at Berkeley, and his war-time work in the Signal Corps on proximity fuses, gave him experience in the management of large contracts between science and industry. Though a brilliant physicist, he did not advance far as a serviceman. "He wasn't the hottest thing on the market," Ramsey said, a situation of which he took advantage by getting Green hired as a physicist in Brookhaven's accelerator program.²²

Similarly, Ramsey knew of a husband-and-wife team of physicists at the University of Illinois, Maurice Goldhaber and Gertrude Scharff-Goldhaber, whose research on nuclear isomers was perfectly suited to Brookhaven's future reactor. Because of an anti-nepotism policy, they could not both work at Illinois. When they were offered positions at Brookhaven and visited in February 1948, both the reactor and the accelerator were stillborn, their existence revealed only by two holes—a square one for the reactor, and a round one for the accelerator. Deciding to postpone a decision, the couple went back to Illinois. "What can you do with a square hole and a round hole?" Maurice Goldhaber recalls thinking.²³ They returned to Yaphank in the summer of 1950, when the square hole was plugged and they had access to the facilities they needed.

The frustrating case of the Blewetts played a role in Ramsey's ultimately quitting the lab. John Blewett had worked on top-secret radar countermeasures during the war and was building an accelerator at General Electric's laboratory in Schenectady, where his wife Hildred, also a

physicist, worked as well. Early in 1947 they accepted positions at Brookhaven. But, shortly after they purchased and moved into a house in East Patchogue, Morse informed them that the government had denied them security clearance, without which they had no job. John's college roommate had been jailed during a Canadian spy scare at the end of the war, and, though he was eventually cleared, the incident cast a pall of suspicion over his friends. Moreover, the two had participated in a strike at the GE plant. After several months, Rabi offered John Blewett a job at Columbia, but he refused. "I thought Brookhaven was basically a good idea and was willing to stick it out," he said.²⁴ The Blewetts' case was taken up by the newly established AEC, which decided in July that Brookhaven could hire them, but by a three to one vote—the Commissioners' first less-than-unanimous decision.²⁵ In the interim, the struggle to clear the Blewetts, and several others, created what Morse later called a "morale problem."²⁶ Ramsey was one of the victims; the mistreatment of the Blewetts, on top of commuting to Columbia on the Long Island Railroad, led him to leave in September to accept a position at Harvard that he previously had turned down.

Contract negotiations between AUI and the government proceeded painfully in the summer of 1946. While the government wanted to maintain security over nuclear reactors and the research performed at them, the scientists envisioned an open and free environment for their lab, akin to but on a larger scale than that at a university. Some mutually acceptable management plan had to be worked out.

The scientists had on their side an important precedent set during the war by the Manhattan Project. While organizing the Los Alamos Laboratory, General Groves at first thought in terms of a military hierarchy, staffed by commissioned officers and a chain of command; the lab director, J. Robert Oppenheimer, would become a lieutenant colonel. But several influential scientists, principally Bacher and Rabi, refused to participate in an arrangement they thought was inimical to the conduct of science. Eventually, Groves agreed that the laboratory remain under civilian management by the University of California.

The subcommittee on contract intended a similar scheme, but had to fight for control of the laboratory for the new corporation. In August, the planning committee pondered whether the coming contract negotiations were worth delaying the lab's creation: "Too much in quality of the contract should not be sacrificed for the sake of speed."²⁷ The trustees of AUI while it was a New Jersey corporation confronted the government over hiring; protesting that "under the contract proposed by the District, the District officer in charge of salaries and wages, rather than the Corporation's Director, would run the laboratory," Pegram expressed a determination to resist.²⁸ Another problem concerned employees who failed to obtain clearance. The District wanted them dismissed, while the trustees wanted them barred from the lab until clearance was approved. The District ultimately came around, and while the trustees found this less than perfect it was better than nothing, as the Blewetts' case soon proved.

A longer-lasting problem involved research. The trustees, especially Rabi, wanted only publicly available, unclassified work performed at the lab; the District, and then the AEC, wanted the right to decide what work was unclassified. Some papers were withheld from publication pending declassification by the AEC. Eventually, the trustees asked the AEC to specify certain areas of nuclear research as unclassified, rendering the process unnecessary.

More important were the respective roles of the AUI and the government in the operation of the laboratory. This conflict was in play at the first meeting of the executive committee on 9 September 1946, when the subcommittee on contract presented "Draft No. 4" of the contract, which the executive committee decided was unacceptable. On 27 September the executive committee considered "Draft No. 5," to which it agreed in principle, "but with such further amendments in the interests of a free scientific effort as the Board of Trustees may deem advisable and obtainable."²⁹ In mid-December, as time was running out on the Manhattan District, a final contract seemed at hand.

It was not to be. In the last week of 1946, Groves asked David Lilienthal (the future AEC chairman) whether his agency, which was bound by the contract, wanted to review it. Lilienthal said yes, and instead of a signed contract AUI received a letter contract outlining terms for a three-month period.³⁰ Negotiations continued throughout 1947, with the letter agreement renewed several times. In October, the trustees expressed their objections to the contract, including "too much management and control in the contract...too much expensive red tape," so much detail that "making subcontracts would be difficult...the right to refuse classified research should be reserved to the corporation," and the impracticality of government ownership of "all records and every scrap of paper."³¹

By the end of the year, spirits at the lab picked up enormously. It now employed about 1,150 persons. Four scientific departments had been created—physics, chemistry, biology, and medicine—with a fifth, engineering, on the way.³² The appearance of the site improved. Many old army buildings—some barracks, a mess hall, a small theatre, the fence and barbed wire around the stockade, and the sentry booths—were sold at auction, dismantled, and removed. On 23 December 1947, the lab held its first Christmas party. Only hours before, the final contract was signed by AUI president Edward Reynolds and the AEC's manager of New York operations; it was countersigned three weeks later in Washington by the AEC's General Manager. Satisfaction was expressed at the next trustee's meeting; "They now clearly have confidence in the ability of this Corporation to build, organize, and operate a laboratory. They concede wide discretion in making decisions and now require a minimum of red tape."³³ The AEC showed its trust by removing more than two-thirds of its on-site staff of eighty.

The government's renewable contract, to run to the end of 1950, embodied an important new concept later known as administrative contracting. As opposed to the usual fixed-price and cost-plus-fixed-fee

arrangement, an administrative contract enacts a long-term collaborative relationship. "It is the desire of the Commission," the AUI contract reads, "to procure for the Government managerial skill and responsibility which will permit flexibility in administrative controls and freedom from detailed supervision."³⁴ The AEC booklet on Contract Policy and Operations describes its acceptance of basic research:

Because of the greater difficulty in describing goals in basic research, and because responsible scientists plan their own basic research projects, such programs are not budgeted or controlled in the detail found in applied research planning. Dollar estimates and dollar limitations are coupled with classes of work such as "neutron physics" and "chemistry of the rare earths," leaving to the laboratory director and his scientific staff the choice of specific investigations and methods of attack, within the totals fixed under each major budget program.³⁵

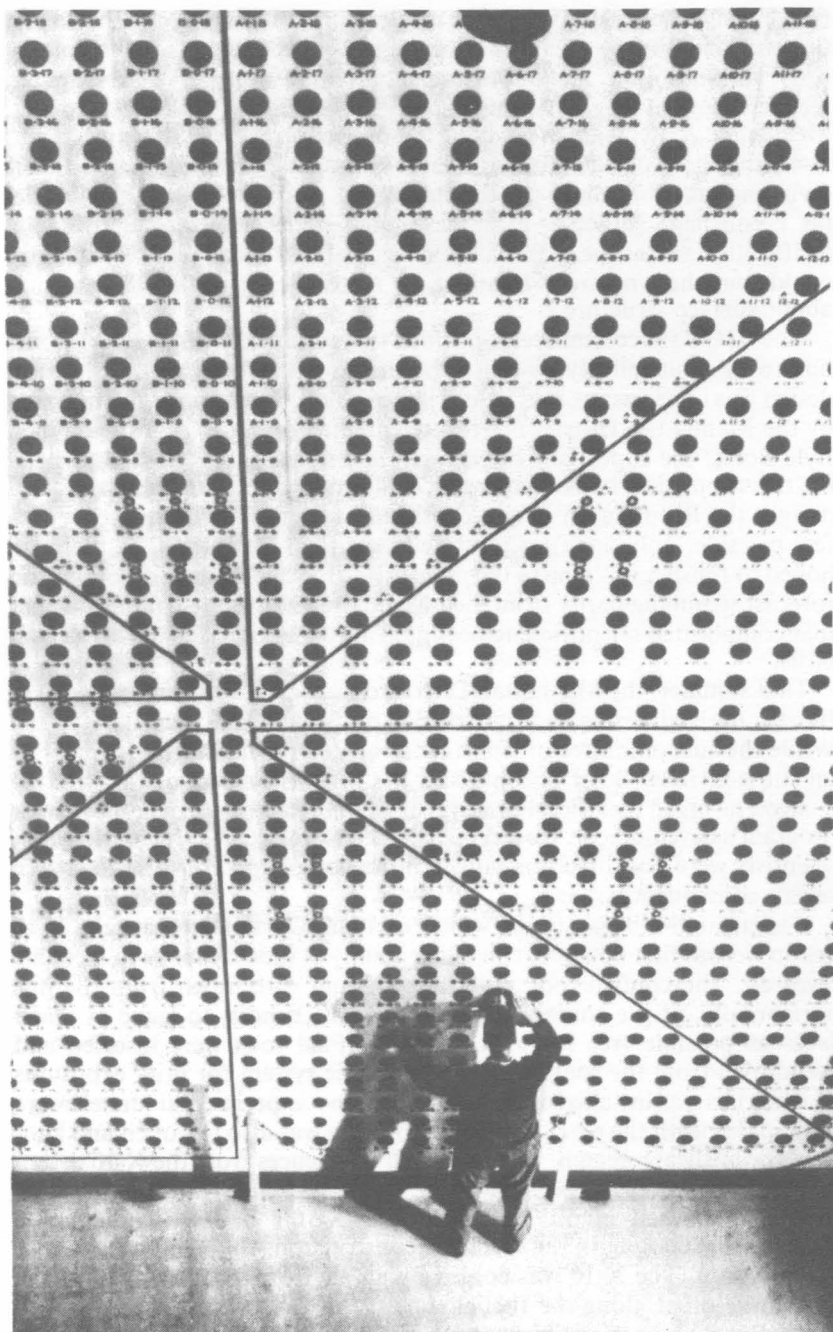
The precedent set by the AUI contract was enormously influential in establishing future laboratories in the United States and abroad.³⁶

The euphoria induced by the attainment of a site, director, and contract soon was dispelled. During 1948 the reactor program was plagued with difficulties. Morse resigned, partly because of the reactor problems and partly because his scientific interests never jibed with those of the lab. To take his place the lab hired Leland Haworth, a capable physicist who remained director for more than a decade. Under his leadership, the lab completed its first two major instruments, the Graphite Reactor and the Cosmotron.

The Brookhaven Graphite Research Reactor

In an article on the construction of the Brookhaven Graphite Research Reactor (BGRR), Allan Needell refers to the episode as an example of the "dangerous underestimation of the technical and managerial difficulties to be overcome in large-scale research and development projects."³⁷ At the outset it did not seem risky; the aim was to build a conventional device utilizing the design of an existing reactor.

The BGRR was the first U.S. reactor built solely for peaceful use. The purpose of such a reactor is to generate a stream of neutrons. The neutron, discovered in 1932, is a useful tool for exploring the atomic nucleus, as Fermi demonstrated in Rome in a series of experiments, beginning in 1934, in which he bombarded the nuclei of all known elements with neutrons, producing new radioactive isotopes in the process. At the end of 1938, two German researchers following up on Fermi's work found that neutron bombardment caused some forms of uranium to split, or fission, releasing energy and more neutrons. This raised the possibility of a self-sustaining nuclear chain reaction, and the first such reactor was achieved in 1942 at Chicago's Metallurgical Laboratory by Fermi and collaborators, as part of the Manhattan Project.³⁸ (Reactors were also called "piles" because



Fuel-loading face of the Brookhaven Graphic Research Reactor, 1951. Photograph courtesy of Brookhaven National Laboratory.

they consisted of piles of graphite moderator with no binder—the largest unbonded masonry structures since the pyramids—threaded with control rods and uranium fuel). This reactor was eventually disassembled, reconstructed at Argonne, and relabeled the CP-2 (“Chicago Pile 2”). Meanwhile, other piles were built in connection with military research, including the X-10, at Clinton. Basic researchers, however, wanted their own reactors. One could use the streams of neutrons to bombard nuclei (as Fermi had), either to examine excited states of nuclei or to create artificially radioactive materials for medical and other research. Or one could study how neutrons bounced off materials, providing information about surface structure.

The IUG’s subcommittee envisioned two reactors, with a conventional one to be built quickly so that experiments might begin. An advanced design was unnecessary, and indeed impossible, given a constraint imposed by the Manhattan District not to use enriched uranium as a fuel. When Lyle Borst, the supervisor of research at the X-10, was named to head the reactor project he saw no practical alternative to using the basic X-10 design; the Brookhaven device consisted of a graphite cube twenty-five feet per side, only one foot per side larger than the X-10. The planners hoped to finish it in “nine to ten months” for \$2.5 million,³⁹ an optimistic forecast stemming partly from their Manhattan Project-encouraged belief that complicated scientific-engineering feats could be managed on a crash basis.

That summer, the Manhattan District engaged Hydrocarbon Research, Inc. for the engineering and construction of the laboratory and its projects. While the subcommittee on contract struggled for laboratory control of on-site activities, Borst encountered the practical effect of this lack of control; he urged that the laboratory obtain more authority over the reactor program’s development. He did not get it. As a result, the reactor project’s scientists were not directly involved in its design and construction, with severe consequences.

Design studies began in the winter of 1946. Deviations from the X-10 design were at first minimal, consisting mainly of modifications to facilitate research. The control rods were inserted and withdrawn from the pile horizontally, at the southwest and southeast corners, to leave as many faces as possible free for experimenters. Fuel rods were inserted and withdrawn from the south face; a pneumatic system for brief exposures of materials was installed at the north face; two experimental tunnels were built underneath the reactor; and the top face was also left open and later used for medical research. Two principal differences from the X-10 design involved the cooling system and the fuel packaging. Both departures, though attempted improvements on the X-10’s design, would cause trouble—the cooling in the reactor’s construction, the fuel packaging in its operation. The X-10 was cooled by an air flow from one end of the pile to the other along the fuel channels. But following a suggestion of Borst, Brookhaven’s graphite cube was divided into two equal pieces, with a small vertical slot between. Air entered the center of the reactor through

the slot, was sucked through the pile inside out through the fuel channels, and then was sent through ducts ultimately to a smokestack. That modification improved the airflow, putting the coolest air at the central and hottest part of the reactor, allowing operation at a higher power with a greater neutron flux. It also meant running the reactor at a hotter air temperature than the X-10, which seemed to introduce no major new difficulties. But engineering problems, magnified by the odd division of responsibility among AUI (which provided basic specifications), Hydrocarbon (which provided engineering designs), and the AEC (which approved designs and specifications),⁴⁰ almost doomed the project. Two critical problems—defective studs in the air ducts, and the absence of any accounting for thermal stresses on various parts of the reactor—remained undetected until construction was far along, forcing costly and time-consuming repairs.

In spring 1947, Hydrocarbon created a wholly-owned subsidiary, Delner Corporation, to work on the reactor. Delner provided an initial engineering design and an estimate of \$5,000,000, which zoomed to \$9,300,000 a few months later. As Borst later commented, “these estimates were really not much more than guesses...the contractor did not fully grasp the difficulties of the undertaking.”⁴¹ In May, with a dawning awareness of forthcoming expenses and difficulties, Hydrocarbon withdrew and the contract was taken over by the H. K. Ferguson Company, a Cleveland firm with no experience in reactor construction. Here was an opportunity to review the project and uncover Delner’s design or engineering defects. Ferguson missed it; they took over Delner’s tracings, nearly all its personnel, and accepted its engineering decisions. Delner’s air duct drawing became Ferguson’s air duct drawing. Moreover, Ferguson’s contract, like Hydrocarbon’s, at the outset was with the AEC rather than the lab, perpetuating the division of responsibilities; “The Atomic Energy Commission continued to be basically responsible for all work performed since it was still their intention to furnish Associated Universities, Inc, with a working reactor complex.”⁴²

On 11 August 1947, an upbeat ground-breaking ceremony was held on Rutherford Hill, the highest location in the vicinity. Wearing a hard-hat, director Borst ceremonially but expertly operated a crane to scoop out a bucketful of earth. In September, a new contract made Ferguson directly responsible to AUI—and another opportunity for a project review was missed. Lab scientists assumed that Ferguson had matters in hand; Ferguson thought the scientists were getting what they wanted; and the AEC assumed that any necessary interaction was taking place. “In no case did Brookhaven National Laboratory consider it necessary to check H. K. Ferguson plans and specifications for engineering adequacy,” and the duct design was routinely approved by the reactor project staff.⁴³ Each of the three parties had faith in the others. Such a faith can be legitimate when the instruments involved are sufficiently standardized, but the X-10 was hardly a good prototype, built as it was with seat-of-the-pants engineering; the temperature differentials of the kind affecting the BGRR

project, for instance, either did not happen at the X-10 or successfully were ignored.

Fabrication of air ducts began in the Brooklyn Navy Yard, and the first sections arrived at the laboratory in October. Meanwhile, Ferguson made its first cost estimate: \$15 million. Even this proved wildly optimistic, as unforeseen problems arose and final plans changed. Problems arose from Ferguson's inexperience; from security concerns (workers without security clearance were banished from the site until the foundations were covered); from an unusually severe winter (a record snowfall of nineteen inches on 26 December); and from confrontations with unions anxious to test their strength in the new industry of atomic energy, after their relative complaisance during the war. But as 1948 approached, spirits still were high. At laboratory parties, a ditty to the tune of "My Darling Clementine" made the rounds, the first verse and chorus of which ran as follows:

In a sandhill on Long Island
Excavating for a pile
Is the Ferguson contractor
Working for our brother Lyle.

Oh Brookhaven, Oh Brookhaven,
Darling of the AEC
With its peacetime chain reactor
What a fine place it will be.⁴⁴

Ferguson officials predicted completion by early fall,⁴⁵ but engineering problems surfaced in March. A report on the cooling system revealed that no account was taken for temperature differences in various parts of the reactor, which would create stresses in the materials caused by different thermal expansions.⁴⁶ A number of studs used to anchor the aluminum plates in the concrete of the air duct sections were found defective; Ferguson's tests and repairs, lasting for months, failed to remove the problem even as the company remained outwardly optimistic. Lab scientists became progressively more anxious, for the ducts would be completely inaccessible after the reactor commenced operation. A report stated that,

No maintenance work can ever be done within the reactor shield nor in the exit air ducts once the reactor has come to full power operation because of the radioactivity produced by the chain reactor. A failure in these structures may very well mean the abandoning of the whole reactor.⁴⁷

Losing faith in Ferguson's rosy forecasts—and at last realizing the folly of the same company's doing not only design and construction, but also inspection—the reactor project scientists convinced Ferguson to engage an outside engineering firm, Babcock and Wilcox, as a consultant on the repair work. That firm was in the awkward position of a subcontractor anxious to avoid passing judgment on the prime contractor's design. But

as Babcock and Wilcox gradually earned the respect of the lab scientists, the scope of their consulting arrangement grew from the stud to the thermal stress problem to other aspects of the design.⁴⁸ Babcock and Wilcox understood insulation and thermal expansion problems from their experience building furnaces, and were able to suggest corrections that could be implemented even while the construction was nearly complete. Virtually all of their recommended corrections were insisted upon by lab scientists, even though Ferguson resisted and the scientists knew that the changes would add to the expense and schedule. The final cost was \$26 million.

On 11 August 1950 the BGRR was loaded with uranium, and eleven days later the first self-sustaining chain reaction took place inside it. Completion of the BGRR, its first major instrument, was a milestone in the lab's early development; nuclear research of the sort the planners envisioned finally could begin. The departure of many of Ferguson's construction workers contributed to the feeling that the laboratory was on the way to standing on its own feet.

Brookhaven's reactor program encountered a new set of problems, among them a continuing struggle with the AEC over security and classification. Although the officials precluded classified research, all experimenters at first had to have security clearance just to enter the building. Eventually, uncleared experimenters were allowed to use the west face of the reactor, via a separate entrance; access to the rest of the building was sealed off by a metal sheet known as the "iron curtain." In 1955, as part of President Dwight D. Eisenhower's "Atoms for Peace" initiative, the reactor was declassified and the iron curtain removed. After the reactor was shut down in 1968 (a more powerful one had been built) the building was turned into a museum. For a long time, the reactor's 320-foot red and white smoke stack dominated the site. The smokestack, still in use, is surpassed as an aerial landmark by the huge accelerator ring to the north.

The Cosmotron

Reactors led to Brookhaven's creation, but accelerators became the main reason for its continued existence. As reactors ceased growing in size and importance as fore-front physics tools, accelerators soared in dimension and importance; the joint sponsorship of a world-class device soon became unavoidable. Like the reactor project, Brookhaven's accelerator project was shaped by a complex interweaving of science, instruments, personalities, and institutions. Unlike the reactor project, the accelerator project was not mediated by an outside construction firm; the scientific staff directly controlled design and engineering.

The scientific background—as well as the name—of Brookhaven's first major accelerator was indebted to cosmic rays. The discovery and gradual understanding of the radiation that bombards the earth from deep space began at the turn of the century and slowly intersected with the interests of mainstream physics, culminating in a sense with the construction of

the Cosmotron—the machine to do the work of cosmic rays.⁴⁹

Shortly after the war, cosmic ray physicists were fascinated by observations of high-energy collisions between cosmic rays and other particles in the atmosphere. These collisions sometimes produced bizarre, short-lived particles called mesons. Observing such collisions was extremely difficult, requiring the installation of equipment on mountain-tops, or designing it to be lofted by rockets or balloons. Equipment often was unreliable, and working conditions were poor. Even when all went well, there was no guarantee that a collision would be observed or produce mesons. The situation would improve only by finding a way artificially to boost the speed of particles enough to create such collisions in the laboratory.

Such particle accelerators were under development, employing various means of boosting particle speed. At the end of the war, the most reliable method was through cyclotrons, pioneered by Ernest Lawrence at the University of California at Berkeley. In a cyclotron, a particle is made to spiral outward from the center of a circular vacuum chamber sandwiched between the poles of a magnet. Lawrence's first successful cyclotron, constructed in 1931 with the assistance of M. Stanley Livingston, a graduate student, was a few inches across and managed to accelerate protons to slightly more than one million electron volts (MeV; an electron volt is the energy a particle acquires traversing a voltage drop of one volt). Throughout the 1930s, Lawrence's accelerators grew ever greater in size.

However, scientific and economic restrictions made it impossible to build cyclotrons forever. As the speeds of particles approach that of light, their mass increases and the rate of acceleration decreases, throwing them out of synch with respect to the acceleration system. Synchro-cyclotrons—modified versions of cyclotrons—extended the energy of operation. The economic inhibitor was the need to build ever-bigger and costlier magnets to cover the diameters of increasingly large, circular, vacuum chambers. Mark L. Oliphant, a British physicist from the University of Birmingham, during the war proposed another kind of accelerator—a synchrotron—in which magnets bent particles in a circular path by encircling that path like beads on a necklace. The key was the “principle of phase stability” announced independently in 1945 by a Russian and an American physicist. At war's end, however, no such machine yet existed, and cyclotrons remained the most reliable and powerful method of acceleration.

In 1946, when Livingston was a professor at M.I.T., he became a member of the IUG's Subcommittee on Electronuclear Machines. At the group's first meeting on 4 April 1946, planning began on machines to be built at the new lab. A synchro-cyclotron to accelerate protons to an energy over 500 million electron volts (MeV) topped the list, though the construction of electron synchrotrons was also considered essential. Livingston undertook the formulation of a plan.

Matters were complicated by Columbia's announcement that it would build its own synchro-cyclotron, although at the lower level of 300 MeV. Brookhaven's most advanced accelerator would be a lesser jump than

expected over existing machines. Rabi, in particular, felt that the laboratory's aim should be more ambitious, and began to push for construction of a proton synchrotron of as high an energy as possible—perhaps 10 billion electron volts (GeV). The scientific reason for this was that, while mesons of the sort found in cosmic rays would be created in quantity by an accelerator with energy of about 2.5 GeV, nucleons (protons and neutrons) would be created at an energy around 6 or 7 GeV—and their artificial creation would answer a host of fundamental questions. Rabi's desire set the stage for a year-long struggle with Livingston and other cyclotron partisans, who pointed out that a cyclotron, although it could not reach 10 GeV, could be completed sooner, would be more reliable, and would create a more intense beam of particles. Livingston, now head of the accelerator project, participated in drawing up designs for the proton synchrotron, and was quite content to pursue both programs simultaneously. Rabi was not, feeling that the cyclotron project should be discontinued because it sapped laboratory resources.

At a planning committee meeting in October 1946, Livingston advanced a proposal to build a 240-inch synchro-cyclotron, able to accelerate protons to between 600 and 1000 MeV, at an estimated cost of \$5 million. In urging adoption he pointed out that many of the design problems already were worked out at Berkeley, where a smaller machine was in progress. Turning this observation against Livingston, Rabi argued that the scheme was not bold enough; he preferred to forego a large machine for a few years in order to concentrate on “the very high energy range.” With its members evenly divided, the committee made no decision.⁵¹ The lab's program report in December mentioned both projects along with plans for two smaller accelerators for other uses—a sixty-inch cyclotron (eventually built by Collins Radio Company) and a 3.5 electrostatic accelerator (later built by General Electric).⁵²

Work continued next spring on the two basic high-powered designs, with no decision made between them. In April Livingston acknowledged that “each machine has its strong supporters for first priority at Brookhaven,” but defended his preference for the cyclotron, which

offers very high intensities at medium energy and with poor directionality; its design is practical and it could be completed soonest with minimum demands on scientific personnel...The synchrotron is the only machine capable of really high energy, but at the expense of exceedingly low intensity; its development will take many years and involve major investments of money and scientific talent. ⁵³

On 8 August, twelve physicists assembled at Brookhaven to consider which accelerators to build at the lab. All agreed that a 10 GeV machine should be Brookhaven's ultimate goal, but differed regarding the intermediate steps. Then Rabi held forth. He urged them to repudiate “the safe path and little steps,” and boldly strike at 10 GeV. Building a cyclotron would distract the lab from that goal, and absorb needed money and effort. “Be a little wild,” he advised. During the meeting it became clear that

whatever course Brookhaven took, it could not operate independently of decisions by other institutions, including its rival, Berkeley, and its funding institution, the AEC. Once again, no conclusions were reached. "We agree to disagree," read Green's handwritten notes.⁵⁴

The showdown took place on 20 October. Following a conversation with some of the AEC's members, the laboratory officials decided that they could execute only one major accelerator project, and that it would be the proton synchrotron. The AEC staff had pointed out that the cyclotron would have a factor of only 2 above existing machines; it wanted a factor of 5 or greater.

Livingston banged out an angry memo, protesting that the integrity of the lab was compromised:

The original concepts, before the Atomic Energy Commission was activated, were based on the assumption that the research program would be largely determined by the planning of the Brookhaven research staff...It now becomes evident that the program must be based primarily upon the policies of the Atomic Energy Commission and that the Laboratory staff and the Universities advisory groups have relatively little significance. As such, it is not the "free" laboratory for fundamental research which had been visualized, but is now directly controlled by the national interests of the Atomic Energy Commission...The decision...will postpone for several years longer the maturing of an instrument at Brookhaven which is capable of producing mesons. To just that extent I believe that it will postpone the effective development as a research laboratory in this field.⁵⁵

Gracefully surmounting his anger, he began to steer the accelerator project in the direction of a proton synchrotron. Once more the AEC stepped in. At the beginning of 1948, it told Brookhaven and Berkeley scientists that it had a limited pot of money to be allocated between the two labs for building accelerators—enough for one of about 2-3 GeV, suitable for producing mesons, and another of about 6-7 GeV, for nucleons. The Brookhaven scientists chose to take the smaller accelerator and strive to complete it before the more experienced Berkeley team completed its. The Brookhaven team named their machine the Cosmotron, after the cosmic rays whose energies they were trying to replicate.

Whatever his other motives, Rabi's vision was long. After four years of effort, the machine was completed in May 1952, the first to accelerate protons to an energy above a billion electron volts. Like that of its sister project, the BGRR, its struggle to complete the Cosmotron was replete with scientific and engineering difficulties. The accelerator project, however, had fewer management problems; it was run by scientists under no illusion that outside contractors could design and engineer the machine for them. The Cosmotron was finished a year before Oliphant's less ambitious British machine, which was started earlier, and two years before the Berkeley machine. Brookhaven scientists profited from Berkeley's two-

year delay, thanks to the involvement of Lawrence and most of the Berkeley staff in a top-secret project, ultimately abandoned, to build an accelerator to produce weapons-grade nuclear material for the military. The Cosmotron dedication ceremony, on 15 December 1952, was an occasion for rejoicing that drew scientists from all over the world. The celebratory dinner in the lab gymnasium after a day of speeches and demonstrations was quite a symposium, marked by an uncharacteristically large consumption of alcoholic beverages. At least one guest passed out on the table, and a Berkeley scientist set his tablecloth on fire. The final speaker, Dr. Detlev W. Bronk, the president of Johns Hopkins University, mixed up the text of his speech with one he was scheduled to give in Canada, puzzling those still *compos mentis* with references to “your king.” Because of the magnitude of the accomplishment, no one found the revelry excessive. “A billion volts?” Blewett later remarked, “—that was one helluv’ an achievement!”

The Lab in 1952

In five years the laboratory had undergone a huge transformation. Most traces of the army camp were gone or disguised. The lab now had two major instruments, a renowned staff, and throngs of visitors. Perhaps the best testimony of Brookhaven’s arrival as a pacemaking institution came from Louis Leprince-Ringuet, an outstanding cosmic ray physicist and member of the French Atomic Energy Commission. A few months after the merry Cosmotron dedication, at which he was one of the guests, Leprince-Ringuet addressed a conference on cosmic ray physics at Bagnères de Bigorre, a small town in the foothills of the Pyrenees. At this meeting all known mesons and other kinds of particles found in cosmic rays were catalogued and studied, including a baffling new variety called V particles. The conference could be called the high-water mark of cosmic ray physics, which now was an endangered species of science. Leprince-Ringuet told his audience:

[W]e must hurry, we must run without slackening our pace, for we are being chased—chased by the machines! We know already that Brookhaven is producing V particles at this very moment, and will be producing them more and more... We are, I think, a little in the position of a group of climbers scaling a mountain... [W]e cannot stop to rest, for coming from below, beneath us, surges an ocean, a flood, a deluge that is rising higher and higher, forcing us ever upwards.⁵⁶

The deluge was upon them; machines were taking over the work of cosmic rays and improving on them. Leading the way was the Cosmotron, its operation a turning point not only for the lab but also for accelerator technology. Throughout the next three decades the accelerator program, rather than the reactor program which was its original justification, was the principal force shaping Brookhaven’s development. Although the lab’s

subsequent accelerator, the Alternating Gradient Synchrotron (AGS), would be the machine on which Brookhaven experimenters several times performed Nobel Prize-winning work—and despite Livingston's fears—the Cosmotron brought about Brookhaven's maturity as a world-class research laboratory. The discoveries made with the Cosmotron and the BGRR are the subject of the next article.

NOTES

1. For histories of laboratories, see John L. Heilbron and Robert W. Seidel, *Lawrence and His Laboratory: A History of the Lawrence Berkeley Laboratory, Volume I* (Berkeley: Univ. of California Press, 1989); Lillian Hoddeson, "Establishing KEK in Japan and Fermilab in the US: Internationalism, Nationalism, and High Energy Accelerators," *Social Studies of Science* 13 (1983): 1-48; and the work of the CERN History Project. For "laboratory studies" (not of but in laboratories) see Steve Woolgar, "Laboratory Studies: A Comment on the State of the Art" *Social Studies of Science* 12 (1982): 481-98; and Bruno Latour and Steve Woolgar, *Laboratory Life* (Princeton: Princeton Univ. Press, 1986).
2. For aspects of Brookhaven's early history, see Allan Needell, "Nuclear Reactors and the Founding of Brookhaven National Laboratory," in *Historical Studies in the Physical Sciences* 14:1 (1983); Norman F. Ramsey, "Early History of Associated Universities and Brookhaven National Laboratory," BNL Report 992; *Final Report of Work by Columbia University under Contracts W-7405-eng-50, W-31-109-eng-15, and AT-30-1-GEN-71*, Upton, New York, 15 January 1948.
3. Ramsey, "Early History," 1.
4. For Rabi's biography, see John S. Rigden, *Rabi, Scientist and Citizen* (New York: Basic Books, 1987).
5. Compton, though, already had discussed a possible Northeastern nuclear facility with individuals at Yale and M.I.T.; Needell, "Nuclear Reactors," 96-7.
6. Norman Ramsey, interview with author, 8 August 1990, BNL Oral History Interviews.
7. "Rough Draft of Proposed Letter," G. B. Pegram to General L. R. Groves, January, 1946; "Draft of Proposed Letter," G. B. Pegram to General L. R. Groves, 17 January 1946; "Meeting of Representatives of Institutions and Organizations of New York City and Surrounding Region on the Subject of a Regional Nuclear Research Laboratory," by Norman F. Ramsey, Jr, 16 January 1946. BNL Archives.
8. J. C. Slater, "Proposal for Establishment of a Northeastern Regional Laboratory for Nuclear Science and Engineering," 9 February 1946. I am grateful to Allan Needell for providing me with a copy of this document.
9. Norman Ramsey, interview with author, 8 August 1990, BNL Oral History Interviews.
10. Norman Ramsey, "Memorandum" of meeting at Columbia Univ., 16 February, 1946, BNL Archives.
11. G. B. Pegram to General L. R. Groves, 3 March 1946. BNL Archives.
12. The first supplement was granted 3 April.
13. Mariette Kuper, interview with author, 22 May 1990, BNL Oral History Interviews.
14. "Summary of Meeting of Initiatory Group," 30 March 1946. BNL Archives.
15. Ramsey, "Early History," 6.
16. Summary, Meeting of IUG Planning Committee, 15-16 April 1946; Summary, Meeting of IUG Planning Committee, 3 May 1946. BNL Archives.
17. Mariette Kuper, interview with author, 22 May 1990, BNL Oral History Interviews.

18. Norman Ramsey, interview with author, 8 August 1990, BNL Oral History Interviews.
19. Ramsey, "Early History," 6.
20. *Ibid.*, 7.
21. L.A. DuBridge to Wheeler Loomis, 24 May 1946, BNL Archives.
22. Norman Ramsey, interview with author, 8 August 1990, BNL Oral History Interviews.
23. Maurice Goldhaber, interview with author, 11 December 1990, BNL Oral History Interviews.
24. John Blewett, interview with author, 21 December 1990, BNL Archives.
25. The Blewetts' case is mentioned in David E. Lilienthal, *The Journals of David E. Lilienthal: Volume II: The Atomic Energy Years* (New York: Harper & Row), 1964, 189, 230.
26. Minutes, Executive Committee meeting, 19 December 1947, BNL Archives.
27. Minutes, Informal Meeting of the Planning Committee, 3 August 1946, BNL Archives.
28. Associated Universities, Inc. (New Jersey), "Minutes of a Meeting of the Members, 10 July 1946," BNL Archives.
29. AUI, Minutes of a Meeting of the Executive Committee, 27 September 1946, BNL Archives.
30. U. S. Atomic Energy Commission, Letter Contract No. AT-30-2-GEN-16, 7 January 1947 (effective as of 1 January 1947, from E.E. Kirkpatrick to Edward Reynolds), reprinted in "Final Report." Proposed War Contract No. W-42-069-eng-16 provides the basis for the letter contract.
31. Minutes, AUI Board of Trustees meeting, 25 October 1947. BNL Archives.
32. The Engineering Department was created on 8 January 1948.
33. Minutes, AUI Board of Trustees, 16 January 1948, BNL Archives.
34. Contract No. AT-30-2-GEN-16, BNL, AUI corporate files.
35. *AEC Contract Policy and Operations*, U.S. Atomic Energy Commission, January 1951, 64. For more on government contracting for basic research, see Clarence H. Danhof, *Government Contracting and Technological Change* (Washington, D.C.: The Brookings Institute, 1968); and Harold Orleans, *Contracting for Atoms* (Washington, D.C.: The Brookings Institute, 1967).
36. For more on administrative contracts and their tribulations, see Robert P. Crease and Nicholas P. Samios, "Managing the Unmanageable," *Atlantic*, January 1991, 80-88.
37. Needell, "Nuclear Reactors," 122. It is amusing to note that another example Needell mentions—in 1983!—is the effort to build the Hubble Space Telescope.
38. See Richard Rhodes, *The Making of the Atomic Bomb* (New York: Simon and Schuster, 1986).
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40. "Report on Reactor Duct Repairs, Evaluation and History," 23 June 1949, 11-12, BNL Archives.
41. Associated Universities, Inc., Minutes of a Meeting of the Board of Trustees, 20 October 1950, BNL, AUI corporate files.
42. "Report on Duct Repairs," 20-1.
43. *Ibid.*, 24, 26.
44. Reprinted in *Isotopics* 2 (Jan.-Feb. 1948).

45. *Isotopics* 2: (March-April 1948).
46. "Report on Duct Repairs," 28.
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48. See the preliminary draft of the Engineering Advisory Committee meeting of 11 July 1949, when the question of asking Babcock and Wilcox to conduct a general review rather than address merely the duct problem first was raised.
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Quashawam: Sunksquaw of the Montauk

By Lara M. Strong and Selcuk Karabag

The recorded history of the Long Island Native Americans is mainly limited to an endless list of references to land deeds and descriptions recorded by seventeenth-century English and Dutch observers. Most entries are too brief to illumine the culture, society, and personalities of the indigenous peoples. Moreover, the early observers skewed their accounts with an ethnocentric bias that limits their usefulness. One of many such shadowy subjects is the life of Quashawam, a sunksquaw of the Montauk from 1664 to 1666. Although her father, Wyandanch, is the best-known Native American in Long Island history, and her name appears on deeds and in town records, her character and her role as a leader have been ignored.

The position of sunksquaw is poorly understood. Sunksquaw is an Algonquian term first used in English by Roger Williams, to which he assigned the broad meaning of "Queen." However, the role of sunksquaw was far from uniform in Algonquian society, the word generally designating a woman who exercised a dominant role in community decision making. Although inconsistent with the stereotype of male-dominant Native American cultures, the presence of female leaders was common in Northeastern Algonquian societies.¹

The Narragansetts listed several women among their leaders, including Quaiapan, who commanded 300 warriors in an attack on a tributary group which defied her authority.² Weetamoo, a Pocasset sunksquaw, became a strong war chief who inherited power to rule from her father, and, in alliance with King Philip, led her troops against the English. Awashonks, a Sakonnet, also led her people in war against the English. After her side suffered defeat, she successfully negotiated the freedom of prisoners whom the English attempted to deport to the West Indies as slaves.³

Women took part in other phases of community life.⁴ Many female Shamans conducted religious rituals and administered herbal remedies. Male leaders often depended on the support of these women, who were believed to have supernatural powers. Women helped to organize and supervise trading of corn, skins, fish, venison, wampum, tools, and other commodities vital to the Native American economy.

An important role played by Native American women was to provide an adequate food supply for their communities. The role of men as hunters is often romanticized to suggest that they were the primary providers. Meat was an important food, but the berries, nuts, roots, and greens gathered



David B. Martine, Portrait of Quashawam, 1990.

by women were more reliable and nutritionally balanced sources of nourishment. After the introduction of agriculture in the Northeast, women became even more important to the economies of the Native American groups. Planting and harvesting, seen as natural extensions of gathering, were therefore assigned to them. Once land use was placed in their domain, any change in the status of tribal lands required women's involvement at some level of decision making. The special relationship with the land accorded to women was never fully comprehended by the European settlers, to whom land ownership was a male prerogative. Nevertheless, the colonial records of eastern Long Island show that Shinnecock and Montauk women—Quashawam, for example—played far greater social roles than acknowledged by historians.

Quashawam inherited her position from her father Wyandanch, who had established friendly relations with Lion Gardiner, a leading English settler. Their peaceable relationship, contrasted with the carnage of the Pequot and King Phillip mainland wars, is generally cited as proof that Native American—English relations could be cordial during the early contact period. However, closer examination suggests a less benign interpretation. The two men first met during the Pequot War, at Fort Saybrook, Connecticut, where Lion Gardiner was in command.⁵ When, in 1637, news of the massacre of the Pequots by a New England army reached Long Island, fear and concern prompted Wyandanch to visit Fort Saybrook to see if his Montauk group was a target. Gardiner assured him that the colonial power would deal stringently only with those Native American groups who fought the English, whereupon the Montauk sachem decided that it was in the best interests of his people to side with the English rather than risk the fate of the Pequot. Wyandanch also understood that with English military and economic support he could gain status and power among his people. The alliance was consummated when Wyandanch delivered a dozen severed Pequot heads to Gardiner and invited his new friend to settle on what became Gardiner's Island, a fertile sliver of land in the Sound not far from his village at Montauk. Gardiner accepted and became Long Island's (and the future New York State's) first English settler.⁶

Wyandanch's English connection bore fruit fifteen years later in 1653, when Ninigret, a Niantic sachem from Southern Connecticut, led his warriors in an attack on the Montauk in which they killed two sachems and captured several women, including Quashawam.⁷ Ninigret, an old enemy of the Montauk who had shunned alliances with the English, claimed that this raid was to avenge the murder of one of his men by Wyandanch several years earlier.⁸ When Wyandanch appealed to the Reverend Thomas James of East Hampton for help, James wrote to Governor John Winthrop, Jr. of Connecticut asking him to intercede:

The occasion of my writing is upon a request of the Sachem of Montacut (Wyandanch) whose sorrows and sad condition I shall not neede, I suppose, to inform you. The thing that he desires me to

write you of is, concerning his great feares he is in, not onely in respect of former taking of his daughter and the rest of the captives, lest they should make them away; but he is in expectation of further assaults from them.⁹

James does not name the daughter as Quashawam, but Wyandanch had only one daughter, as far as can be ascertained.

The kidnapping is one of Long Island's most famous stories. In his history of East Hampton, David Gardiner, a descendant of Lion Gardiner, reported that Quashawam was kidnapped on "the night of her nuptials," and that her spouse was killed.¹⁰ The story was repeated by Alexander Gardiner in 1846 and Curtiss Gardiner in 1890.¹¹ Although no documentation supports it, the story is constantly retold by East End historians and novelists. Verne Dyson's *Heather Flower and Other Indian Stories*, and two novels, *Lords of the Soil*, by Lydia Jocelyn and Nathan Cuffee, and *Maid of Montauk*, by Forest Monroe, give dramatic accounts of a wedding interrupted by marauders who brutally murder the groom and steal the beautiful princess for ransom.¹² It is hard to say whether Quashawam really was abducted on her wedding night or if the Gardiners embellished the facts. Very likely a surprise attack occurred while the Montauk engaged in a ceremony which diverted their attention, but the details are hazy.

A provocative variation, inspired by Nathan Cuffee's knowledge of Montauk oral history, is introduced in *Lords of the Soil*. In this novel, Gardiner and two associates conspire with Ninigret to attack the Montauk and capture Wyandanch's daughter. Gardiner then rescues the captives and places Wyandanch in his debt, his reward a large tract in what become Smithtown. No hint of this alleged conspiracy exists in Gardiner family histories, or in any primary record.

In October 1654 Roger Williams of Rhode Island reported the return of the women to the Montauks with the help of the English: "about 14 Captives (diuers of them Chiefe Women)" were restored "upon ye mediation & desire of ye English."¹³ It was in the colonists' interest to assist the Montauk sachem to retrieve his daughter, thus placing him in a position of obligation and debt. Gardiner also knew that his support would strengthen Wyandanch's influence among the sachems on Long Island. The East Hampton authorities proclaimed Wyandanch "Grand Sachem" of Long Island, a title which served their interests because they could by-pass the local sachems and buy large tracts from Wyandanch. This policy was confirmed when Wyandanch rewarded Lion Gardiner with a 30,000 acre tract of land in the area that became Smithtown.¹⁴ The Gardiners later sold this land to Richard Smith, an ambitious land owner interested in expanding his holdings. These events give plausibility to the plot of *Lords of the Soil*. The local sachems' rights, however, were not disposed of as easily as Gardiner and Smith had hoped. Nasseconset the Nissequogue sachem, with Quashawam's assistance, successfully challenged the boundaries of the purchase,¹⁵ and English landowners such as

Robert Seelye of Huntington questioned the Wyandanch grant.

When Wyandanch died, in 1659, the English recognized his widow Wichitaubit, and their young son Wiancombone, as the new Montauk leaders. Wiancombone died three years later before he was old enough to claim his father's title, and his mother died at about the same time. This left Quashawam as the only surviving member of Wyandanch's immediate family. Leadership in the larger Southern New England Algonquian communities descended from father to eldest son, and then to the son of the eldest daughter; if she had no adult son, she inherited the authority to make important decisions for the group.¹⁶ In the smaller, eastern Long Island communities, leadership systems were simpler. Authority in the Montauk and Shinnecock bands was often delegated to people who excelled at particular tasks. For example, the best warrior might command when the group was at war, and an elder skilled in diplomacy would lead negotiations for peace. However, the English preferred a single leader whose name they could invoke and attach to their land deeds to legitimize them. They were particularly concerned about the Dutch policy of obtaining agreements from the original owners. Fear of Dutch competition in Western Long Island encouraged the English to press a hereditary system on the local native communities.¹⁷

The loss of her father, mother, and brother within a relatively short time was unsettling to Quashawam. During this period of uncertainty following Wyandanch's death, a Shinnecock sunksquaw, Weany, challenged Montauk authority over Shinnecock land by selling a tract near what is now Quogue to Thomas Topping, a settler. In 1663 another settler, Robert Seelye, wrote to Topping supporting his right to buy from Weany. Seelye, who claimed ownership of land west of the Nissequogue River which overlapped Smith's purchase, noted that "...all the sachems on the island westward together with their Indians do affirm that Mantawcut Sachem hath noe prerogative over their land..."¹⁸ Seelye told Topping that Uncas, the Mohegan sachem, said it was not the custom of Native Americans to take control of the lands of a defeated enemy. There were no legal grounds, argued Seelye, to support Wyandanch's right to grant title to lands in Quogue, Smithtown, or Huntington. And there was no such thing as a "Grand Sachem." Local sachems like Weany, contended Seelye, had every right to sell their lands without the Montauk sachem's approval.

Nasseconset also challenged the legitimacy of the "Grand Sachem" title by asserting his right to land on the Nissequogue River within the Smith purchase. This land, said Nasseconset, was sold by him to Wyandanch on the understanding that his people retain their rights to an area on the west bank of the Nissequogue. Wyandanch's authority over the land was derived from this purchase, claimed Nasseconset, not from the Montauk sachem's alleged rights as "Grand Sachem."

Nasseconset took his complaint against Smith to the general court at Hartford, which, before the establishment of the colony of New York, had jurisdiction over the towns of eastern Long Island. The court refused

to rule on the thorny question but urged Smith to pay Nasseconset for the land.¹⁹ Smith refused, probably on the grounds that Wyandanch as “Grand Sachem” owned all the land on Long Island and was free to dispose of it any way he chose. The matter rested at impasse during the next few years, when the increasing tension between the Dutch and the English colonial systems encouraged real estate entrepreneurs to wait for a resolution of the question of hegemony over Long Island.

Uncertainty about Wyandanch’s land claims led East Hampton officials to draft a most unusual document—the first to record Quashawam by name. On 11 February 1663/64 she was approved by the English to be “chief Sachem” over both the Montauk and the Shinnecock Indians. The agreement established that the Shinnecock, as well as the Montauk, “owne Quashawam to bee their supream and pay her all honours according to the custom of the Indians,” and that the Montauks should not “plunder” the Shinnecock without first consulting the English. Furthermore, a line of succession to the position of sachem after Quashawam’s death was established to insure a smooth transition to a leader acceptable to the colonial government. Quashawam’s leadership was endorsed by the signatures of four Shinnecock men: Quashaug, Iaskhonse, Accavaco, and Appanch.²⁰

The English openly acknowledged their use of such arbitrary devices as a means of control over Native American communities. For example, after Quashawam’s tenure as “Grand Sachem” ended, a colonial ordinance of 1670 established a new chief sachem of the Shinnecock:

Whereas it hath been usuall & is found very convenient that some person amongst ye Indians should in their respective Tribes or Nations be as Chief or Sachem over ye rest as well to keep them in ye better order as to be responsible for any mischife they should happen to committ, ye Indians neare Southampton in ye E. Riding of Yorkshire upon Long Island commonly called ye Shinnacock Indians being destitute of such a person having nominated and elected ye Indian named Quaquashawge to be their Sachem who is likewise approved by ye English to be fitt person amongst them for that purpose by reason of his quiete and peaceable disposition...²¹

Obviously, the English recognized Quashawam as chief sachem because they found her “docile and peaceable.” Had she shown a more independent attitude, they would have encouraged that someone else be “nominated or elected.” In fairness to Quashawam, she merely continued the policy of accommodation established by Wyandanch, which kept the peace and enabled the Montauk to avoid the fate of the Pequot.

The colonial power, in turn, may have felt more comfortable with a woman because she represented less of a threat. The document of 1664 suggests that the English were nervous that the Montauk would not accept their attempt to install any leader, male or female. The town of Southampton warned the Montauk that:

if Meantacutt Indians shall not pay tribute to Quashawam, true heyre of their master Wyandanch, that then....ye authority of the Long Island...cause them ye said Meantacut Indians to pay their obedience in every respect.²²

This was no idle threat because troops from Connecticut could quickly move across the Sound to deal with any disturbance or uprising.

On the day that Quashawam was appointed chief sachem, Captain John Scott of Southampton claimed power of attorney for all of her affairs:

The Sunk squaw Quashawam doth desire and impower irrevocably her ancient and great friend John Scott to examine and demand & sue for vpon refusall pay for all lands on Long Island bought and not paid for and on the Islands adjacent possessed by English or Dutch, and vpon receipt of Satisfaction to acquit them and to sell all lands not already sold. And to receive satisfaction for them, and to confirme them for ever...²³

Scott was a determined entrepreneur and adventurer whose ultimate goal was to persuade Charles II to make Long Island a new colony, with Scott himself as governor.²⁴ No doubt, he saw the opportunity to increase his property, power, and influence on Long Island by attaining control of the Montauk's financial and business dealings. The words of the document proclaiming him the "ancient and great friend" of Quashawam are very likely creative fiction, as the sincerity of Scott's friendship for Native Americans is questionable, at best.

It seems he continually fancied himself as an authority on, and a great and trusted friend of, the Native peoples. On a trip to London in 1660 to see Charles II, soon after the Stuart Restoration, Scott brought a catechism translated into Algonquian by the Southampton minister, Abraham Pierson. In a notation on the title page, Thomas Stanton, a colonist versed in the Algonquian language, approved the translation. The unscrupulous Scott tore out the original page and entered a new one, crediting himself with approval of the translation: "Examined by that experienced gentleman (in the Indian language) Captain John Scott."²⁵

In spite of his claims, there is little evidence in the colonial records of his close friendship with Quashawam. Before 1660, in Southampton, he focused his attention on his fur and shipping trade; after that he spent much of his time in England trying in vain to convince the king that he would make a just and responsible governor for Long Island. There was little, if any, time for Scott to develop a close relationship with the Wyandanch family out at Montauk. Scott had little respect for Native Americans, whom he once described as "morose, dull, shrinking and (ill) humored."²⁶ A Brookhaven settler attested that Scott was contemptuous of the Indians, once threatening to sell them into slavery in the West Indies if they did not do what he wanted. On 9 June 1664, a Mr. Smith and his wife brought charges to the Committee of the General Assembly of Connecticut, that:

John Scott was treating with the Indians about the rights of land he, the sd Scott, caused the Indians Roges and sayd he would send them to Barbados upon there refusall to make over there lands to them.²⁷

Unfortunately, there is no evidence to suggest how Quashawam felt about him. We do not know if she trusted him or influenced his decisions concerning the land deals.

On 25 February 1663/64 Scott oversaw the first transaction for Quashawam, involving the sale of a large tract in Jamaica, Queens, by local Native Americans to Benjamin Coe and Daniel Denton.²⁸ Scott and Quashawam apparently attempted to reinstate Wyandanch's claims to western Long Island, challenged by settlers like Thomas Topping and Robert Seelye. Quashawam may have believed that alliance with Scott was her only way to recapture the power and status her family lost after the death of her father. She received some immediate benefits from her association with Scott. In an appendix to the Jamaica deed, John Scott ordered Coe and Denton not only to pay the local sachems but also to award twelve looking glasses to Quashawam no later than 3 March 1663/4.²⁹

Quashawam's relationship with Scott was short-lived. John Winthrop, Jr. and Scott became bitter rivals in the struggle for power and influence on Long Island. In May 1664, Winthrop accused Scott of embezzling land from "a certain Indian Queene," who can be none other than Quashawam.³⁰ In addition to embezzlement, Winthrop had Scott arrested for sedition, defaming the king, forgery, profanation of God's holy days, and abetting and encouraging warfare among the Indians.³¹ Connecticut had jurisdiction over the eastern Long Island towns, while the Dutch controlled the western towns. As England and the Netherlands moved towards the confrontation which would result in Dutch defeat, the fate of these towns hung in the balance. Governor Winthrop was threatened by Scott's power on Long Island, which increased significantly when the latter gained Quashawam's power of attorney.

After having Scott arrested, Winthrop abrogated his power by replacing Scott's magistrates with men loyal to him. Winthrop sought a meeting with Quashawam to discuss the charges against Scott, and to ask her to testify in court; she refused, contending that she was lame. In June 1664, Thomas James wrote to Winthrop, requesting him to come to East Hampton to deal with "severall things of weight." Now that Winthrop had the upper hand, the East Hampton officials apparently wanted to distance themselves from Scott. The Montauk, said James, refuse to come to Southampton because of their "squaw sachem being lame."³²

Was Quashawam lame or was she avoiding meeting with the governor in order to protect Scott, believing that he was a trusted friend? She neither met with Winthrop nor testified at the trial of Scott, who was now as unpopular with town officials as with Winthrop. Perhaps Quashawam did not want to express loyalty for Scott for fear she would alienate herself from the town, or she may simply have wished to avoid all entanglement

with the town's political wrangles. With Scott out of the picture the authorities would find a new overseer of her affairs, and she would have as little to say as she had with Scott.

Later that summer the English fleet, commanded by Richard Nicolls, evicted the Dutch from New Netherland. John Scott, who survived an attempt to poison him while he was in prison, escaped and greeted the English troops with a small band of mounted volunteers recruited from the eastern towns. The irrepressible adventurer gambled for high stakes. He hoped that Nicolls, now governor of the new province, would reward his military contribution with a pardon and a land grant on Long Island.³³ Nicolls granted a safe conduct pass to protect Scott from arrest while he was in New York, but Charles II ignored both Winthrop and Scott; he casually wrote a new patent for his brother James, the Duke of York, incorporating Long Island into the colony of New York. Scott, under pressure from Nicolls, who was understandably anxious to see the last of him, reluctantly accepted a commission to command a garrison in Barbados. In the spring of 1665 he left Long Island once and for all.

Quashawam soon proved she could manage her affairs without the help of her former "advisor." On 7 June 1665 the court of sessions at Southold required East Hampton to pay twenty-five shillings a year to the Montauk sunksquaw.³⁴ Wyandanch had sold land to John Ogden, of Southampton, with the stipulation that this annual fee be paid to the Montauk sachem. When Ogden sold this land to East Hampton, the town apparently attempted to cut off the payments. The court was persuaded (perhaps by Quashawam?) that the eastern towns should uphold the real estate deals made by Wyandanch—most of which were beneficial to them. Evidence of Quashawam's diplomatic skill is the relationship she established with Governor Nicolls when he presided over three days of meetings with Long Island sachems and town leaders.³⁵ The first agreement, signed 3 October 1665, voided the controversial title "Grand Sachem," and gave local sachems authority over their lands.³⁶ This was not a great loss for Quashawam, because, except for the Jamaica endorsement, the title was virtually unenforceable after the death of Wyandanch.

The next day an agreement was made between Quashawam and the Town of East Hampton, in the presence of Governor Nicolls, settling long-standing disputes over boundaries and land use at Montauk. Nicolls affirmed Quashawam's right to the Montauk homeland on the eastern end of Long Island, an area of about 4,000 acres east of Fort Pond.

Contention over the boundary began in 1660, when Lion Gardiner and a small group of East Hampton investors bought all of the Montauk lands for a price of one hundred pounds. The death of Wyandanch and a devastating epidemic left the Montauk weak and demoralized. Ninigret, their old nemesis, took advantage of the situation by launching a series of attacks which forced the Montauk to seek refuge in East Hampton, where another danger awaited. Led by Wyandanch's widow and young son, the dispirited Montauk were induced to sign away all of their land at Montauk. Gardiner apparently told them that if the English held formal

title to the Montauk lands, the Niantic would be afraid to continue raiding.

John Ogden, a Southampton official engaged in real estate transactions, challenged Gardiner's deed. Ogden testified at a meeting of the United Colonies that the Montauk were being cheated by Gardiner and the East Hampton leaders. Gardiner admitted that it was a "sham deed" but claimed it was done to prevent the land from being bought by "foreigners"[sic], presumably from Rhode Island.³⁷ Under pressure from the United Colonies' commissioners, Gardiner and his East Hampton associates agreed to allow the Montauk to return home whenever they wished; however, the English never rescinded their claim to Montauk itself. The situation had been further confused in 1662, when Wiancombone and his mother granted East Hampton a section of the land from the town's eastern boundary to Fort Pond, where the village of Montauk is today, in "appreciation" for protecting the Montauk during the war with Ninigret's Niantics.³⁸ By the end of 1663, when Quashawam became sunksquaw, the Montauk had lost a large portion of their land and held a clouded title to the rest. Quashawam's success in getting the governor to clarify her title to, and prevent the erosion of, the remaining Montauk lands were important accomplishments.

Other important issues were addressed during the negotiations with the governor. Between 1662 and 1665, friction between the town and the Indians over the use of the land at Montauk increased. The colonists wanted to graze their livestock at Montauk from October, after the Indian harvest was in, until spring planting began at the end of March. However, this was made impossible by the Native American practice of burning off their fields each fall, a custom viewed by the English as wasteful and dangerous. Other areas of conflict involved stray English live-stock that roamed the Montauk fields in summer, destroying crops, and the Indians' dogs that roved at will in the fields adjacent to Montauk village, often attacking English cattle.

An accommodation was reached resolving some of these problems. East Hampton received the right to graze cattle as long as this did not interfere with the Montauk corn harvest. Any damage to Montauk crops would be paid for by East Hampton. For their part, the Montauk promised not to burn the brush each winter. The East Hampton leaders were able to restrict Quashawam's title to land by making her promise that the Montauk would not sell land to anyone but East Hampton residents.³⁹ In return, a memorandum was added stating that permission to graze livestock at Montauk did not compromise Quashawam's title. These land-title resolutions voided the previous agreements between Quashawam and John Scott,⁴⁰ giving the sunksquaw no choice but to abandon her ties with Scott, who by then was in Barbados. Now well rid of Scott, she had to take her chances with the Reverend Thomas James and the other East Hampton officials. In the early summer of 1666, Quashawam was involved in a dispute over the land her father gave Lion Gardiner for his aid in ransoming her from the Niantics. Richard Smith, the owner, remained at impasse with Nasseconset until jurisdiction for Long Island shifted from

Hartford to the new colony of New York in 1664, when Smith reopened the case and appealed to Quashawam for support. The Montauk sunksquaw, now living in a village on the west bank of Three Mile Harbor, received Smith in the presence of several East Hampton officials. Smith pressed her to reject Nasseconset's claims, but the sunksquaw testified that Wyandanch indeed purchased the land from Nasseconset. However, she claimed that she did not know the details of the agreement, and that there was no written record of it. Unable to get a clear resolution, Smith returned home and settled with Nasseconset, giving the sachem a gun, a kettle, ten coats, a blanket, and three handfuls of powder and shot.⁴¹

There is a different account in the first volume of Smithtown records, edited by William Pelletreau.⁴² The testimony of Pauquatouns, a Montauk elder who served as an advisor to Wyandanch, was recorded by Thomas James and witnessed by John Mulford, a prominent East Hampton official. Pauquatouns stated that the land in what is now Smithtown had belonged to Wyandanch's grandmother, who passed it along to him, and that Nasseconset, and Assawawkin, the Sagamore of Oyster Bay, acknowledged Wyandanch's right to dispose of it as he wished. When James later asked Quashawam about the matter, she said that "The Sunksquaw on Montaukett sends word by her husband and Obadiah, that the fore said land was her father's own land, and that those Indians if he were living durst not deny it." James signed the document, dated 22 June 1666, and testified that "These particulars above were spoken to ye best of my understanding before me—Thomas James."⁴³

The obvious discrepancy between the two documents raises some interesting questions about all of the parties involved. Unfortunately, we do not know which of the meetings with Quashawam came first, or the exact date of the meeting between Pauquatouns and James.⁴⁴ Quashawam's support for Nasseconset's land claim (in Smith's account) suggests that she no longer was willing to play the role of pawn to the colonial authorities. Such a show of independence would upset James and the East Hampton officials; it seems odd that, given the seriousness of the case, James did not go to Quashawam himself. Instead, he sent a messenger and then repeats this second-hand information in his testimony. If Richard "Bull" Smith had James's support, why did he return and pay off Nasseconset? He could simply ignore Quashawam's statement to him, and deny payment to Nasseconset on the basis of the public testimony of so respected an official as the Reverend Thomas James. Did Quashawam say one thing to Smith and another to James's messenger?

Smith had no reason to invent the story of his visit to Quashawam because her testimony went against his interest. James may have attempted to help Smith and assert East Hampton's authority over the Montauk afterwards, by calling in Pauquatouns and putting pressure on Quashawam to change her position. The issue may have led James and the East Hampton government to replace Quashawam with new leaders recruited from more compliant Montauks.

Events the following fall suggest that Quashawam either was deposed,

perhaps for her independent stance, or died. If she were alive in fall 1666 when the Shinnecock sunksquaw Weany's challenge to Montauk authority finally was answered, she would have been drawn into the controversy. A Shinnecock faction associated with the family of Mandush, a recently deceased sachem, and led by his daughter (not mentioned by name) issued a statement rejecting Weany's 1662 sale of land in Quogue to Thomas Topping.⁴⁵ Punch (Appanch) and Quaquasaw (Quaquashaug), who represented the Shinnecock at the negotiations endorsing Quashawam as their sunksquaw, joined the Mandush family in the protest. Mandush's daughter was first to sign, followed by Quaquashaw. The position of her mark above all other Native Americans who endorsed the document suggests that she was a sunksquaw. Mandush's son (also not named) was listed fifth, below Punch (Appanch).⁴⁶

The Mandush faction testified to turning over their interest in the land west of Canoe Place to their "ancient and loving friends the Townsamen of Southampton," provided the town pay them a fee to be determined by Governor Nicolls. Two days later Thomas Halsey and Thomas Sayer, both Southampton men, testified to witnessing Mandush accept tributary status under the Montauk seventeen years earlier, in a ceremony involving the presentation of a piece of Shinnecock turf to Wyandanch.⁴⁷ Halsey and Sayer apparently tried to demonstrate that only Shinnecock aligned with the Mandush family were empowered to sell land.

The conflict over the land in Quogue was resolved by Governor Nicolls in a special hearing on 3 October 1666.⁴⁸ He granted the land to the Town of Southampton, requiring it to pay the Mandush faction four-score fathoms of wampum, the same fee that Topping paid Weany. Several months later Weany joined the Mandush family and its supporters in signing a treaty endorsing the governor's determination, and acknowledging receipt of the wampum.⁴⁹

Because of the connection between Wyandanch and Mandush, it is curious that no Montauk leader was called to testify in the Quogue case. By the fall of 1667, however, Pauquatouns was recognized by East Hampton as the new leader of the Montauk, undoubtedly because he supported James in the controversy over Smith's land claims. Pauquatouns was called the following year to testify in another land dispute, between Southampton and Southold.⁵⁰ He is identified as the Montauk "chief Counsellor" rather than as the sachem, but the colonial power regarded him as spokesperson for the Montauk. Again, there is no mention of Quashawam. Two elderly Montauk women, Aquabacack and Impeagwam, were called to testify, but neither was identified as a sunksquaw. These women grew up at Aquabogue near the disputed area and married men from Montauk, where they lived with their husbands.

East Hampton's involvement in western Long Island land disputes declined after 1667, when the town focused its concern on the Montauk lands to the east. Governor Nicolls issued a patent to East Hampton endorsing the existing deeds and granting the exclusive right to purchase the rest of the Montauk lands.⁵¹ The "exclusive right" clause depended

upon the compliance of Montauk leaders, who, therefore, were watched very carefully by the East Hampton officials. In November 1669, Pauquatouns and five other Montauk, including a sunksquaw, Askickotantup, and a Montauk sachem, Ponitute, signed a declaration of loyalty to Governor Thomas Lovelace, who replaced Nicolls the year before.⁵² Ponitute may have been Quashawam's son, because later on he adopted the name "Wyandanch," and testified that he was the grandson of a great chief "loyal to the English." His signature on this document indicates that Ponitute continued his grandfather's policy of accommodation with the English. The pledge of loyalty clearly shows that the English were tightening their control.

Askickotantup's signature suggests that a new sunksquaw may have emerged among the Montauk. On 28 July 1669, five months before the pledge was signed by Askickotantup, Ninigret told the court at Rhode Island that the daughter of Wyandanch no longer was alive, but he did not date her death,⁵³ which could have happened any time after 1666. Marion Fisher Ales, whose master's thesis at New York University is the first documented history of the Montauk, raises an alternative theory. She dismisses Ninigret's report and speculates that Askickotantup may be a new name taken by Quashawam.⁵⁴ She bases this theory on the widespread Native American practice of taking new names when traumatic events were experienced, such as a puberty ritual, or a significant personal goal was achieved, such as a military victory or successful hunt. Name changes might also be a response to a vision or a dream. Although this is a plausible speculation, Ales cites no evidence that Ninigret's statement was false. The Niantic sachem had nothing to gain from lying about Quashawam's death, and her absence from the documentary record after 1666 supports his testimony.

CONCLUSIONS

Quashawam appears in various documents between 1654 and 1666, but in most cases there is only a brief reference. The English were not concerned with preserving the history of Quashawam and the Montauk. From the records, it appears that Quashawam's role as sachem was created for her by the English in order for them to gain legitimate, or "legal," control of the lands. It is too harsh a judgement, however, to dismiss Quashawam as a pawn in the colonists' game because her people were caught in a difficult position, which worsened as the English settlements grew around them. She showed courage by refusing to play the role of puppet when she defied "Bull" Smith and Thomas James in her support of Nasseconset.

The question of Quashawam's leadership and character can not be answered satisfactorily with the meager data in the colonial records, but other equally important insights into the role of women in aboriginal society can be gained. Recent studies about sunksquaws in coastal Algonquin cultures conclude that the stereotype of Native American

women as "...beasts of burden, drudges, slaves..." is a serious misconception.⁵⁵

The number of women mentioned in colonial records may be underestimated, because ethnohistorians tend to assign the male gender to any leader who is not clearly identified as a woman.⁵⁶ New findings concerning Native American women are supported by records from eastern Long Island. In a relatively short time frame, a small demographic sample identified five sunksquaws, three from the Montauk—Wichitaubit, Quashawam, and Askickotantup, and two from the Shinnecock—Weany and the daughter of Mandush. All these women were active in the important affairs of their communities. The elderly Montauk women, Aquabacak and Impeagwam, who testified in the land dispute between Southold and Southampton, demonstrate the important part that women played in issues concerning property rights.

NOTES

1. Roger Williams, *A Key to the Language of America* (Detroit: Wayne State Univ. Press, 1973), 201. Modern ethnologists shorten William's "Sauncksquuaog" to "sunk squaw" or "sunksquaw."; see also Trudie Lamb, "Squaw Sachems: Women Who Rule," *Artifacts* 9 (Winter/Spring 1981): 1-3.
2. Robert Steven Grumet, "Sunksquaws, Shamans, and Tradeswomen: Middle Atlantic Coastal Algonquian Women During the 17th and 18th Centuries," in Mona Etienne and Eleanor Leacock, eds. *Women and Colonization: Anthropological Perspectives* (New York: Praeger, 1980), 50-51.
3. *Ibid.*, 52.
4. *Ibid.*, 53-59.
5. Roger Wunderlich, "An Island of Mine Owne: The Life and Times of Lion Gardiner 1599-1663," *Long Island Historical Journal* 2 (Fall 1989), 5-6.
6. *Ibid.* 7.
7. David Pulsifer, ed. *Records of the Colony of New Plymouth* (Boston: William White, 1859), 10:96-98. The last two volumes in this collection contain the records of the United Colonies. This raid is typical of warfare in southern Algonquian culture. Raids were carefully planned to catch the enemy by surprise and avoid a major confrontation. A major goal was to steal away as many women and children as possible and adopt them into the victor's community. See Thomas Lotfield, "The Adaptive Role of Warfare Among the Southern Algonquian," in William Cowan, ed., *Papers of the Seventh Annual Algonquian Conference*, (Ottawa, Canada: Carleton University Press, 1975), 289-295. The new women and children increased the size and strength of the community and made it possible to expand the planting fields.
8. *Records of Plymouth Colony* 10: 96-98.
9. *Winthrop Papers, Collections of the Massachusetts Historical Society*, Vol. 7, 4th Series (Boston, 1865): 482-483.
10. David Gardiner, *Chronicles of the Town of Easthampton, County of Suffolk, N. Y.* (1840; reprint, Sag Harbor: I. G. Mairs, 1973), 23.
11. Alexander Gardiner, "History of the Gardiner Family," *Collections Of the Massachusetts Historical Society*, Vol. X, 3rd Series (Boston, 1846), and Curtiss Gardiner, *Lion Gardiner and His Descendants*, (St. Louis: Whipple, 1980), 63.
12. Verne Dyson, *Heather Flower and Other Indian Tales of Long Island*, (Port Washington:

Ira Friedman, 1967); Nathan Cuffee and Lydia Jocelyn, *Lords of the Soil*, (Boston: C. M. Clark Publishing Co., 1905); and Forest Monroe, *Maid of Montauk* (New York: William Jenkins, 1902). Dyson's undocumented, biographical sketch identifies Wyandanch's daughter as "Heather Flower," but does not mention her later role as a sunksquaw. The colorful name must come from local folk traditions because it does not appear in colonial records. Nathan Cuffee, descended from a Shinnecock who worked on whaling crews in the late-seventeenth century, was considered a reliable folk historian. Joyceln may have derived her interest in Native American history from her experience on a Sioux reservation, where her father served for many years as a missionary. She did the historical research in the local records, relying on Cuffee for the Montauk folk traditions.

13. John Russell Bartlett, ed., *Records of the Colony of Rhode Island* (Providence: A. Crawford Green, 1856), 1:297.

14. Wunderlich, "An Island of Mine Owne," 3-4.

15. The spelling of Native American names is from William Wallace Tooker, *Indian Place Names on Long Island* (1911; reprint, Port Washington: Ira Friedman, 1962).

16. Trudie Lamb, "Squaw Sachems," 2.

17. See John A. Strong, "How the Land Was Lost," in Gaynell Stone, ed., *The Shinnecock Indians: a Culture History* (Lexington, MA.: Ginn and Company, 1983); see also Morton Fried, "On the Evolution of Social Stratification and the State" in Stanley Diamond, ed. *Culture in History*, (New York: Columbia Univ. Press, 1965) and June Helm, ed. *Essays on the Problem of Tribe*, (Seattle: Univ. of Washington Press, 1971).

18. William Pelletreau, ed. *The Fifth Book of Records of the Town of Southampton*, (Sag Harbor: Hunt, 1910), 18-19.

19. Edmund O' Callaghan and Berthold Fernow, eds. *Documents Relative to the Colonial History of the State of New York*, 15 vols. (Albany: Weed and Parsons, 1885-1887), 14:640. Both claims are suspect: the sale of land by one sachem to another is most unusual because Native peoples did not consider land as a commodity. Nasseconset's claim selling the land to Wyandanch is without precedent. The title of "Grand Sachem" is clearly an English concept imposed on Native Americans to facilitate land transactions. See Strong, "How the Land was Lost."

20. *The Second Book of Records of the Town of Southampton* (Sag Harbor: John Hunt, 1877), 36-38.

21. O'Callaghan and Fernow, *Documents*, XIV: 647.

22. Pelletreau, *The Second Book, Southampton Records*, 36.

23. *Ibid.*, 37-38.

24. Lillian Mowrer, *The Indomitable John Scott: Citizen of Long Island 1632-1704* (New York: Farrar, Straus and Cudahy, 1960), 78. Mowrer is one of few scholars presenting a positive view of Scott. This scholarly and well documented book should be read along with the many negative characterizations of Scott by local historians.

25. *Ibid.*, 393-394.

26. John Scott, *A Preface to the History of North American*, Sloane Manuscripts, 3662:26. British Museum Manuscripts Room.

27. *Records of the Town of Brookhaven*, Patchogue, 1880), Vol. 1:38-39.

28. *Book of Deeds*, Office of the Secretary of State, Series 453, Box 1, vol, 2: 159-160. (New York State Archives, Albany, N.Y.).

29. *Ibid.*, 160.

30. Robert C. Black, *The Younger John Winthrop* (New York: Columbia Univ. Press, 1966), 261.

31. Mowrer, *The Indomitable John Scott*, 397-398.
32. "Letters of Thomas James," in *Collections of the Massachusetts Historical Society*, Vol. 7, 4th Series (Boston, 1863), 484.
33. Pelletreau, *The First Book, Southampton Town Records*, 171.
34. Mowrer, *The Indomitable John Scott*, 143.
35. *Book of Deeds*, Series 453, Box 1, Vol. 2: 123-125.
36. *Ibid.*, 126.
37. Pulsifer, *New Plymouth*, X: 250; see also Marion Fisher Ales, "A History of the Indians on Montauk, Long Island," in Gaynell Stone, ed., *The History and Archaeology of the Montauk* (Stony Brook: Suffolk County Archaeological Association, 1979), 71-73.
38. Raymond Smith, ed. *In Re Montauk*, (East Hampton, 1926), 25-29.
39. *Book of Deeds*, Series 453, Box 1, Vol. 2:123.
40. O'Callaghan and Fernow, *Documents* Vol. XIV:606.
41. John Lawrence Smith, "The Town of Smithtown," in *A History of Suffolk County*, (New York: W.W. Munsell, 1882), 4-5.
42. William S. Pelletreau, ed., *Town Records of the Town of Smithtown*, (Smithtown, 1898), I: 16-17.
43. *Ibid.*
44. The assertion that Wyandanch inherited the property from his grandmother is interesting. If the land passed through the female line, which seems possible because of the relationship between women and the planting grounds, the property would go to Wyandanch's sister. It is possible that the sachem had no sister at the time but no records of any of this survive.
45. Pelletreau, *The First Book, Southampton Records*, 169.
46. *Ibid.*
47. *Ibid.*, 158.
48. *Ibid.*, 172-74.
49. Strong, "How the Land Was Lost," 80.
50. William Pelletreau, ed., *The Third Book of Records of the Town of Southampton*, (Sag Harbor: Hunt, 1978), 110-11.
51. Smith, *In Re Montauk*, 19-22.
52. O'Callaghan and Fernow, *Documents*, XIV:627.
53. Bartlett, *Records of Rhode Island*, II:270.
54. Ales, "A History of the Indians on Montauk, Long Island," 89. William Wallace Tooker, Long Island's pioneer ethnologist, also believed that Askickotantup was a new name taken by Quashawam, but he offers no documentation for his interpretation. William Wallace Tooker, "Cockeno-de-Long Island," in Gaynell Stone and Nancy Bonvillian, eds, *Language and Lore of the Long Island Indians*, (Lexington, MA.: Ginn and Company) footnote, 186.
55. Lamb, "Squaw Sachems," 1.
56. Grumet, "Sunksquaws, Shamans," 50, 58.

Montauk Point Lighthouse: A History of New York's First Seamark

By Robert J. Hefner

This article explores the history of Montauk Point Lighthouse, the nation's fourth oldest active lighthouse and the first that completely was planned and designed by the federal government. The three earlier towers still carrying lights are:

Sandy Hook Lighthouse, in New Jersey, constructed by New York City maritime interests in 1764;

Boston Lighthouse, built by the Massachusetts Legislature in 1783;

Portland Head Lighthouse, in what became the state of Maine, begun by the Massachusetts Legislature and completed by the federal government in 1791.

The story of Long Island's most famous seamark reflects the evolution of the United States lighthouse service. In 1789, the first session of the first Congress made the government responsible for a system of aids to navigation. The Treasury Department, which administered the lighthouse service, turned its attention to building lighthouses where they would best serve the nation's maritime economy. Within two years the Department resolved to build a lighthouse at Montauk Point, to guide ships to New York City and ports in Connecticut, Rhode Island, and Massachusetts.

The need for a lighthouse at Montauk was widely recognized. When Tench Coxe, the Commissioner of Revenue, sought the opinion of prominent merchants and ship captains regarding the placement of new lighthouses, the testimony for Montauk Point was persuasive. Joseph Anthony, a merchant-skipper from New York, wrote in 1793 (the original spelling and syntax are preserved in this and other documents cited) that:

I have drove the coasting business through all seasons for twenty years and often reflected upon the settling of a light upon Montague which in fact would be favorable to the trade of all the Middle States—a light upon Montague would give the most universal relief & satisfaction of any spot you culd fix upon.¹

Captain C. Miller, of New York, declared the same year that, "If the great object of lights and landmarks is to conduct ships into safety from the Great Atlantic...Montauck light is as necessary as Henlopen or Sandy

Hook.”² William Allibone, a Philadelphian, approved of Montauk Point as a site in 1795: “Its elevation is such as makes it a Key to a Great portion of the Foreign trade both to New York and Several of the eastern states and to all the Coasting trade in that quarter.”³

While most beacons guided mariners to a particular port, a lighthouse at Montauk Point would have far-reaching regional impact. Perhaps its foremost appeal was as a landfall light for ships bound to New York from Europe. These vessels could take bearings from Montauk Point and use its light to conduct themselves from the Atlantic to safe anchorage northeast of Gardiner’s Island, or in Gardiner’s Bay. The light would guide ships on their way in or out of Long Island Sound, and those bound eastward in the Atlantic for Newport, New Bedford, and the Vineyard Sound. Also, Montauk Point was high enough to allow a tower to serve as a landmark within the Sound, especially to guide ships through the Race to New London and other mainland ports.

Constructing a lighthouse that benefited the commerce of multiple states was a logical priority for the government of the new nation. Equally understandably, a lighthouse at Montauk Point could hardly be built before the establishment of a political and economic mechanism to fund and maintain a lighthouse in a remote location to stimulate interstate commerce. Most lighthouses built in colonial times marked the entrances to rivers, harbors, or bays of major ports; they often were funded by taxing ships that entered such ports. The 1767 Cape Henlopen Lighthouse, marking the entrance to Delaware Bay, was the only remote colonial lighthouse with a regional significance.

In addition to its other distinctions, Montauk Point was the first lighthouse built in New York State. When finished in November 1796, it became the fifth lighthouse completed by the United States, preceded by the 1791 Portland Head Lighthouse; the 1792 Cape Henry Lighthouse, in Virginia; the 1796 Cape Fear Lighthouse, in North Carolina; and the 1796 Seguin Island Lighthouse in (what became) Maine. Cape Henry, Portland Head, and Montauk Point still stand, the last two still carrying lights. Including the two extant pre-Federal towers—the 1764 Sandy Hook Lighthouse and the 1783 Boston Lighthouse (Henlopen collapsed because of erosion in 1926)—the Montauk Point Lighthouse is thus the fourth oldest active lighthouse in the United States.

Planning a Lighthouse for Montauk Point

On 7 October 1791, Tench Coxe wrote to the New York congressional delegation, requesting the information necessary to purchase land and plan a lighthouse for Montauk Point.⁴ Congress authorized construction the following April, and appropriated \$20,000 to build it on 2 March 1793.⁵ But it was not until the end of 1792 that State Senator Ezra L’Hommedieu, of Southold, on behalf of the New York Chamber of Commerce, complied with the Treasury Department’s request for a survey of Montauk Point. L’Hommedieu chose Turtle Hill as a site, at the tip of Montauk Point

which, he observed, provided a flat plateau extending 297 feet westward from the bluff which faced the Atlantic. "As the Bank is washed by the sea in storms," he noted, "we suppose it best to set the Building at this distance." Turtle Hill's seventy-five-foot elevation was a tremendous advantage for a lighthouse; if there were no obstructions, a tower of no great height was required. However, L'Hommedieu pointed out, higher hills to the west would block the light from "vessels which may be to the westward, near the shore" unless the tower were built "seventy or eighty feet" tall.⁶

The Treasury Department advertised for bids to construct the lighthouse in April 1795, and by August received the following four:⁷

Abisha Woodward New London Connt	32,000
Abraham Miller & Co. East Hampton Long Isl	30,000
Nathaniel Richards New London Connt	22,500
John McComb Jr. New York	22,300

On 11 August 1795, Coxe submitted the bids to President George Washington with the recommendation that the contract be awarded to John McComb, Jr., who not only submitted the lowest offer but was "the same person who built that [lighthouse] on Cape Henry in Virginia. His attention, skill, and fidelity in that case inspire confidence on this occasion."⁸ On August 24 the contract with McComb was drawn up and signed.⁹

The way appeared clear for construction, but the Proprietors of Montauk were not anxious to sell Turtle Hill to the government because these approximately 150 joint-owners of Montauk (the nation's first prairie) used it for summer pasturage of horses, sheep, and cattle. Henry P. Dering, the Collector of Customs for the port of Sag Harbor, reported "much difficulty in obtaining a grant" from this group, whose members feared that fishermen from Connecticut would raid their livestock and build shelters on the lighthouse reservation. Local merchants and captains, many of whom were Proprietors of Montauk, saw little to gain from a lighthouse. Sag Harbor captains delivered a memorial to the Treasury Department, opposing Montauk Point as a site in favor of Fisher's Island, where a lighthouse could help them navigate Through The Race into Long Island Sound.¹⁰ Nevertheless, on 16 January 1796, the proprietors deeded the lighthouse reservation to the United States for \$250, on condition that no building not associated with the functioning of a lighthouse ever be built on the property.¹¹

Constructing the Lighthouse

John McComb, Jr.'s contract specified an eighty-foot stone tower in the shape of an octagonal pyramid with a base twenty-eight feet in diameter, tapering to sixteen and one-half feet at the summit. On top of the tower would be an octagonal iron lantern, ten-feet high and ten feet, nine inches across at the widest point. McComb also was to build an oil

vault containing nine 200-gallon cedar cisterns, and a frame dwelling for the keeper for whose use he would dig a well.¹²

McComb worked up his estimate in his "Memorandum Book" during the summer of 1795.¹³ His list includes two lighters for transporting sandstone blocks from vessels anchored offshore to a landing on the beach; the cost of building a road from the beach to the top of Turtle Hill; and two yoke of oxen for carting. He planned to hire a crew of fifty men, with laborers far outnumbering masons, carpenters, and blacksmiths. McComb included the cost of supplying the large encampment at Montauk Point with flour, pork, beef, butter, vegetables, tea, sugar, molasses, soap, candles, and 500 gallons of rum. The whole endeavor was designed along the lines of a military campaign.

McComb came to Montauk Point in April 1796 to plan his work. Henry P. Dering reported to Tench Coxe that month that McComb proposed to put the tower fifty feet back on the bluff from the spot selected by L'Hommedieu; the bank "wastes away very fast," he noted.¹⁴ McComb's site was approximately 300 feet from the bluff. (During the past two centuries, some 200 feet of Montauk Point has washed into the Atlantic Ocean. At present, the lighthouse stands less than one hundred feet from the edge of the bluff.)

In May 1796, McComb began operations by building the road and carting material.¹⁵ The first stone of the foundation was laid on 7 June; only four months later the masonry tower was finished and the lantern was being erected.¹⁶ McComb ordered the iron lantern from the New York "Black and White Smiths," Robert Boyd and Co.¹⁷ On 8 November Dering visited Montauk Point, and reported to Coxe that the lighthouse "together with the Oil Vault and dwelling house [was] compleatly finished."¹⁸ Dering received the keys from McComb and put Jared Hand, the son of Jacob Hand, the intended keeper, in temporary charge of the lighthouse (as "keepers of the cattle" for the Montauk Proprietors, the Hands resided on the site and were logical choices as lighthouse watchmen).

McComb's younger brother, Isaac, portrayed the completed lighthouse in a watercolor, *A View of the Light House on Montack Point*.¹⁹ The painting, which includes a site plan, is an accurate rendition of the original light station; it may have been delivered to the Treasury Department as part of a payment request. In the foreground are the rolling, treeless hills of Montauk pastureland. On top of Turtle Hill is the whitewashed tower, surmounted by the copper-covered wooden deck and the iron lantern. On top of the lantern, smoke drifts from the mouth of the ventilator shaped "in the form of a man's head." Set on the bank near the tower is the oil vault, with a capacity to store 1800 gallons. At the foot of the hill are depicted the well and the keeper's two-story, thirty-four by sixteen-foot house, with a kitchen and parlor on the first floor on either side of a large central chimney.

Although the lighthouse was completed in November 1796, four months elapsed before a light was displayed in the lantern. On 10 December, Dering informed Coxe "that the vessel in which the Oil for the Light House at

Montauk was shipped from New Port is on shore at a place called Napeague.”²⁰ The gale that stranded the ship, he went on, also broke fifteen panes of lantern glass and there was no glass to replace them. In March 1797 the oil stored at Montauk’s First House at last was delivered to the lighthouse, and the replacement glass for the lantern arrived at Dering’s Sag Harbor Customs House.²¹ There is no record of the first lighting, but the tower probably carried no light until spring 1797.

John McComb, Jr.

John McComb, Jr., born in New York in 1763, learned building, masonry, surveying, and design as an apprentice to his father, a prominent architect and builder. In 1785 the younger McComb was chief mason for the construction of St. Peter’s Church, on Barclay Street. He was well prepared, when, at the age of twenty-eight, he contracted with the Treasury Department to build the masonry lighthouse at Cape Henry, Virginia.

John McComb, Jr. received high praise for his work at Cape Henry and later at Montauk. Tench Coxe informed the Secretary of the Treasury in October 1796, that “The Inspector of his builds at Cape Henry & Montauk agree that his work is excellent, & his zeal and exertions are greatly to his credit.”²² Following construction of the Montauk Point Lighthouse, Coxe asked McComb to submit a proposal for a lighthouse at Cape Hatteras,²³ but the job went to Henry Dearborn, a former member of the House of Representatives. However, McComb’s 1798 proposal for a lighthouse on Eaton’s Neck was successful; the architectural plans, in the collection of the New York Historical Society, show it to be a smaller version of the Cape Henry and Montauk Point Lighthouses.

Parallel to his lighthouse work, McComb developed a reputation as a notable architect and builder in New York City. He designed and built houses for two men associated with the construction of the Cape Henry and Montauk Point Lighthouses: a 1794 town house for Rufus King, then a United States senator; and Alexander Hamilton’s “The Grange,” built in upper Manhattan in 1801. With Joseph Mangin, McComb submitted the winning design in the 1802 competition for a New York City Hall. Between 1807 and 1811 McComb built Castle Clinton at the Battery.

The Lighthouse from 1797 to 1857

Initially, when the Treasury Department provided capable administration, the keepers at Montauk Point showed an enthusiasm for their work, which included designing and installing a new oil lamp in the lantern. But from 1820 to 1852, under the ineffective guidance of the Treasury official, Stephen Pleasanton, the Montauk Point Lighthouse suffered a period of neglect. Needed repairs to the lantern and tower were not made, leaving the tower open to the weather and eventually causing the wooden floors, stairs, windows, and doors to rot. The lighting apparatus was of inferior quality and poorly maintained by keepers who

received few instructions, and for whom inspections and discipline were almost completely lacking.

Following the War of 1812, the Montauk keeper's dwelling became a favorite destination for travelers on Long Island. Here visitors found a gregarious boarding house. The keepers from 1832 to 1857 (Patrick Gould, John Hobart, and Jason Sorbell) kept a register, "Lights & Shadows of Montauk," in which their guests wrote verses about the sublime setting; sketched the scenery; noted the day's activities of fishing, hunting, and berry picking; and praised the meals served by the keepers' wives and their Native American helpers. One entry reads: "Epicurean Dinners served at Montauk. Bill of Fare: October 17, 1854: Wild Goose, Broiled Chicken, Fried Oysters, Raw Oysters."²⁴

Life at the lighthouse changed dramatically during the second half of the century, as a new central administration replaced local keepers with career lighthouse service personnel, subject to rigorous discipline and frequent inspection.

Planning A First Order Lighthouse at Montauk Point, 1852-1860

In March 1851, Congress took steps to revive America's lighthouse service from thirty years of neglect under Stephen Pleasanton. The Light-House Board, set up to investigate aids to navigation, proposed revamping the service by forming a new board composed of military officers and engineers; by appointing inspectors and engineers to supervise each lighthouse district; by creating a system to classify lighthouses and provide appropriate designs and apparatus for each classification; and by adopting the highest technology available, most significantly by introducing the Fresnel lens in all of the nation's lighthouses.

The board recommended specific lighthouses, including Montauk, a very important light, especially for navigators bound from Europe to New York. It is fitted now with only 15 lamps and 21-inch reflectors for a fixed light. Its reported elevation is 160 feet above the level of the sea, and with a first order apparatus would be seen under ordinary circumstances about 20 nautical miles. Distance from Gay Head 47 miles; from Fire Island inlet light 66 miles. By erecting a light in the vicinity of Great West Bay, Long Island, midway between Montauk Point and Fire Island lights, the trade between New York and all ports to the eastward, including the whole of Europe, would be greatly benefited.²⁵

The report urged that Congress at once appropriate funds to refit ten lighthouses with first order Fresnel lenses; Fire Island Lighthouse was sixth and Montauk Point tenth on the list. The Light-House Board requested immediate funds for a new first order lighthouse at Great West Bay (Shinnecock Lighthouse), and assigned high priority to its master plan for three first order lighthouses to guide ships along the South Shore of Long Island. Each of the three was to be distinguished by a different signal:

Montauk's a fixed light varied by flashes; Great West Bay's a fixed light; and Fire Island's its current flashing light.

Congress quickly took action. In October 1852, the system of aids-to-navigation was removed from Pleasanton's office and given to the Light-House Board. The board tried to implement its plan rapidly but the task was enormous. Communication and planning problems delayed its recommendation to refit thirty-eight lighthouses with first order lenses. It took five years for a first order lens to be installed at Montauk Point, and eight to renovate the tower to standards established for first order lighthouses.

The Great West Bay Lighthouse, later known as the Shinnecock Lighthouse, was completed in 1856, but because the reflector lamps at Montauk displayed a fixed light, the fixed first order lens could not be lit. The Light-House Board could not decide whether to renovate Montauk Point Lighthouse or to build a new tower. In 1857, it authorized temporary repairs to expedite installation of the new first order lens. In June, the board notified mariners that:

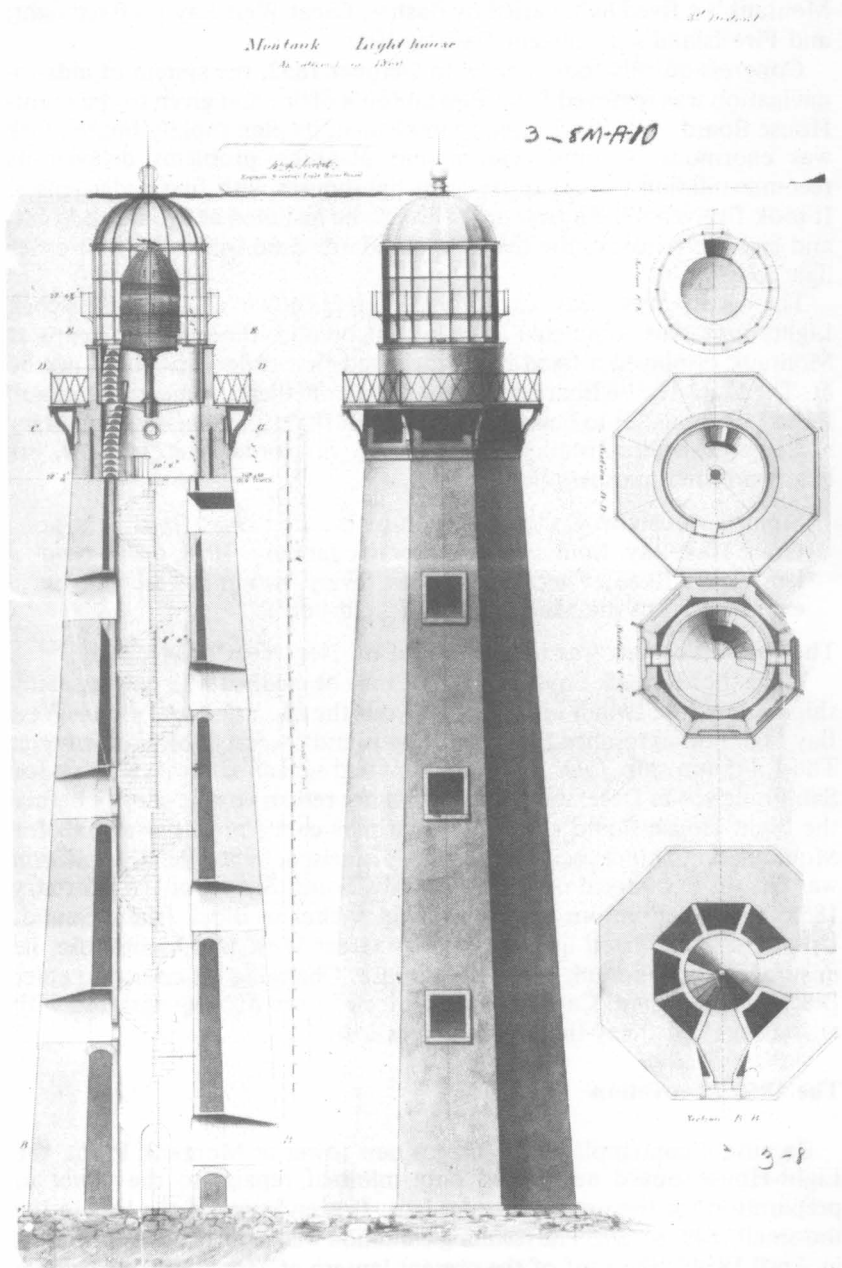
Simultaneously with the exhibition of the first class fixed light at Great West Bay, Long Island, on the 1st January, 1858, a first class lens light, fixed, varied by flashes [every two minutes] will be exhibited from the Montauk Point light-house.²⁶

The first order lens was lit as planned on New Year's Day, 1858.

While the Montauk Point Lighthouse may be credited with guiding many ships safely, the switch in signals between the Montauk and Great West Bay Lighthouses resulted in one of Long Island's worst maritime disasters. The 1,445-ton ship *John Milton*, which had set sail from New York for San Francisco in December 1856, began her return voyage shortly before the Light-House Board's notice to mariners concerning new signals for Montauk and Shinnecock reached San Francisco. When the *John Milton* was caught in a storm off Long Island's South Shore, on 18 February 1858, Captain Ephraim Harding sought shelter in Block Island Sound. Upon seeing the fixed light of the new Great West Bay Lighthouse, he mistook it for Montauk Point Lighthouse. Changing his course to enter Block Island Sound, Captain Harding instead ran his ship aground with all sails set; all thirty-three hands were lost.²⁷

The 1860 Renovation

Because it contemplated building a new tower at Montauk Point, the Light-House Board authorized only minimal repairs to the tower in preparation for the new first order lens. It even installed the lens in the too-small 1849 lantern. The resulting condition was reported by Lt. Morton in April 1859: "the roof of the present lantern at Montauk comes down over & hides the upper or inclined third part of the lens."²⁸ Morton summarized the situation at Montauk Point: "Tower ready to fall—dwelling in bad order—New tower & dwelling required" and then outlined



Montauk Lighthouse as altered in 1860. National Archives, Cartographic Division, Washington, D.C.

his plan for a new eighty-foot tower “identical with that of Great West Bay Tower.”

Six months after Lt. J. St. C. Morton submitted his plan to build a new tower, the Light-House Board reversed its decision and committed to renovating the 1796 tower. On 24 April 1860, an order for ironwork for the Montauk Point Lighthouse was placed with J. P. Morris & Co. of Philadelphia, indicating that plans for the renovation were complete.²⁹ The 1860 remodeling transformed the Montauk Point Lighthouse as closely as possible to a standard first order lighthouse, as described by the Light House Board’s specifications.³⁰ The 1796 tower was raised fourteen feet to provide a watch room and a service room, and a new iron lantern was installed for the giant Fresnel lens—twelve feet high and six feet across. The old tower, gutted of wooden components, was refurbished with iron stairs, floors, windows, and doors. The renovation involved more than the tower. An oil house containing an oil-storage room and a maintenance shop was built adjacent to the tower. A keepers’ dwelling, doubled in size, accommodated the three men appointed to run a first order lighthouse.

Preparations for the renovation began in April 1860, when the apparatus for a temporary light was shipped to the Third District depot for use at Montauk Point. The Sag Harbor *Corrector* reported two months later that a work crew of twelve had commenced to repair Montauk Light and raise it another fourteen feet, with

a new and superior lantern introduced. Two new dwelling houses are to be built for the use of the keepers, so constructed however as to form one building. A tower also is to be raised for a temporary light. A schooner from New York has already landed a cargo of lumber and returned for a cargo of brick.³¹

Inspector A. M. Pennock, in a September report to the Light-House Board, requested that “Montauk Tower [be] thoroughly renovated and new lantern placed. New Dwelling for keeper & assistant and oil room built.”³²

The Lighthouse from 1860 to 1899

Before the Light-House Board’s supervision began, it is doubtful that keepers at Montauk Point routinely watched the lamps all night. However, the frequent inspections and military discipline introduced by the board ensured that keepers attend to their jobs. Once the board required that the lamp of the Fresnel lens be constantly attended, a resident keeper and two assistants, housed in the lighthouse’s expanded quarters, divided watches in the lantern room. The local shepherds and cattle watchers recruited to be the first keepers gradually were replaced by career professionals who moved from station to station.

The principal job of the keepers was to maintain the first order Fresnel lens on four-hour watches from dusk until dawn. An 1871 article in *Harper’s New Monthly Magazine* described the Montauk lantern room

when the first order lens was illuminated. The author was fascinated with the complexity of the lens, a beehive of glass prisms twelve feet high and six feet in diameter:

A few steps higher and we are in the lantern, containing a "Fresnel" flash light of the first order, made by Henry LePaute. It is a miracle of ingenuity in the scientific concentration of the lenses. We step inside the lenses as the "flash" slowly revolves, and the next moment are enclosed in light which is visible thirty-six miles seaward. The flash throws a flood of brilliant light around the entire circle, disappearing and re-appearing every two minutes.³³

Change in Light and Daymark Characteristics, 1899-1903

At the close of the nineteenth century, the Third District engineer, Major David Heap, devised a plan to increase the effectiveness of the flashing lights under his jurisdiction. Heap believed that one-or two-minute intervals between flashes were too long for mariners to wait for the distinguishing signal. He wanted to reduce the interval to no more than fifteen seconds, reasoning that "the shorter time the mariner has to wait for the signal the more valuable the signal will be for him."³⁴ To give all flashing lights a distinguishing daymark, he proposed a brown band on the tower as a "simple and excellent method of denoting by day that the light-house displays a flashing light."³⁵

The Light-House Board adopted Heap's plan. The easiest component to implement was the daymark characteristic; orders were given in 1899 to paint a brown band on Montauk Point Lighthouse and the other five Third District lighthouses that exhibited flashing lights. The plan to decrease the interval between flashes from two minutes to fifteen seconds was not implemented until 1903, when, on 15 June, the first order lens was replaced by a three and one-half order bivalve lens, which exhibited a flashing light every ten seconds. Although smaller, the bivalve lens produced a more intense light than had the first order lens it replaced. By this time the Montauk Point Lighthouse was of lesser importance to transatlantic navigation than the Fire Island Lighthouse, now the principal landfall light, where it was proposed to install a first order bivalve lens.

Automation of the Lighthouse, 1987

The modern era for the Montauk Point Lighthouse began in 1940, when the light was electrified and a radio beacon established at the station, two harbingers of the light's eventual automation. Technological improvements in electronic aids to navigation diminished the importance of lighthouses, and new fully automated optics eliminated the need for manned lighthouses.

The Montauk Point Lighthouse was fully automated on 3 February 1987, when the three and one-half order bivalve lens assembly was replaced

with an automated optic, a revolving DCB 224 beacon. This was the only change wrought by automation. The United States Coast Guard, which assumed the administration of lighthouses in 1939, leased the property to the Montauk Historical Society in 1987, to operate as a historic site museum. The construction of Montauk Point Lighthouse was one of the federal government's first efforts to improve the nation's maritime economy by enhancing navigation to the port of New York. While initially of little importance to ships' captains on eastern Long Island, Montauk Point Lighthouse became a welcome landfall to round-the-world whalers returning to Sag Harbor, Greenport, and Northport. Into the early twentieth century, the American lighthouse establishment regarded it as one of the principal lights on the eastern seacoast. But today Montauk Point Lighthouse is as much a landmark to people traveling in automobiles to the eastern tip of Long Island as it is a seamark to mariners.

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MAGLEV

By Lee E. Koppelman

Editor's note: this article continues our "State of the Island" analysis of Long Island's present and future. The author is the director of the Center for Regional Policy Studies, at USB.

Magnetically levitated high-speed mass transportation, or "MAGLEV," involves the propulsion of a car or train of cars by magnetic forces. As the vehicle is suspended and does not come into direct physical contact with the guidance system, the elimination of contact friction enables much greater speeds than can be attained by wheeled apparatus. MAGLEV is a virtually silent operation, save for the whish of air as it passes at speeds of up to 300 miles per hour.

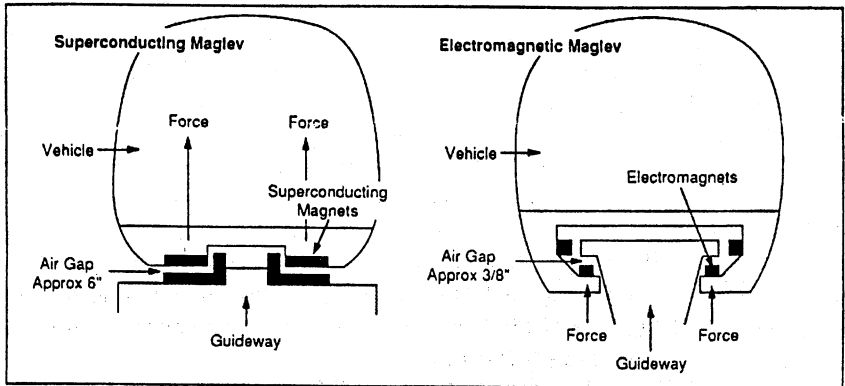
A June 1989 report to the U.S. Senate Subcommittee on Transportation, Water Resources and Infrastructure characterized this new technology: "MAGLEV is to diesel locomotives what Star Trek is to Wagon Train."¹ It is ironic that a society that placed men on the moon and is now exploring our galaxy still operates mass ground transportation with nineteenth-century concepts and equipment. Even more ironically, the next century's answer to safe and expeditious mass transit was pioneered in the United States almost three decades ago and then allowed to demise—only for Japanese and German firms to move into the resulting vacuum.² The potential impact on our Gross National Product is enormous, holding the promise of placing the United States in the most competitive position world-wide in mass transportation.

This article discusses why MAGLEV holds special interest for Long Island, long known as "the cradle of aviation." On 20 May 1927, Charles A. Lindbergh launched his historic flight from Garden City. The Grumman Corporation, of Bethpage, and the Republic Aviation Corporation, of Farmingdale, produced the fighter aircraft that helped win World War II; Grumman also developed and built the LEM, or Lunar Exploratory Module. Already in place on the Island is the engineering know-how and capability to conduct advanced research and development on vehicles that, in effect, are airplane fuselages without wings. Should MAGLEV design be fostered here, the benefits to our economy are self-evident. With the

so-called "Peace Initiative" offering a new opportunity for the United States to shift from an arms race with the Soviet Union to a more domestically-oriented economy, MAGLEV has great potential to offset decline in production and loss of jobs resulting from cutbacks in military spending.

The second generation of MAGLEV technology, invented here on Long Island, offers two types of systems capable of operation. One, the German prototype based on an electromagnetic or "attractive" force, soon will be built by Transrapid International at Disneyland at Orlando, Florida. The tolerance clearance, which must be approximately one-half inch between car and guidance system, is the more costly to build. The second system, based on superconductivity or "repulsive" force, can operate with as much a six inches of clearance (see figure 1). Two physicists at Brookhaven National Laboratory perfected and hold the patents to the magnetic concepts (see figure 2).³ Grumman Corporation, having invested several million dollars in the research and design of the vehicles and guidance system, believe that their approach easily can compete with the German prototype both operationally and economically.

Figure 1. Alternative MAGLEV Technologies



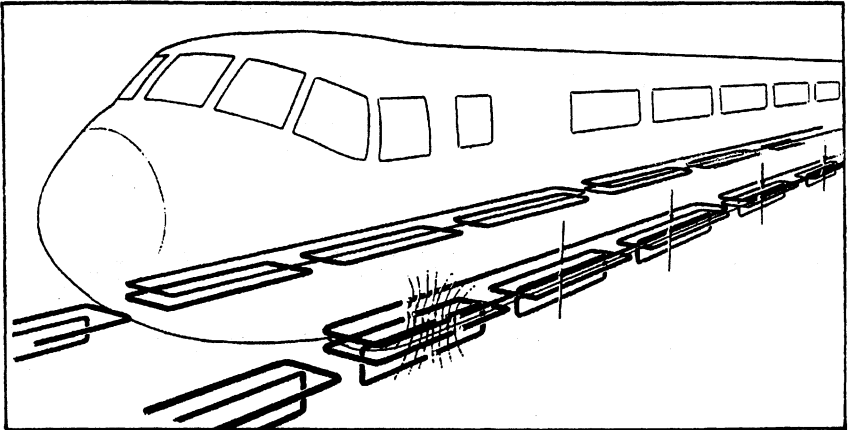
Source: Grumman Corporate Technology, A803V.001, 24 July 1989.

The United States must come to grips with the policy question of whether again to create a technology on which other countries capitalize. This occurred with automobiles, artificial intelligence, and electronics, and is also occurring with MAGLEV. Time is a major concern if the Germans and the Japanese are not to preempt the market; the Japanese National Railway already has built a prototype based on magnetics generated on Long Island.

Washington must take decisive action, committing itself to invest in the nation's future as well as to rethink its transportation policy. As the

nineteenth century was the "train era," when federal policy made transcontinental rail a reality, so the twentieth century has been the age

Figure 2. Powell-Danby Superconducting MAGLEV



Source: Grumman Corporation, "Benefits of Magnetically Levitated High-Speed Transportation for the United States," MAGLEV Technology Advisory Committee Report to the United States Senate Committee on Environment and Public Works, June 1989,

of the automobile and the aeroplane. Now the government must realize that the twenty-first century will be the age of high-speed mass ground transit.

Private enterprise is neither able nor willing to handle the project on a totally privatized budget, but, fortunately, congressional voices are being raised. For the past decade, Senator Daniel Patrick Moynihan has proposed modest funding to rekindle interest in the subject. However, more than a toe-in-the-water approach is needed; the basic research and production of a twenty-to-thirty-mile test track and needed equipment is at least a billion-dollar effort. Representative Robert Mrazek, of Huntington, recently introduced a bill for a \$950-million demonstration project, and has Moynihan's support for similar action in the Senate.

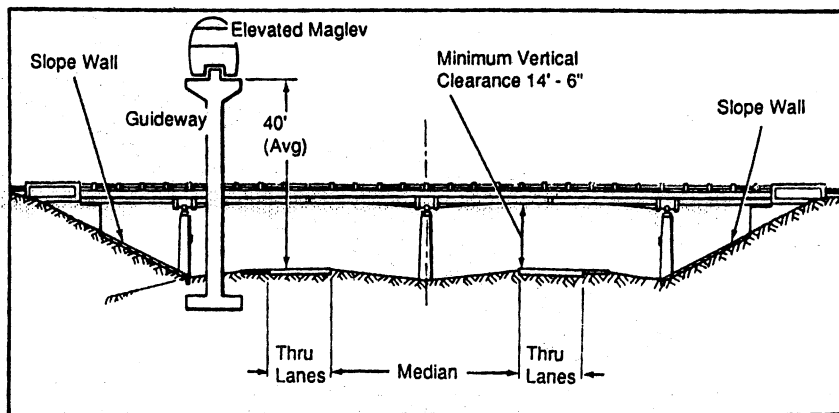
In October 1988, Senator Moynihan formed the MAGLEV Technology Advisory Committee, with members from government, industry, universities, and national laboratories.⁴ Key participants include Drs. Gordon Danby and James Powell, who developed the magnetic concepts at the Brookhaven National Laboratory, and Dr. Richard Gran, from Grumman's Advanced Concepts Division.

The findings thus far are impressive. First, the system can be built on the existing interstate highway network, eliminating expense and delay in securing adequate right-of-way corridors (see figure 3).

Second, MAGLEV is more energy efficient than auto or aviation modes, needing only one-half of the primary energy used by cars per passenger mile, and one-fourth of that used by planes, Savings in petroleum

consumption, and reduction of the balance of trade deficit are other advantages. A secondary consequence of less reliance on fossil fuel is the environmental improvement accruing from a shift of reliance on existing

Figure 3. MAGLEV: Compatibility with the Interstate Highway System



Source: Grumman Corporation.

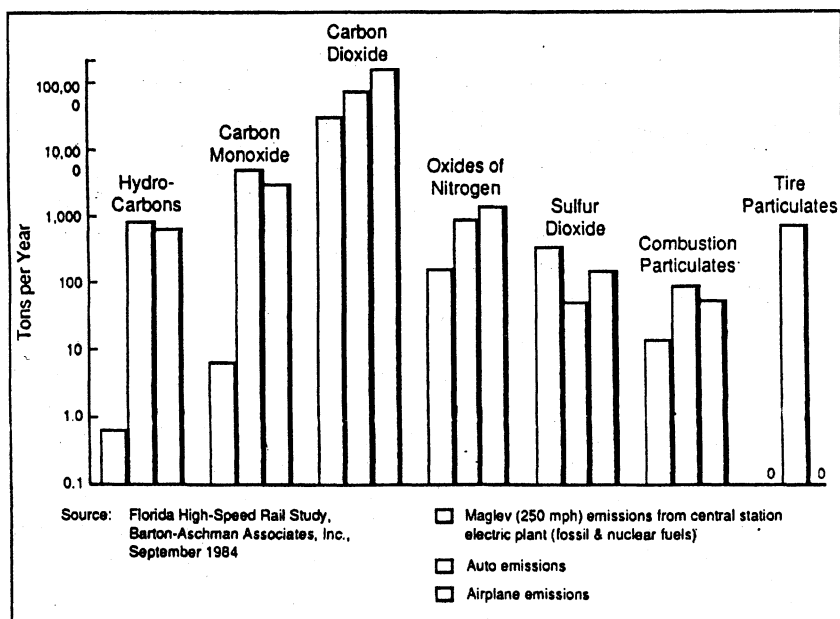
modes to MAGLEV. For example, emissions associated with automobile and airplane operations would be reduced in proportion to their replacement by travel on MAGLEV trains. These emissions include carbon monoxides and dioxides, nitrogen, oxides, volatile organic carbons, and a variety of total suspended particulate matter (see figure 4).

Cautionary voices warn that possible genetic damage from MAGLEV's electromagnetic fields may produce serious health hazards for anyone near or on the vehicles. These concerns are part of ongoing debate and study of the possible genetic effects of radiation from household electrical appliances and power transmission lines. The early assumption was that the fields from household appliances were too low in frequency and too weak in intensity to cause cell damage by heating. More recent studies indicate that cell damage can occur by protein modifications to those who are sensitive to such radiation.⁵ MAGLEV proponents minimize these concerns since it is their belief that in contrast to power lines and other electromagnetic sources, the magnets used on MAGLEV systems can be effectively shielded to reduce the magnetic flux densities well below the most recently adopted standards of safe acceptable levels of such radiation.⁶

Mass high-speed ground transportation would rationalize currently inefficient options for regional travel by plane or car. Air corridors surrounding all major American cities are close to saturation, and subject

to delays caused by weather, unanticipated repair problems, and over-usage. Intercity trips of up to 1000 miles could be made, downtown to downtown, in less time than by plane. This would enable the airlines to eliminate yo-yo (up and down) flights and concentrate on longer trips, for which planes have the speed advantage. Similar benefits would accrue on the ground. Investment in additional highway lanes would be reduced, as would automobile usage, including maintenance and repair; overall

Figure 4. Environmental Pollutants MAGLEV vs. Automobiles and Airplanes



Source: Dr. T. Lynch, *Energy, Environmental, and Economic Benefits of Florida's High Speed Rail and MAGLEV Systems Proposals*, Grumman Corporation Research Paper #890717

safety in terms of injury, deaths and property damage could be achieved. Moreover, construction of a national network of MAGLEV trains would add billions to GNP in equipment manufacture, construction, operational, and indirect multiplier jobs, and the saving of time now spent on travel, let alone the potential for foreign markets.

Although the MAGLEV concept's basic technologies and patents were pioneered in the United States in the 1960s, federal support for continuing research ended in 1975 for unexplained reasons. The resulting vacuum enabled researchers in Germany and Japan to develop the first generation prototypes, and thus preempt the current market. However, the battle is

far from over. It still is feasible for American technology to develop the second generation system, which promises to be superior in every aspect—weight, cost, environmental acceptance, and safety.

Several states have undertaken feasibility studies, and some have begun to establish administrative bodies to bring MAGLEV to fruition.⁷ In 1984 the Florida Legislature passed a High Speed Rail Act, establishing the Florida High Speed Rail Transportation Commission, the purpose of which is to solicit private investment, encouraged by real estate concessions, to build a MAGLEV facility in the Tampa-Orlando-Miami corridor. The state issued a Response for Proposal (RPF) two years later, and expects to award a franchise by September 1991.

The Ohio Legislature followed suit in 1986 for the Cleveland-Columbus-Cincinnati corridor, creating the Ohio High Speed Rail Authority which issued an RFP in June 1989. Instead of full privatization, the Ohio proposal envisions a partnership between the Authority and the private sector. A successful respondent, the Ohio Railway Organization, Inc., is working with the Authority, and later this year expects to submit a construction and operational proposal to the governor and the assembly. In Pennsylvania, a Carnegie Mellon working group was the catalyst for legislation creating an Oversight Authority to draft an RFP for a Pittsburgh-Philadelphia franchise.

Texas invited the German High Speed Consortium to do feasibility studies in 1985 and 1987 for the "Texas Triangle" of Houston, Dallas and San Antonio. A Texas Turnpike Authority study, undertaken in 1987 and completed in February 1989, was followed by the creation of the Texas High Speed Rail Authority, now developing an RFP. Finally, California and Nevada started joint work in 1983 for the Las Vegas-Anaheim route. The California-Nevada Superspeed Train Commission, established five years later, issued an RFP in January 1990. This effort probably will lead to an expanded Pacific Southwest High Speed Rail System that also includes Arizona.

The actions of so many states is proof of increasing interest, yet the Northeast, especially New York and New Jersey, has ignored MAGLEV technology and the economic benefits of leadership in the field. This is particularly ironic and vexing, considering that the seminal work and patents were created on Long Island. The Port Authority of New York and New Jersey, which existed for more than fifty years before other states created agencies to address the MAGLEV option, continues to demonstrate lack of interest, if not antipathy, to the issues of rail transportation. Nevertheless, one of their engineers, William Van Allen, was committed to the concept and virtually single-handedly worked for a New York-New Jersey participation in MAGLEV development.

Early in 1990, Van Allen looked for a sponsor to pull interested individuals together and generate interest in the system's inherent opportunities. With the aim of building a consensus with the political strength to win the support of the governments of New York, and, hopefully, of New Jersey and Connecticut, he successfully solicited the

help of the Center for Regional Policy Studies at the State University of New York at Stony Brook (USB). A strategy meeting concluded that to gain state involvement the University, Drs. Powell and Danby, and the Grumman Corporation must cooperate to galvanize public attention.

Van Allen organized a research seminar at which MAGLEV professionals presented their views.⁸ The meeting, held at the World Trade Center, was co-sponsored by USB, Stevens Institute of Technology, and the New York Institute of Technology. Coincident with the seminar, a USB press statement noted that the Long Island Regional Planning Board had released the transportation segment of the *Comprehensive Development Plan for Long Island: 1990-2010*, which strongly endorsed the MAGLEV concept.⁹

The well-attended seminar was addressed by representatives of the Federal Railroad Administration, the U.S. Army Corps of Engineers, the Department of Energy, and the Argonne National Laboratory, in addition to speakers from sponsoring universities and the Port Authority of New York and New Jersey. Participating private corporations included Grumman and the German firm, Transrapid International. Widespread media coverage aroused interest throughout the tri-state region.

In spring 1990, the Ad Hoc Regional MAGLEV Technology Committee, formed as a result of USB's initiative, scheduled a series of meetings on Long Island; at Stevens Institute, in New Jersey; at Columbia University; and at New Paltz, in the mid-Hudson valley.

The initial strategy succeeded. Members of the New York State Department of Transportation (NYSDOT) asked why the Center for Regional Policy Studies at Stony Brook was in the vanguard of what obviously should be the state's responsibility. They immediately were informed that state leadership was most welcome, and, if the NYSDOT were in earnest, it could and should take the lead in pursuing a New York State MAGLEV program.¹⁰

The pace quickened. Legislation introduced by Representative Mrazek, in accord with the recommendations made by the Long Island group, was followed by a Request for Proposal (RFP) issued by the New York State Energy Research and Development Authority (NYSERDA) to "...quantify the technology requirements and potential benefits of MAGLEV to New York State, and position the State's industrial base to respond to opportunities associated with this technology."¹¹ The budget for this study is \$100,000, with Grumman the winning contender.

NYSERDA and the NYSDOTA convened a jointly sponsored conference at Albany, on 17 September 1990. The opening speaker, Assemblyman William B. Hoyt (D-144th Assembly District), called for a New York State High-Speed Rail Service Commission, similar to those created in other states. Current budget debates will determine whether the commission and its \$1 million allocation will be approved.

The movers and shakers of New York State would be well advised to follow the admonition attributed to Daniel H. Burnham, the designer of the Chicago World's Fair of 1893: "Make no little plans; they have no

magic to stir men's blood...Make big plans...Let your watchword be order and your beacon beauty."

What bigger and more stirring plan than the transportation solution for the twenty-first century?

NOTES

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American Quilting, 1780-1990

By Amy McKune

Last July The Museums at Stony Brook presented “Two Centuries of American Quilts,” an exhibition exploring the history of quilting in the United States. Quilts dating from 1780 to 1990 were drawn from private and public collections, predominantly on Long Island.¹ Quilting has been a popular art form from colonial times to the present; this article traces its development during the period covered by the exhibit.

Once thought of as uniquely American, both patchwork and quilting predate the settlement of the New World by Europeans. Patchwork, a method of piecing fabric together to form a whole, has been done in many parts of the world, including Africa, Asia, and Europe. Quilting, a way of stitching layers of fabric together for warmer clothing and bedding, has its roots in ancient Egypt.² However, if we cannot credit ourselves with inventing the technique, the proliferation of the patchwork quilt is a uniquely American tradition.

Few examples of quilting survive from colonial times, suggesting two important aspects of the study of the art. First, quilts are by nature fragile; because they are textiles, they tend not to survive as long as some other types of objects. They deteriorate from use, exposure to light and dust, and, often, from “inherent vice,” a general degeneration contributed to by an integral element of an object—for example, certain dyes. Stable dyes like indigo, often found in coverlets, survive without a great deal of fading or fiber degradation, but harsh dyes containing salt cause fibers to wear out faster than those that are treated with gentler dyes.

There is also an economic reason for the failure to survive of quilts made before 1800. They often are thought of as inexpensive forms of bed covering, but their production required a certain degree of affluence. Many patchwork quilts were not put together from scraps left over from other work, but rather with fabric made or purchased expressly for a particular quilt. Before the invention of the sewing machine in the mid-nineteenth century, quilts were crafted by hand. The expense of fabric, as well as the time that had to be invested in such a labor-intensive product, precluded quilts from being the handiwork of people struggling to survive.³

A large number of late eighteenth- and early nineteenth-century quilts were whole-cloth—that is, although often pieced they used one fabric for the quilt top, relying on the quilting lines to delineate a pattern. This early form, made of silk, linen, or cotton, was virtually replaced in the 1840s

by the pieced cotton quilt. The popularity of the pieced cotton quilt corresponds with the growth of the American textile industry. In 1798 Samuel Slater opened the first mill producing factory-spun cotton, in Pawtucket, Rhode Island, followed some fifteen years later by spinning and weaving mills in Waltham and Lowell, Massachusetts. This led to the Northeast's economic transformation from agriculture to industry, while the South remained dependent on agriculture sustained by slave labor.⁴

Cotton production at reasonable prices made it the most popular choice for nineteenth-century quiltmakers. Construction of a patchwork quilt involves cutting large pieces of cloth into shapes, sewn together to form a pre-determined pattern. After the resulting quilt top is laid over the backing fabric and batting material, all three layers are connected with decorative stitching. The purpose is to create a warm and eye-pleasing bed cover.



Appliqué quilt made by Mary Cordelia Hawkins, Stony Brook, 1846. Courtesy of The Museums at Stony Brook.

A patchwork quilt recently acquired by The Museums at Stony Brook is unusual because the quilter appliqued her name, the town in which she lived, and the date of completion along two edges. This quilt, made in 1846 by Mary Cordelia Hawkins of Stony Brook, sheds new light on daily life in the nineteenth century. Born Mary Cordelia Bayles, in Stony Brook in 1821, she was one of the nine children of Thomas and Elizabeth (Hawkins) Bayles (both Bayles and Hawkins are names familiar to readers of Suffolk County's history). Mary's father, Thomas, died in 1836, her mother, Elizabeth, two years later.⁵ Further geneological research is needed to clarify Mary's relationship to Nichols Smith Hawkins, her cousin and future husband.

Three touching letters from Mary to Nichols illuminate their loving but harried courtship (prolonged by intra-family opposition), as well as prevailing mores of courtship and marriage. In the first letter, dated 16 February 1840, Mary thanks Nichols for his Valentine, and continues (original spelling, syntax, and punctuation preserved):

You wrote that you wanted me to make you happy by Becoming yourn I should like to Comfort you but must say that I cannot for particular reasons it ant because I dont respect you nor do I think that I ever shall find anyone that will do any better by me I sincerely think that you will do as well by me as any one I am very sory to hear that it would make you the most miserable wretch on earth if I refused you for I cannot give you an incouragement I beg to be excused for keeping you in suspence so long and then deny you Believe me my Friend I wouldnt if I thought of denying you of my Heart and Hand I think just as much of you now as ever I did I cannot forget a one that I do so highly respect you will think it very strange then why I do refuse you I will tell you although I am very sorry to say so it is on the account of the Family they do oppose me so very much They say so much that I half to refuse you it is all on their account that I do refuse so good an offer I sincerely hope that it will be for the best I hope that you will find some one that is worthy of you more so than what I am I beg only [that you] remember me when you join with one in wedlocks bands I cannot write any more for my feelings wont admit I must now bid you Farwell.⁶

Four days later she writes:

Dear Cousin I received your letter yesterday morning I was very sorry to hear that you was so troubled in mind I dont doubt but what you do feel very bad for I think that I can judge you by my own feelings but we must get reconciled to our fate I am very sorry that things has happened so but I cannot help it therefore I hope you will not trouble yourself any more than you can possibly help keep your mind from it as much as you can and be cheerful for I must tell you as I have told you before that I cannot relieve you by becoming your

Bride therefore I do beg and entreat on you not to think of me any more as a Companion through life for if you make your own self unhappy by it you will make me the most miserable creature in the world to think that I made you so unhappy and I do now beg and Beseach of you for your own sake and for my sake not to trouble yourself it will render me very unhappy I must now close my letter with my love to you.⁷

The third letter, written the following summer, shows that the situation has changed little, if at all. A portion of it reads:

It is their wish to have our friendship destroyed if they do succeed in their wishes I sincerely hope that you will bear the disappointment with great fortitude I shall think that you will doubt the sincerity of these lines but I will call on God to witness them for he knoweth the secret of every heart.

I do conjure on you to never mention one word of what I have wrote please to burn them us as quick as you read them.⁸

Each letter is signed affectionately (although the signatures have been excised) and followed with the direction to "Please burn this up." These blunt but poignant letters highlight the struggle endured by this couple before they married in 1846. Mary's quilt, probably her "bridal quilt," is proof of the strong bond between them which lasted until Mary's death in 1888 (Nichols lived until 1903).

Mary's bridal quilt is typical of the mid-nineteenth-century, when changing styles reflected increasing technological innovations. The sewing machine, patented in 1848 by Elias Howe, Jr., was marketed for home use when he teamed up with Isaac Singer in 1856.⁹ Once it became widely available, this device drastically changed the technique of quilting. A minority continued to sew by hand, but many people preferred the sewing machine to speed the construction of quilt tops. After 1860, it is estimated, half of all quilts were pieced by machine sewing.¹⁰ Other late nineteenth-century improvements were attachments enabling quilters to machine quilt, rather than work by hand,¹¹ but this never became the norm; the majority of quiltmakers still prefer to hand-quilt their work.

Mary's quilt is a signature quilt, a category which includes album, friendship, and presentation quilts.¹² Traditionally, quilting is an anonymous art form, but because this type of quilt is signed, it may usually be identified as the product of a particular maker or group. Although Mary's signature is appliqued fabric, this sort of quilt proliferated after the invention of indelible ink in the 1840s made it possible to write on fabric without causing its deterioration.

A signature quilt was sometimes the effort of a group, who presented it to a bride, a minister, or some other person they wanted to honor. Signatures also were made by one person with fabric donated by family members and friends. Each block was "signed" with its contributor's name, often applied by someone with excellent handwriting, such as a

schoolteacher.

Fund-raising quilts, another example, bore the signatures of people willing to pay a small fee to sign their names to raise money for a cause. Raynham Hall Museum in Oyster Bay has such a quilt produced for the Oyster Bay Public Library (now the Oyster Bay-East Norwich Public Library), with the signatures of Theodore Roosevelt and Andrew Carnegie. The signature of Carnegie, who endowed many small-town libraries, suggests that he gave the Oyster Bay Public Library seed money for its building. The signatures of prominent people were often obtained by sending a block of fabric to be signed before the quilt top was constructed. Once a fund-raising quilt was completed it was frequently sold to the highest bidder to raise additional funds.

During the last quarter of the nineteenth century, the production of cotton quilts decreased and a new type of quilt appeared—the “crazy” quilt, which looked like a scrap quilt, yet a market developed for it.¹³ Many companies marketed patterns for piecing and embroidery, and sold scraps of silk, velvet, and other fine materials. The popularity of the crazy quilt, designed to add decoration to already ornate parlors, reflected the excessive ornamentation that marked the Victorian era. Because of their use as throws rather than bedcoverings, crazy quilts tended to be smaller than the cotton patchwork quilts which preceded them.

The development of the crazy quilt corresponds to an increased availability of silk, and a resulting drop in its price. In the late nineteenth century, a silk weaving industry developed in the United States. By 1900, two-thirds of the world’s silk was woven here. This industry, however, depended on silk yarn from China, which dwindled early in the twentieth century.¹⁴

In the 1890s America was swept with romanticism about our nation’s past, resulting in the Colonial Revival period in architecture and the decorative arts. After losing favor during the Victorian era, the cotton patchwork quilt revived. Although “revival” signifies a link with the past, the Colonial Revival in quilting featured a loose adherence to by-gone styles, while often mixing design elements of different historical periods to create a brand new style. An example is the double wedding-ring pattern, published in ladies’ magazines in the late 1920s; although related to nineteenth-century patterns, this design was new.¹⁵ One of the main accomplishments of the revival was the preservation of nineteenth-century quilts which otherwise may have been lost.

The history of the craft continues to unfold. In the 1970s, the ranks of craftspeople were augmented by a new generation of artistic quilters who choose the medium for its uniquely tactile qualities. Some use standard designs with little change; others transform traditional patterns to create contemporary pieces; still others use the quilt as if applying paint to a canvas.¹⁶ This continuing phase is expanding quilting’s horizons while respecting its historical integrity.

NOTES

1. Some basic studies of quilting, from which came much of the research for the exhibit and this article, are: Barbara Brackman, *Clues in the Calico* (McLean, VA: EPM Publications, 1989); Patsy Orlofsky and Myron Orlofsky, *Quilts in America* (New York: McGraw-Hill, 1974); Pat Ferrero et al, *Hearts and Hands: The Influence of Women and Quilts on American Society* (San Francisco: Quilt Digest Press, 1987); Kurt C. Dewhurst, Betty MacDowell, and Marshal McDowell, *Artists in Aprons: Folk Art by American Women* (New York: Dutton, 1979).
2. Brackman, *Clues*, 13.
3. Jonathan Holstein, *The Pieced Quilt: An American Design Tradition* (Boston: Little, Brown, 1973).
4. Brackman, *Clues*, 16; for a brief summary of Samuel Slater, Francis Cabot Lowell, and the development of textile mills, see Robert L. Heilbroner and Aaron Singer, *The Economic Transformation of America* (New York: Harcourt Brace Jovanovich, 1977), 37-41; for the antebellum economy of the North, South, and West, see Douglass C. North, *The Economic Growth of the United States 1790-1860* (1961; reprint, New York: W. W. Norton, 1966), 66-188.
5. Ralph Clymer Hawkins, *A Hawkins Genealogy, 1635-1939* (Baltimore: Gateway Press, 1987); the wills and probate records of Thomas Bayles, Elizabeth Bayles, and Mary Cordelia Hawkins are on file at the Surrogate's Office, Riverhead.
6. Mary Cordelia Bayles to Nichols Hawkins, 16 February 1840, Rhodes Collection of the Three Village Historical Society, Emma S. Clark Library, Setauket.
7. *Ibid.*, 20 February 1840.
8. *Ibid.*, 13 July 1841.
9. Orlofsky, *Quilts*, 59; for the impact of the sewing machine and the I. M. Singer Company, one of the country's first mass producers of machinery, see Alfred D. Chandler, *The Visible Hand: The Managerial Revolution in American Business* (Cambridge: Belknap Press of Harvard Univ. Press, 1977), 302-06.
10. Ferraro, *Hearts and Hands*, 39.
11. Orlofsky, *Quilts*, 59.
12. See Linda Otto Lipsett, *Remember Me: Women and Their Friendship Quilts* (San Francisco: Quilt Digest Press, 1985), and Jane Bentley Kolter, *Forget Me Not: A Gallery of Friendship and Album Quilts* (Pittsdown, NJ: Main Street Press, 1985).
13. Penny McMorris, *Crazy Quilts* (New York: E. P. Dutton, 1984).
14. Brackman, *Clues*, 42.
15. *Ibid.*, 16, 168.
16. Penny McMorris and Michael Kirk, *The Art Quilt* (San Francisco: Quilt Digest Press, 1986).

Long Island Goes to the Auto Races: The Great Vanderbilt Cup Controversy of 1904

By Geoffrey L. Rossano

The Vanderbilt Cup Races, a series of dramatic automobile competitions conducted over Nassau County's public highways in the first decade of the twentieth century, were among the most famous, as well as the most controversial, sporting events ever held on Long Island. Each fall between 1904 and 1910 these international meets attracted enormous crowds, sometimes as many as 250,000 spectators. They have since passed into legend, generating nostalgia for the pre-suburban, gold coast days.

Less well-remembered is the fierce controversy the races sparked, and the strident opposition mounted by those segments of Long Island society which resented the intrusion of millionaires and sportsmen, their death-defying "Devil Cars," and the revolutionary changes in everyday life that they represented. A few Nassau citizens even threatened to defend their home turf with guns.

The chief sponsor, who inspired and organized the event and donated the huge trophy bearing his name, was William K. Vanderbilt II. Only twenty-six years old at the time, he was a true child of the Gilded Age, an incandescent fixture of the Newport social scene, the owner of a noted turbine yacht, developer of an elegant North Shore estate at "Deepdale," and one of the nation's leading proponents of automobiles. Without his enthusiasm and persistence the Vanderbilt Cup Races would never have occurred. It is the interrelationship of the man, his times, and the event which this article explores.¹

Vanderbilt's reputation had a great deal to do with the public opposition to the races which flared throughout 1904. As one of the most visible and controversial heirs of a "Robber Baron" dynasty, he became a lightning rod for the storm of social and political controversy swirling at the turn of the century. Not twenty years had passed since his grandfather, William Henry Vanderbilt, when challenged about the effects of certain railroad policies, exploded, "The public be damned! I'm working for my stockholders." In the intervening decades the family had gone on a building, buying, and yachting spree that may be unparalleled in American history. Hardly a day went by without some newspaper printing a story about the Vanderbilts and their flamboyant life-style.²

Even as William Vanderbilt and his fellow automobile enthusiasts drew up plans for a great Long Island road race, legislators from Albany to Washington debated whether too much wealth and too much power lay

in the hands of great industrial trusts and the men who owned them. Newspapers and magazines were filled with stories of corruption and the abuses of power, written by a new breed of journalist known as muckrakers. One after another old guard politicians were replaced by reformers called Progressives.³

On Long Island, the ever-growing influence of a prominent millionaires' colony raised disturbing questions. Many residents bemoaned the loss of farmland as estates replaced fields of vegetables. Others charged that wealthy citizens brazenly controlled the political process and manipulated land-use policies for their own benefit. Still others criticized so-called sportsmen who careened around local roads in their dangerous and expensive automobiles.⁴

Much of that local criticism was aimed directly at young Mr. Vanderbilt. While others bought farms and built estates, he attempted to purchase Lake Success, the largest freshwater lake in Nassau, and turn it into his private retreat. Though many of his peers enjoyed fast cars, Vanderbilt roared along the highways daring the police to catch him. Without question, his sponsorship and association with the Vanderbilt Cup Race guaranteed that he, as much as the event itself, would be the focus of attention, enthusiasm, and dismay.

The opposition to the proposed race which surfaced in the summer and fall of 1904 drew on several sources, especially the antagonism felt by many Long Islanders toward the rapidly expanding colonies of millionaires on the North and South Shores. This opposition encompassed both the distaste of the less affluent for those favored with extraordinary riches, as well as the suspicion of traditional agricultural communities for the social, economic, and technological modernization fostered by the wealthy. Such a clash of values and lifestyles found focus in both the political arena and the newspapers. William Vanderbilt's effort to create an exclusive personal enclave at "Deepdale" formed a prominent chapter in this much larger story.

Affluent New Yorkers began establishing country estates on Long Island in the late-seventeenth century, and, in the following 150 years, many of the region's political, social, and economic elite created large rural retreats. The process accelerated in the nineteenth century as improved transportation systems such as the railroad and steamboat offered more rapid access; the Island's hills, plains, and shore provided ample room for the development of recreational facilities then coming into vogue—yacht clubs, polo fields, golf courses, fox hunts, and sportsmen's clubs.

By 1900 the move to the country was at flood tide. The Morgans, Pratts, Whitneys, Cuttings, Havermeyers, Mackeys, Phippses, Vanderbilts, and dozens of others laid out estates along the North Shore, and to a slightly lesser extent the South Shore, by purchasing large blocs of farmland. The coming of the millionaires precipitated the greatest changes in the topography, economy, and society of Long Island since the arrival of the Europeans 250 years earlier.⁵

Thousands of Long Island residents welcomed the vast infusion of

capital and the modern improvements it brought. The millionaires supported better roads, electric generating plants, telephone service, museums, and hospitals. Construction activity boomed. Local nurseries thrived. Many farmers eagerly sold their property for top dollar, far in excess of its agricultural worth.

Others were less enamored of the phenomenon. The centuries-old agricultural communities north of Jericho Turnpike were virtually eliminated in the space of thirty years, as hundreds of farms disappeared. In many instances traditional access to the shore or rights of passage across woods and fields were denied by the new owners, and bitter courtroom battles ensued. In the famous case of the utility magnate John Aldred and the New York attorney W. D. Guthrie, who purchased the village of Lattingtown, the entire hamlet of sixty buildings was razed to improve the views.⁶

So dramatic was the change unfolding on Long Island that in 1903 the *New York World*, a prominent muckraking journal, printed a story inveighing against the millionaires' monopolizing local property. The author charged that the creation of an exclusionary "millionaires belt" was shutting off New York and Long Island's future growth by denying access to the middle and working classes. In Huntington the *Long Islander* editorialized against the concentration of thousands of acres in the hands of a few owners.⁷

The expanding political influence of Long Island's richest residents also created resentment. In one typical situation plans were announced to locate a cemetery on the I. U. Willets farm in Herricks, within sight of several estates. Almost immediately a cadre of wealthy opponents appeared, attending a public hearing to protest the scheme. Among those who announced their opposition were W. R. Grace, William K. Vanderbilt, E. D. Morgan, Robert Bacon, and John S. Phipps. Grace, a leader in the controversy, hosted a dinner and organized a committee of one hundred to fight the cemetery. When the proposal was turned down, County Supervisor James Cocks rather lamely insisted that he had not been influenced by Grace and his allies.⁸

It was within this context of social and political upheaval that a bitter controversy over William K. Vanderbilt's plans to create a great Long Island estate emerged. The reaction that he sparked, in turn, impacted his later plans to host an international road race on the public highways of Nassau County.

Young William Vanderbilt was intimately familiar with Long Island's social and political landscape. His father, William Kissam Vanderbilt, created the famed estate "Idle Hour" at Oakdale in the 1870s, and Willie, Jr. spent many pleasant days there fishing, ailing, riding, and hunting. Visits with friends elsewhere on Long Island introduced him to the entire range of Gold Coast sites. Following his 1899 marriage to Virginia "Birdie" Fair, daughter of the Comstock Lode millionaire James Fair, Vanderbilt began thinking about establishing a country seat of his own. After an unsuccessful attempt to buy a Newport "cottage," the young

couple selected a spot on the shores of Long Island's Lake Success straddling the Nassau-Queens border. Lake Success offered many advantages: proximity to New York, natural beauty, vast acreage, and excellent roads for motoring.

Given his high profile as one of the nation's most talked about "aristocrats," as well as his family's recent building spree which included "Marble House," "The Breakers," "Biltmore," and a new "Idle Hour," it was not surprising that the popular press scrutinized and publicized young Vanderbilt's plans for a Long Island estate. At first his projects were greeted with the same reaction that heralded similar turn-of-the-century ventures—praise and wonder. In time, however, the public perception changed and a distinctly hostile tone crept into the reporting.⁹

Using the pseudonym "Mr. Smith," Vanderbilt commenced purchasing property in 1901. The following spring, word leaked out that he had acquired seventy-five acres for \$250,000. By the time he finished buying, Vanderbilt had amassed approximately 600 acres at a total cost of \$334,000. He soon named his new home "Deepdale."

During the next three years he ordered extensive work on the grounds, seeking to create a park-like setting adorned with fountains, oversized vases, and ornamental plantings. An initially modest Colonial Revival-style farm house erected in 1902 was enlarged in 1903, and again in 1904. At least one newspaper reported that the architectural firm of Hunt and Hunt was also drawing up plans for an even larger stone castle to be built on an eminence overlooking Lake Success. This project, however, was never executed.¹⁰

In addition to the grounds and mansion house, the "Deepdale" property also contained conservatories, two great greenhouses, garages, a gardener's cottage, carriage stable, vegetable garden, farm outbuildings, and deer park. One of Vanderbilt's special hobbies at this time was raising and exhibiting prize poultry.¹¹

Vanderbilt's initial efforts at "Deepdale" met with general approbation, and his neighbors, both the wealthy and those of modest means, wondered what further transformations he would undertake. Area newspapers reported each event at Lake Success, described the estate's lavish appointments, and speculated on future developments. When news of Vanderbilt's true intentions was revealed, however, fireworks erupted.

Vanderbilt, who already owned nearly all the shoreline surrounding Lake Success, next attempted to purchase the lake itself, along with the last remaining public access, from the town of North Hempstead. He hoped thus to increase his privacy by eliminating boaters and fishermen. As early as August 1902 he tendered a formal offer to the municipal authorities. After heated debate, which included objections that local men would be prevented from earning a living harvesting ice in the winter, area voters at a special September election refused to sell, whereupon Vanderbilt began fencing his land and barricading certain lanes that ran down to the shore. During the following winter he maneuvered to have legislation enacted in Albany that would facilitate his acquisition, but a wave of public

opposition killed the plan.¹²

Annoyed by these rebuffs, Vanderbilt, usually a vigorous advocate of technological improvement, opposed the creation of a Lakeville electric district, fearing that street lamps installed along the road which bordered his estate would increase evening traffic there. So obnoxious did he become that, in the fall election of 1904, the local Republican party campaigned against his expansion program.¹³

Vanderbilt never acquired Lake Success, but his attempts generated deep hostility. His equally aggressive pursuit of a small farm belonging to the elderly descendent of an old Long Island family brought further harsh condemnation. Well before Vanderbilt's challenge to the automotive community to visit Long Island and compete for his silver trophy, actions and plans at "Deepdale" had sparked a major public controversy, casting the millionaire sportsman in the worst possible light.¹⁴

As if the struggle over Lake Success were not enough to tarnish his reputation on Long Island, William Vanderbilt's position as one of the nation's leading "automobilists" helped fan the flames of local anger, rousing opposition to the planned road race. To many technological enthusiasts he was an automotive pioneer, the passionate exponent of a revolutionary form of transportation. Throughout his young adulthood William K. Vanderbilt II exhibited a marked passion for fast cars. He was among America's earliest racers, competing at Daytona Beach in Florida and Eagle Rock in New Jersey, as well as in France, Spain, and Belgium. At one point he held several world speed records. A businessman and visionary, he later guided the creation of the Vanderbilt Motor Parkway, which originally stretched from the Queens border to Lake Ronkonkoma. Along with the railroad, the automobile played the greatest part in changing the face and pace of Long Island, and Vanderbilt was in the forefront of that movement.

Not everyone was so complimentary; less charitable observers saw him as the exemplar of the privileged offspring of Gilded Age tycoons, who spent their time roaring around the countryside in dangerous and expensive toys rather than earning a living like everyone else. Thousands of turn-of-the-century Long Islanders were not amused by his accidents, scrapes with the law, and often boorish and arrogant behaviour.

In their early days, automobiles were fiercely expensive to own and operate, well beyond the reach of most consumers. A typical vehicle could cost several years' average salary, with Henry Ford's "Model T" more than a decade away. Automobiles, however, were enthusiastically adopted by the nation's wealthy. Millionaire sportsmen dominated both the Automobile Club of America and the American Automobile Association, with such prominent Long Islanders as August Belmont, William Vanderbilt, Howard Gould, James Breese, Foxhall Keene, Frederic Bourne, H. O. Havermeyer, Clarence MacGay, and Harry P. Whitney among them. There was even talk of leasing a Long Island country club for the use of the auto set.¹⁵

The first Newport auto races of 1900 (Newport was then the center of

fashionable society) were sponsored by the grande dames, Mrs. O. H. P. Belmont and Mrs. Theresa Oelrichs. The same summer a newspaper reported, "Auto Craze Seizes Newport: To Be Without a 'Mobe' is to Endanger One's Social Position." Similarly, in a 1902 article on "Society Women and Their Autos" the *Atlanta Constitution* decreed that it was the proper thing "to run one's own machine. To be distinctly smart you must own six autos."¹⁶

Threatened with possible cancellation of the 1901 Newport auto meet, the *New York Herald* noted that "Millionaires Ask for Auto Race." The petitioners included Col. John Jacob Astor, Mrs. Alice Drexel, Reginald Vanderbilt, and H. O. Havermeyer. When the races again were run at Aquidneck Park, the contestants included such social luminaries as William Vanderbilt, Harry P. Whitney, O. H. P. Belmont, Clarence MacKay, and Louis Lorrillard.¹⁷

Here and there critical voices were raised. The *New York World*, known for its slashing attacks on the rich and their ways, charged that "America's exclusive monied, aristocratic set courts peril...in its almost mad search for diversion, pleasures, and pastimes." The *World* also published a lengthy article on how the automobile was making society leaders fat. Among those spotted carrying a few extra pounds were Mrs. Theresa Oelrichs, James Breese, and Reginald, Virginia, and Alfred Vanderbilt.¹⁸

William Vanderbilt's love affair with the automobile began in 1888 during a European vacation with his family. As a guest of the Count de Dion, the excited ten-year-old rode in a steam-powered tricycle from Beaulieu to Monte Carlo. Twelve years later, on another European journey, Vanderbilt purchased his first automobile, an English Morse roadster. During the next dozen years he conducted several auto tours across Europe and even motored through North Africa.

When not engaged in extended exploration of the countryside, Vanderbilt participated in a series of highly-publicized races at home and abroad. He competed first in events in Rhode Island organized by the millionaires' colony there, but soon branched out to races at Ormond-Daytona Beach, Florida, the famous Eagle Rock, New Jersey, hill climb, and several important meets in Europe, including the ill-fated Paris-to-Madrid dash of 1903 which left nearly a dozen participants and spectators dead.¹⁹ Vanderbilt's frenzied automotive activity generated considerable comment, much of it caustic; for nearly fifteen years the newspapers reported his escapades. Just as events at "Deepdale" ignited a storm of local criticism, so his exploits on the road spawned more hostility which inevitably colored the reaction to his proposed Long Island auto race.

In 1899 he almost died in a Newport accident caused by racing his car backwards down a hill on Ocean Drive. The following year, Newport officials ordered him to curb his speed on local roads or face being arrested. A June headline charged that "Whenever [Vanderbilt's] French Auto Appears in Public the People Run for Cover!" On still another occasion he was arrested for "scorching" through Boston-area parks. He paid a fifteen-dollar fine at the Milton, Massachusetts, police station with money

borrowed from his chauffeur. Each summer, policemen from Newport to Boston were lying in wait for him.²⁰

So negative was the reaction from much of the Newport populace that in 1901 Vanderbilt abandoned the town, claiming authorities there were harassing him over the speeding question. He promised he would never return except for short visits with his relatives. Instead, with the purchase of "Deepdale" he shifted his attention to Long Island, where soon the drumbeat of public anger reverberated again. In 1902 the New York American charged that Vanderbilt and his "Red Devil" racer were largely responsible for a law pending in Albany to limit speed on state roads. It claimed that Long Islanders near Garden City cowered in fear of the "Red Devil," and that "Eternal Vigilance was the Price of Life."²¹

The *New York World*, which frequently criticised the rich and their automotive thrill-seeking, singled out Vanderbilt and his new Mercedes roadster, the "White Ghost," for special attention. Many editorials condemned wild, rich, dangerous owners. One called the drivers "speed-mad Monomaniacs in their Man-maiming Machines." A 1905 cartoon depicts Vanderbilt running over a dog while motoring on a Long Island lane. The young millionaire asks a man standing near the slain animal if \$50 will set things right. The stranger accepts the cash and Vanderbilt roars off in a cloud of dust. The final frame shows the Long Islander thinking, "I wonder whose beast it was?" Given the controversies surrounding early auto racing, and the vast amount of ill-will Vanderbilt generated, the contretemps over his proposed race could easily be predicted.²²

The story of the Vanderbilt Cup races dates from 1903, when the New York State Legislature, at the behest of several prominent automotive enthusiasts, enacted a bill permitting local governments to sanction "speed tests and races of motor vehicles" on public roads. While competing at the Ormond Beach, Florida, speed trials in January 1904, William Vanderbilt offered a large silver trophy to be awarded to the winner of a proposed 300-mile race that fall on the roads of Nassau County. He predicted that the contest would spur progress by American auto manufacturers, who lagged behind the technological prowess of their European rivals.²³

The Vanderbilt Cup race developed into the premier American auto event of its day, and drew a well-known international field. It easily qualified as the non-pareil attraction for New York City auto enthusiasts. The first competition, in 1904, drew 100,000 spectators. In later years crowds swelled to 250,000. The race also constituted a highlight of the millionaire colony's fall social season. As predicted by the newspapers, "society" turned out in force; grandstand box-holders included E. R. Thomas, Mrs. Clarence Mackay, O. H. P. Belmont, Alfred Vanderbilt, Foxhall Keene, and Frederic Bourne. Other notable spectators included Thomas Hitchcock, Consuelo Vanderbilt, the Duchess of Marlborough, and J. D. Lanier, a well-known resident of the Wheatly Hills colony.²⁴

In February 1904 a committee of the American Automobile Association began laying out a race course in Nassau County. Barely a month later, however, it appeared the project might be derailed when newspapers reported that many residents opposed motor cars and high speeds, and would object strenuously if public highways were closed for a day. Surprisingly, the criticism voiced by certain Long Islanders, though sensationally chronicled in contemporary periodicals, has often been omitted from popular historical accounts.²⁵

In fact, the races became highly visible, even symbolic, events around which larger questions concerning the excessive influence of millionaires were debated. This was the zenith of the Progressive Era, when Americans struggled with a variety of class-related social and economic issues. Added to this volatile mix was the brash figure of the races' sponsor and chief spokesman, William K. Vanderbilt II, already a walking storm of controversy. The resulting reaction clearly revealed socio-political fault lines. At first it appeared that local reaction was overstated; by April it seemed opposition was abating, and that prejudice against reckless use of automobiles was exaggerated. Many racing proponents claimed that the cup competition would aid American industry, while the automotive press trumpeted the glamorous new event.²⁶

On 8 June 1904 the American Automobile Association issued its preliminary notice for the race scheduled to be run the following October 8. The course would pass through Hempstead, New Hyde Park, Mineola, Westbury, Jericho, and Hicksville, utilizing such primary routes as Jericho Turnpike, Massapequa Road, Bethpage Turnpike, and the Hempstead-Jamaica Plank Road. The prize would be the 481-ounce silver cup donated by William Vanderbilt, decorated with a representation of the sponsor's Mercedes racer. At least 90,000 gallons of oil would be sprayed on the dirt roads to suppress the dust. Entrants included drivers from the United States, Germany, France, and Italy.²⁷

In early August the Nassau County supervisors, by a two-to-one margin, voted final approval for the event, claiming it would focus national and international attention on the region while attracting tens of thousands of visitors who would boost local business. That decision triggered six weeks of clamorous protests and ignited a full-scale newspaper campaign in opposition to the race, a campaign which plumbed the depths of social antagonism toward Long Island's millionaire sportsmen.²⁸

Local opposition was led by a hastily-formed group called the People's Protective Association (PPA), which quickly gathered 300 signatures on a petition demanding that the supervisors rescind permission to hold the race on public roads. The PPA's officers included president Charles Rhoades, vice-president C. E. Duryea, secretary George Langdon, and treasurer William Stringham.²⁹

The *New York World* picked up the story and ran with it, presenting it as a case of the "little people" against the plutocrats. When racing officials ordered posters set up along the route warning residents to stay off the roads between 5 a.m. and 3 p.m. on the day of competition, the

paper thundered,

War, grim war of the bucolic variety, looms up in Nassau because of the proposal to hold the first annual automobile race for the Vanderbilt Cup over the only roads the farmers of that section can use in taking their produce to market.

With the bit in their teeth, *World* editors continued: "The masters of the revels have issued orders to the peasantry...Why don't automobilists who want to race provide themselves with a track, as horsemen do?" Farmers in Elmont joined the fray, protesting that the race interfered with their marketing. One journal quoted a local grower's saying:

I think it is a "derved" sight more important that I should drive my truck on the roads carrying garden produce to the city than that these swell chaps should drive their automobiles which carry nothing but a nasty smell.

Many residents objected to the stench of oil sprayed on the roads to reduce dust, and to the grease they unavoidably carried into their houses on their shoes. Some insisted they would be out on the highways as usual, no matter what the racers did, while a few claimed they would carry firearms. One threatened to throw potatoes at anyone who tried to force him aside. Headlines warned, "Farmers Will Carry Pistols to Auto Races; More Peaceable will Stick to Middle of Road and Defy Devil Wagons."³⁰

County politicians did little to calm the situation when they replied to the Protective Association's petition by saying,

It is absurd for the farmers to protest against this race. The race will focus attention and bring business to the county. It will make Nassau County one of the most talked of localities in the country.

PPA vice-president Duryea acidly responded that,

The Board of Supervisors made one of the greatest mistakes of their lives in granting the unrestricted right-of-way to the racers. If they had desired to kill themselves politically they could not have taken a better means to do so.

The Association then announced plans to seek an injunction in State Supreme Court against the race. Under great public pressure, the beleaguered supervisors finally agreed to hold a public hearing in Mineola on 4 October to consider the petition.³¹

Race supporters did little to win friends either, especially after the AAA contemptuously termed their critics "small farmers and truck drivers." Others challenged the *World* and the race opponents head-on. One automotive journal archly responded,

A hysterical yawp in a recent issue of the *World* entitled An Auto Outrage, marks the limits of editorial indecency towards the automobile and the Vanderbilt Cup, written evidently by some pupil

who recently graduated from Pulitzers saffron school of journalism to the the staff of the *World*.³²

Nor were area newspapers united in their opposition to the race. Unlike the *World* and the *Daily News*, the *Brooklyn Eagle* strongly backed the event, and noted that "William K. Vanderbilt, donor of the cup for the big race, is a sterling sportsman." Many other papers voiced similar sentiments.³³

Opponents of the big race were not cowed, and in the few days preceding the public hearing kept up their barrage against the event. On 3 October one paper published a lengthy article charging the contest was an outrage upon public rights. "There surely ought to be enough law in New York," it observed, "to sustain farmers and other residents of Nassau County in their determination to prevent the confiscation of their highways." The author then went to the heart of the matter, exposing the social conflict which energized the opponents, declaring that

It is an extraordinary condition of affairs when a coterie of idlers. rich men's sons, and gilded youth can take possession of the public highways, warn the public off, and proceed to use those roads exclusively for their own amusement.³⁴

The death of a local resident, Frank Ripley, in an auto accident while testing the course only added to the furor.

The hearing scheduled for 4 October took place in Mineola at the new Nassau County Courthouse. Members of the visiting New York Auto Club, including William Vanderbilt, O. H. P. Belmont, S. B. Stevens, and Fred Watrous, sat in the jury box. One report described the hearings by saying,

When farmers gathered at the new courthouse they found scores of machines blocking the roadway before the handsome structure...and groups of millionaires and society men of international notoriety stood chatting in the courthouse rotunda.

A few hours later the supervisors reaffirmed their decision to permit the race, and at least one newspaper claimed, "Hints so strong as almost to be charges of bribery were freely flung by taxpayers." The *World* sarcastically noted that "Peasants must make way for auto cup race...hired hand clappers pack the meeting...protest of farmers and taxpayers ridiculed according to prepared program."³⁵

Having failed to sway local politicians, the Protective Association, aided in large measure by the media, turned to the courts. Following the hearing, the *Daily News* announced that it would file suit to try to stop the race. A story railed that!

Nassau County taxpayers cooperate with *Daily News* in pushing legal proceedings to end domineering of millionaire clubmen. *Daily News* will stop auto race. Legal steps taken to prevent seizure of the public roads by the domineering, law-defying millionaire clubmen of Long Island.³⁶

In addition to initiating legal proceedings, the *News* also published the most sensational attack on the race enthusiasts that had yet appeared, an attack which laid bare the tensions of Progressive Era politics. In an "open letter" to the millionaires, the paper drew on the imagery created by Charles Dickens in *A Tale of Two Cities*, charging, "You are hostile to the form of government obtaining in this Republic... You menace the very foundation of the American system of government..." In an obvious reference to Dickens's fictional nobleman who later was murdered in his bed, it charged that,

You or your kind have nonchalantly, merrily ground to death the children of the poor under the wheels of your devil wagons; you have tossed the foolish, groaning parents a golden coin, bidding your goggled chauffer to speed on.

Alluding to the sportsmen's use of money and influence to obtain their desired ends from pliant legislators and politicians, the writer concluded,

When you insidiously see to overthrow and destroy the American form of government, which the people of this nation will preserve at whatever cost in toil or blood, you are deservedly in danger.³⁷

On 6 October the battle shifted to a Brooklyn courtroom, where the Protective Association sought an injunction against the race. The judge, Wilmot Smith, granted an order to show cause why the injunction should not be issued, temporarily raising the hopes of race opponents. The following morning, 7 October, a day before the start of the race, William Vanderbilt and the Automobile Association's lawyers appeared to argue against the move. Judge Smith was convinced by their presentation and ended the legal skirmishing by denying the request for an injunction. The race would proceed as scheduled.³⁸

Early the next morning the *World* proclaimed in a banner headline, "speed-Mad Automobilists Dash Along Today in Deadly Race." The majority of newspapers, though, were highly enthusiastic about the contest, as they had been from the beginning. More than 100,000 spectators jammed the course to watch George Heath, an American living in Paris, capture the cup for the Auto Club of France.³⁹

While most papers gave the results a huge play, a few raised questions, especially about the two deaths which had occurred during the contest and its practice laps. The *Daily News* condemned the event with a biting, "What matters a Life or Two?" The *New York American* echoed,

Three dead to make a gentlemen' holiday, the gentlemen doubtless consider a cheap price. But no sport has been held to be worth killing and being killed since men fought one another with short sword in the arena 1700 years ago. It is a bad sign now that men would throw away life for amusement or profit.

Even the staid *New York Times*, which avoided most of the pre-race controversy, editorialized in the following week,

The race was utterly futile...a road race such as that in Nassau County will encourage gross violations of the law everywhere and create a popular antagonism to the automobile and those who use it which will not be overcome in a long time, hence it was not only futile but mischievous.⁴⁰

Most surprising of all, *Horseless Age*, an enthusiastic supporter of almost all automotive endeavors, called it "The Fatal Cup, a barbarous exhibition of no earthly use except to satisfy the morbid cravings for excitement of a few gamblers and idlers."⁴¹

Despite the earlier controversy and scattered post-event condemnation, the organizers of the race, William Vanderbilt foremost, were more than satisfied with the results. A second contest was scheduled for the following autumn, which encountered similar but greatly diminished opposition. The Town of Hempstead continued to condemn use of the public roads, while the president of the PPA claimed that local outrage had lessened not "one whit!" At a public hearing held in Mineola in July 1905, farmers testified that they could stand the race, but not the continuous practice runs. Judge Robert Seabury was elected to the board of supervisors from the Town of Hempstead, partly on account of his outspoken opposition to the race. The *New York World* continued to editorialize against the meet, while the Nassau sheriff declared war against speeders on the proposed course, whether they were race participants or local drivers out to try their mettle.

No matter, for almost from the start the race assumed a life of its own. The glamor, excitement, and danger of the spectacle, the enormous publicity, the glittering array of supporters, and the spectators and dollars that poured into Nassau County combined to create an event of gargantuan proportions. The 100,000 fans of 1904 swelled to 250,000 at succeeding races. In fact, it was these huge crowds, rather than indigenous opposition, which eventually led to the demise of the contest. After several spectators were killed in 1910, the meet was moved to Savannah, Georgia, never to return to Long Island.

There is little doubt that no matter who sponsored this early series of automobile races, local opposition would have been mobilized. Antagonism between the social and economic classes had already created a substantial gulf, and such a popular outburst was almost inevitable. The fact that William K. Vanderbilt stood at the center, however, gave the events a special energy and aura. As the beneficiary of inherited millions, a prominent sportsman with a checkered reputation, his patronage turned a local competition into an international phenomenon. Long Islanders, well aware of his escapades and controversies, used both Vanderbilt and his race as a means to vent their long-held anxieties and frustrations.

Ironically, the most prescient commentary was offered by the inventor Thomas Edison in the summer of 1904. Responding to the outcry against the automobile, he observed that,

In time, the automobile will become the poor man's wagon...He will use it to haul his wood, convey his farm freight, get to and from

the post office, and for the family for church.⁴²

Long Island's development throughout the twentieth century proves how right he was.

NOTES

1. William K. Vanderbilt II has received almost no scholarly attention. The best sources are the voluminous scrapbooks, logbooks, and photograph albums in the Vanderbilt Museum Archives, Centerport.

2. For a colorful account of the Vanderbilt family's escapades, see Arthur T. Vanderbilt II, *Fortune's Children: The Fall of the House of Vanderbilt* (New York: William Morrow, 1989); also useful is Consuelo Vanderbilt Balsan, *The Glitter and the Gold* (New York: Harper Bros., 1952, and B. H. Friedman, *Gertrude Vanderbilt Whitney* (Garden City: Doubleday 1978).

3. For the Progressive Era, see Richard Hofstadter, *The Age of Reform* (New York: Knopf, 1955); Gabriel Kolko, *The Triumph of Conservatism* (New York: Free Press, 1963); Arthur Link, *Woodrow Wilson and the Progressive Era, 1900-1917* (New York: Harper, 1954); and Robert Wiebe, *The Search for Order, 1877-1920* (New York: Hill and Wang, 1967).

4. For the controversy between residents and newly-arrived millionaires, see Robert MacKay, Geoffrey Rossano, and Carol Traynor, eds., *Between Ocean and Empire: An Illustrated History of Long Island* (Northridge, CA: Windsor Publications, 1985, 124-125.

5. MacKay, *Between Ocean and Empire*, 112-131; see also Monica Randall, *The Mansions of Long Island's Gold Coast* (New York: Hastings House, 1979), and Donald Sclare and Lisa Sclare, *Beaux Artes Estates* (New York: Viking Press, 1975).

6. MacKay, *ibid.*, 124.

7. *New York World*, 15 March 1903; MacKay, *ibid.*, 124-125.

8. *New York Times*, 18 May 1911.

9. Vanderbilt, *Fortune's Children*, *passim*.

10. *New York Herald*, 6 August 1902; *Brooklyn Eagle*, 20 July 1902.

11. *New York Tribune*, 25 January 1903; *Brooklyn Eagle*, 25 January and 25 July 1903.

12. *Philadelphia Times*, 15 June 1902; *New York Herald*, 5 May 1903; *New York Telegraph*, 5 June 1903; *Brooklyn Eagle*, 6 February 1903.

13. *New York American*, 11 November 1904; *New York Telegraph*, 11 December 1904.

14. *New York World*, 24 August 1902 and 15 March 1903.

15. *New York Herald*, 17 November 1903.

16. *New York Morning Sun*, 7 August 1900; *New York Herald*, 7 August 1900; *New York World*, 3 August 1899; *Atlanta Constitution*, 20 July 1902.

17. *New York Herald*, 3 and 11 August 1901.

18. *New York World*, 9 August and 6 October 1903.
19. Vanderbilt's racing and driving career can be traced in detail in several volumes of newspaper clippings covering the period 1899-1910 on file at the Vanderbilt Museum Archives, Centerport.
20. *New York Press*, 24 August 1901; *New York Journal*, 30 August 1901; *New York Herald*, 21 August 1901; *Richmond News*, 2 September 1902.
21. *New York American*, 27 January 1902.
22. *New York World*, 16 August 1905.
23. *New York Herald*, 9 January 1904; *New York Times*, 28 February 1904.
24. The Vanderbilt Museum Archives contain at least eight scrapbooks of newspaper clippings about the Vanderbilt Cup Races.
25. *Brooklyn Times*, 8 March 1904; Edward Smits, *Nassau: Suburbia, U.S.A.* (Garden City: Doubleday, 1974), 130, refers only to "some opposition to the races by more conservative citizens..."
26. See n. 3, above.
27. *New York Herald*, 3 April 1904.
28. *New York Telegraph*, 8 June 1904; *New York Herald*, 9 June 1904.
29. *Brooklyn Times*, 24 August 1904.
30. *New York Sun*, 24 September 1904; *New York World*, 30 September 1904.
31. *New York World*, 30 September and 1 October 1904.
32. *New York Mail*, 30 September 1904; *Brooklyn Standard Union*, 1 October 1904; *Automobile Age*, October 1904, 18.
33. *Brooklyn Eagle*, 1 October 1904.
34. *New York World*, 3 October 1904; *New York Telegram*, 3 October 1904; *Brooklyn Times*, 3 October 1904; *New York Telegraph*, 2 October 1904; *New York Evening World*, 4 October 1904.
35. *New York Evening Journal*, 5 October 1904; *Brooklyn Eagle*, 4 October 1904; *New York Times*, 4 October 1904; *New York World*, 5 October 1904.
36. *New York Daily News*, 4 October 1904.
37. *Ibid.*, 5 October 1904.
38. *New York Tribune*, 6 and 7 October 1904; *New York Times*, 7 October 1904.
39. *New York World*, 8 October 1904.
40. *New York Daily News*, 8 October 1904; *New York American*, 9 October 1904; *New York Times*, 10 October 1904.
41. *Horseless Age*, (October[?] 1904), in William K. Vanderbilt Scrapbook 2, Vanderbilt Museum Archives, Centerport.
42. *New York Journal*, 7 October 1904.

The Pratt Experiment: The Early Years of the Library School

By Anthony Cucchiara and Sandra Roff

This article focuses on the origin and development of the Pratt Institute Library School, opened one hundred years ago and still flourishing at 200 Willoughby Avenue, Brooklyn. Started in 1890 as a training program for the staffs of Pratt Institute and other libraries, it soon expanded into a library school with an outstanding faculty and students who, after graduation, went on to careers in librarianship.

The American public library movement was in its infancy until the Boston Public Library opened in 1854, the first library authorized by a state legislature. Its dual purpose was to supplement the public school system and improve the reading taste of Bostonians; of secondary importance was to make the public library a center of scholarly learning. By 1876 many communities in the Northeast and Midwest had joined Boston in establishing public libraries. Ten states enacted enabling laws, and free municipal libraries opened in eight cities.¹

The field of library training traces its roots to the formation of the American Library Association (ALA) in 1876, a time when many professional and scholarly associations were organized to define the goals and future direction of their disciplines.² There was increasing recognition of the need for educated librarians; with demand far exceeding supply, the traditional route of apprenticeship no longer served its purpose.

At the ALA's 1883 session, Melvil Dewey, a pioneer in library science and the creator of the "Dewey decimal system" of book classification, proposed the creation of a school of librarianship at Columbia, where he was the librarian. The ensuing Columbia University School of Library Economy, under Dewey's supervision, began in 1884 as a regular course offering. Because of conflict with faculty factions opposed to this project, Dewey resigned in December 1888 to become secretary of the University of the State of New York and director of the New York State Library. In January 1889 he convinced the Board of Regents to transfer the School of Library Economy from Columbia to the State Library, at Albany.³

Dewey, a man with a forceful and often unbending personality, made a lasting contribution to the library profession. He was among the first to recognize women as an untapped resource; "There is almost nothing in the higher branches which she cannot do quite as well as a man of equal training and experience," he wrote, "and in much of library work woman's quick mind and deft finger do many things with a neatness and dispatch

seldom equaled by her brothers.”⁴

With librarianship a growing vocation, there was a welcome place for Pratt when it entered the training picture. Its parent body, Pratt Institute, was established in 1887 by Charles Pratt, one of the nine founding members of the Standard Oil Trust spearheaded by John D. Rockefeller. The vast fortunes amassed by Pratt and his fellow captains of industry extended their power and influence into all avenues of American society and culture. Many so-called “robber barons” regarded the arts, education, science, law, and religion as arenas in which to show off their wealth and prestige, realize past dreams and desires, and ward off negative public opinion and cries of “tainted money.”⁵

Charles Pratt, a person of humble origins and limited schooling, somewhat ameliorated this image by donating large sums to Amherst College and the University of Rochester; by presenting Adelphi Academy, Brooklyn (attended by his children and of which he was president of the board of trustees), with a building with room for one thousand students;⁶ and by creating Pratt Institute “to help all classes of workers, artists, artisans, apprentices and home makers and offer courses in such a way to give every student practical skills along some definite line of work...”⁷ He backed up his words with a bequest of \$200,000, and by earmarking the \$30,000 rental income from “The Astral” (his model tenement for workers in his Greenpoint, Brooklyn, oil refinery) to launch his project.⁸ Pratt Institute opened with a drawing class of twelve people in October, 1887, the third institution of higher learning established in Brooklyn (the first two were Brooklyn Collegiate and Polytechnic Institute [now Polytechnic University], 1853, and St. Francis College, 1885).

The Institute’s policy not to discriminate against female students was ahead of its time. At the World’s Columbian Exposition in 1893, its exhibit focused on the work of women, with a brochure that listed the objectives of the Association of Pratt Institute Graduates: “To awaken and sustain an interest in the industrial work of all women. To study the industrial standing of women. To endeavor by organization to advance the industrial position of women.” According to the brochure, the Institute had educated 13,000 students, 9,000 of whom were women, a staggering figure in an era when woman’s accepted sphere was the home; progress to date “shows what effort has been made by one institution to lead women into varied careers of honorable activity, and to fit them to start others on the same roads.”⁹

Soon after the Institute opened, Frederick Pratt, a son of the founder, described it as “something akin to the Cooper Institute of New York. As a supplement to the work of the public schools of Brooklyn and institutions of higher learning it will afford the manual training for the active work of life.”¹⁰ Charles Pratt hoped that the use of classes, workshops, a library, reading-room, and museum would help ambitious young people. A board of trustees controlled the Institute, with a secretary as executive officer, and the work of the school assigned to departments headed by faculty members. Tuition was a modest \$2.50 per course, per semester; every

worthy applicant gained admission. The wide gap between tuition income and costs was met by the Pratt family, which also provided administrative support.¹¹ Charles Pratt pledged to do all he could to “build up and develop the Institute,” but he knew that “an endowment alone is limited and uncertain at best.” The “wise way” to provide for the future, he concluded, was to continue “...to use money freely for building and equipping the Institute with the best facilities, and then aim to have the receipts from tuition support the departments as far as possible.”¹²

At the time of the Institute’s creation, the city of Brooklyn, although only a decade from becoming a borough of New York City, was seeking “cultural independence” from Manhattan. It enjoyed the presence of the Brooklyn Philharmonic Society and the Mercantile Library (both founded in 1857); the Brooklyn Academy of Music (1861), the Long Island Historical Society (now the Brooklyn Historical Society), the Brooklyn Art Association, and the Park Theatre (all 1863); and the Brooklyn Theatre (1871).¹³

His interest in the New York Mercantile Library led the philanthropic Charles Pratt to establish the Pratt Institute Free Library in 1888, the first of its kind in Brooklyn or New York City. In addition to serving the Institute’s students, the library was open to any Brooklynite fourteen years of age or older who could obtain a “reasonable reference.”¹⁴ Like all other departments of the Institute, declared Pratt,

this work started modestly...and with relatively few books on its shelves and magazines and papers on its reading tables, and with the immediate purpose of bringing these into circulation and use among our own students and the people of this neighborhood.

He pledged to apply all money received for tuition to enlarge the library and to establish and maintain branches throughout Brooklyn. In 1896 there as yet was no other free public library in Brooklyn, although they were opening in other parts of the state. According to the Board of Regents, the Pratt Free Library was third both in size among circulating libraries and in circulation in New York State.¹⁵ Ten years elapsed from its founding until the opening of the Brooklyn Public Library.

In fall 1890, when the library had acquired more than 30,000 volumes, it hired its first professionally trained librarian, Mary Wright Plummer, a member of the first class of the Columbia College Library School. After working a short while at the St. Louis Public Library, she applied for a position at Pratt, submitting an impressive list of references from “Prof. Melvil Dewey and Miss Mary S. Cutler, of the Library school at Albany, Mr. R.R. Bowker of the Library journal, and Prof. George M. Baker, Librarian at Columbia College.”¹⁶ In his capacity as president of Pratt Institute, Pratt hired Plummer to assist in the direction of the Free Library and in the creation of a program to train librarians for the Institute’s library. Plummer showed her professionalism and dedication in “The Columbia College School of Library Economy, from a Student’s Standpoint,” a paper presented at the ALA’s annual conference in 1888.¹⁷

Her many other papers and lectures gave the teaching of librarianship a significant place in the field of education.

The program for the Pratt Institute Free Library Training Classes was designed to train "skilled Assistants" to help Pratt Institute Library's scholarly workers. Neither entrance exam nor tuition was required from the opening class, enrolled in courses in cataloguing and library economy. Cataloguing required three hours of instruction a week and at least one hour of supervised practice. Typing, accession-work, shelf-listing, and classification also received attention. The economy course covered library handwriting, registration of borrowers, order department work, stock-taking, and binding. The first year, recalled Plummer, was a challenge for pioneer students who had "...no class-rooms or desks, not even places in which to put the girls' wraps,...We were objects of charity to the other departments of the Institute, which lent us now this, now that class room."¹⁸ The experiment was a success; with the course modifications adopted later, Pratt took a leading place in library education.

By the time the second class entered, an entrance exam was required and courses in literature and English composition were added. The *Brooklyn Eagle* reported that "Miss Plumber [*sic*] is in charge of the library and literature classes and under her able teaching assisted by the various heads of departments, some excellent work is being done."¹⁹ Tuition of five dollars a term was begun, and apprenticeship became another important part of the program. In the second term, students could attend lectures on aspects of the profession not covered in required courses; out-of-towners were acquainted with the cultural richness of Brooklyn and its environs.²⁰ During the early years, students were not awarded certificates or diplomas, but were recommended for employment if they performed satisfactory work and passed their final examination. Julia Pettee, of the class of 1895, wrote to her parents that:

My Library work goes on smoothly and I like it so much. Now almost every day we are sent [to] the Library to do some of the actual work there...we all feel a great deal of pride in walking at large in those stacks of precious books and being looked upon as half fledged Librarians, and even sometime having the public mistake us for some of the regular staff.²¹

The staff took turns teaching the first five classes, but in 1895 a separate library school faculty was designated, with class size limited to twenty.²² That year, when she became the director of the Library School and Free Library, Plummer wrote to Frederick Pratt outlining achievements made through her efforts, and thanking him for supporting her promotion. However, the issue of salary greatly concerned her, and she asked for an adjustment:

Now I shall be held entirely and directly accountable and the planning and amending will descend wholly upon me...I feel justified in asking for an advance of salary commensurate with the work and

responsibility I assume...making less than others doing less. I would like to resolve this before summer to discuss this with my father...

Aware of her talents and accomplishments, Pratt gave her a sizable increase in pay to \$2,500 a year.²³

By 1896, annual applications were four times more than could be accommodated. Once Plummer took charge, the school developed a more structured program that offered more courses. It became more competitive and selective, raising the age for admission from eighteen to twenty to attract a larger proportion of college graduates. Minnie A. Dill remembered her days as a student:

I was overjoyed to be accepted as a member of the class of 1896-7. It was a great adventure for a mid-western girl to have a year in such envirement [*sic*], so every spare moment was filled with visits to galleries, churches, historic buildings, parks, etc.; attending opera and theatres, with trips to nearby places.²⁴

The academic year ending 30 June 1897 was highlighted in March by a visit to Washington and Baltimore; enrollment, no longer confined to New Yorkers, now included students from Connecticut, Georgia, Illinois, Maryland, Massachusetts, Minnesota, Nebraska, New Hampshire, New Jersey, Ohio, Pennsylvania, and British Columbia. In 1898 the school received 104 applications from all over the country, and even from abroad. Thirty-five of ninety-four candidates passed the entrance examination, and twenty were accepted.²⁵

The program mainly appealed to women; most classes had only two or three men. When asked about the disparity, Plummer answered perceptively that:

...possibly it is because women are more sympathetic and anxious to please. Sympathy and common sense are the prime natural endowments in the efficient assistant; without these ...he or she will not be a perfect success, no matter how well qualified from the point of view of education. But men are preferred as heads of libraries. They are suppose[d] to have more executive ability [and] be more capable of preserving discipline.²⁶

By the turn of the century, Pratt graduates held positions at many Northeastern libraries, including Columbia College Library, the New-York Free Circulating Library, the Free Public Library of Braddock, Pennsylvania, the Y.M.C.A. Library of Brooklyn, Vassar College, MacMillan's Publishing House, Packer Institute, Brooklyn, Publishers' Weekly Office, and Princeton College Library. An 1899 questionnaire showed that graduates working in libraries received an average annual salary of \$686 for a forty-two-and-one-half hour week, with an average vacation of four weeks, and five days allowed for illness or attendance at library meetings.²⁷

Alumni were eager to meet and exchange ideas. Minnie A. Dill, class

of 1897, fondly remembered her days at Pratt:

We worked hard on what then seemed a stiff course. But we had jolly times in school and out and, through that year of close association, many friendships developed. These continued by correspondence, by occasional meeting at A.L.A. Conferences, and sometimes in each others' homes.²⁸

In the winter of 1897, during a joint meeting of the State Library Association of New York and the New York Library Club, some thirty Pratt graduates formed a Graduate Association.²⁹ Meetings often took place at ALA meetings, where Pratt alumni were sure to be found. An alumna reported such a gathering in 1898, at Lakewood-on-Chautauqua, "called at five o'clock in the parlor of the Kent House, Irene Hackett acting as chairman, Miss Gertrude Carr as secretary *pro tem.*"; with twenty alumni in attendance, every class was represented.³⁰ The Association has served as an organ for social and professional exchanges.

Pratt Library School began one hundred years ago as an experiment in library education, a trade school rooted in the needs of an emerging profession which has grown and changed over the years. At the beginning of the school's second century, the profession again is on the threshold of change in the new and exciting information age. However, serious problems confront it, among them the alarming trend to close library schools across the country. On 4 June 1990, the trustees of Columbia University announced that over the next two years they would phase out the School of Library Service, the nation's oldest graduate library school (which may be moved to another institution). Expressing his bitter opposition, Dean Robert Wedgeworth called for an "independent review" by impartial scholarly and professional groups, "to protect the integrity of the School" and to prevent "misguided actions...based on events here at Columbia" from affecting other library schools. There is widespread concern that Columbia took this action because it "involved a relatively low-paying 'women's profession...'"³¹

Also in June 1990, ALA accreditation was suspended at Long Island University's Palmer School of Library and Information Service, C. W. Post campus, the largest library school in the state with some 481 students enrolled in its Spring 1990 term. It is "the expectation" of LIU Vice-President of Academic Affairs Walter Jones to "recover accreditation in January, 1993—the earliest possible date,"³² but the turn of events both at Columbia and at LIU is unsettling. According to an experienced American librarian, "library schools in the United States must confront the realities of declining enrollment, lack of well-paying jobs for graduates, and the low status of the profession."³³ On the positive side, both the Division of Library and Information Science at St. John's University, Jamaica, and the Graduate School of Library and Information Studies at Queens College of the City University of New York are alive and well.

Pratt Library School, now the Pratt Institute Graduate School of Library and Information Science, offers an MS in Library and Information

Science, an Advanced Certificate in Library and Information Studies, and a joint MS/JD in law librarianship with Brooklyn Law School. According to Dean Rhoda Garoogian, 4,160 graduate degrees have been earned since they first were awarded in 1940; most recipients became librarians, principally in the New York metropolitan area. Today, states the dean, the school has a new vitality, partly because of administrative and financial support provided by Warren F. Ilchman, the president of Pratt Institute. In commenting on the library school's hundredth-year anniversary, she observed that professionals skilled in processing information are in short supply,

not only in libraries, but also in schools, corporations, law firms, and medical institutions. We take a practical approach to training new professionals for these fields, though we never lose sight of the need for human resources and the ability to communicate interpersonally.³⁴

Most schools provide background and theory, she remarked, expecting their graduates to be trained on the job, but "Our students are ready to perform as professionals the moment they receive their degrees."³⁵

NOTES

1. See Robert Lee, "The People's University—The Educational Objective of the Public Library," in *Reader in American Library History*, Michael H. Harris, ed. (NCR Microcard, 1971), 118, 120-21.
2. Also founded in the last quarter of the nineteenth century were the American Chemical Society (1876), the Modern Language Association (1883), and the American Historical Association (1884); see Samuel Rothstein, "The Development of Reference Services through Academic Traditions, Public Library Practice and Special Librarianship," *The Reference Librarian* 25/26 (1989-1990): 34, 36, 38.
3. Louis R. Wilson, "Historical Development of Education for Librarianship in the United States," in *Reader in American Library History*, 186; Melvil Dewey, *Librarianship as a Profession for College-Bred Women: An address delivered before the Association of Collegiate Alumnae on March 13, 1886* (Boston: Library Bureau, 1886), 17; Dee Garrison, *Apostles of Culture: The Public Librarian and American Society* (New York: The Free Press, 1979), 135, 137.
4. Garrison, *ibid.*, 168; Dewey, *Librarianship*, 19.
5. Matthew Josephson, *The Robber Barons: The Great American Capitalists, 1861-1901* (1934; reprint, New York: Harcourt Brace Jovanovich, 1962), 277-78, 318.
6. *Dictionary of American Biography*, s.v. "Pratt, Charles."
7. Carol Lopate, *Education and Culture in Brooklyn* (Brooklyn: Brooklyn Educational and Cultural Alliance, 1979), 32.
8. *Brooklyn Union Newspaper*, 6 May 1887.
9. *Exhibit of Women Graduates and Pupils of Pratt Institute, Brooklyn, N.Y. founded by Charles Pratt, 1887 Columbian Exposition 1893* (n.p.: n.p., 1893), 2, 11, 12.
10. *New York Herald*, 5 January 1888.
11. *Pratt Institute Circular of Information* (Brooklyn, 1890-1), 1.; *Pratt Institute Brooklyn, N.Y. 1888* (New York: Fleming, Brewster and Alley, 1888), 1,2; Lopate, *Education and Culture*, 34.
12. *Pratt Institute Record: Founder's Day Number 1* (October 1889), 7.

13. David Ment, *Building Blocks of Brooklyn: A Study of Urban Growth* (Brooklyn: Brooklyn Educational and Cultural Alliance, 1979), 41; also see Geoffrey S. Cahn, "Rebirth, Struggle, and Revival: The Brooklyn Academy of Music, 1908—the Present," *LIHJ* 2 (Spring 1990): 251-64
14. *Dictionary of American Biography*, s.v. "Pratt, Charles"; Lopate, *Education and Culture*, 31.
15. Charles M. Pratt, "Opening of the Pratt Institute Free Library May 26, 1896," 1, 7, 8, Pratt Archive MSS; *Pratt Institute Record* 1 (October 1889), 7
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17. "Mary Wright Plummer, 1856-1916," in *Bulletin of Bibliography* 14 (January-April, 1930): 2, 18.
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24. Miscellaneous papers, Pratt Institute Library School, Class of 1897, 4, Pratt Institute Archives.
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27. *Pratt School Publication 1890-1899* (n.p., n.d.), 6; *Pratt Catalogue 1896-7* (n.p, n.d.), 4; *Pratt Institute Monthly* 7 (June 1899), 206-07.
28. "Pratt Institute Library School Class of 1897," MSS, Pratt Institute Archives, 1.
29. *Pratt Institute Monthly. Science and Technology Number* (February 1897), 186.
30. Letter from Miss Irene A. Hackett. ca. 1898, Pratt Institute Archives.
31. "Outrage Over Columbia Decision to Close SLS," *American Libraries*, July/August 1990, 622; new students admitted in fall 1990 and the 244 already in the program will be able to complete their degrees (*Chronicle of Higher Education*, 6 June 1990: A23).
32. "LIU Library School Committed to Regaining Accreditation," *American Libraries*, September 1990, 702.
33. Patrick Bunyan, New York Public Library, retired, interview with Sandra Roff, 15 January 1991.
34. Dean Rhoda Garoogian, Pratt Institute Graduate School of Library and Information Science, telephone interview with the authors, 7 January 1991.
35. Garoogian, quoted in Ellen Glassman, "Library and Information Science to Celebrate 100 Years in 1990," *Pratt Grad* 5 (Winter 1990): 7.

Lost and Found

With this issue we launch "Lost and Found," an ongoing series of reviews of worthwhile but forgotten novels, memoirs, and other books about Long Island and Long Islanders. We are eager to add to our growing list of "lost" Long Island classics, and welcome suggestions from readers.

A good example is Lords of the Soil, one of the "lost" books reviewed below, which was "found" by the Southampton historian, Robert Keene. Mr. Keene's letter to our reviewer and colleague, Professor John A. Strong of Southampton College, illustrates the purpose of our "Lost and Found" department;

For the first twenty years of operating a bookshop in Southampton, I received calls for a number of books on Long Island history that were out of print and unavailable. One of the most persistent was for a book about Long Island Indians—Lords of the Soil... a novel about the Montauket Indians during the time of Lion Gardiner. When originally published in 1905, this novel must have been a curiosity of American letters... It portrays a love affair between an Englishman and an Indian princess, and although packed with historic fact and Indian lore, it was considered then, we are sure, pure fiction. I published a reprint...in 1974. This was prompted by a revival of interest in Long Island Indians, and the fact that the book was almost impossible to find. We still have a number of copies of Lords of the Soil available, and they can be ordered from: Yankee Peddler Book Company, P. O. Drawer O, Southampton, NY 11968. Cost is \$15.00, plus \$1.50 shipping.

The Long Island Frontier: Fiction and Folklore

Nathan J. Cuffee and Lydia Jocelyn. *Lords of the Soil*. Boston: C. M. Clarke, 1905. Reprint, Southampton: Yankee Peddler Book Company, 1974. Pp. 467.

Forest Monroe. *Maid of Montauk*. New York: William Jenkins, 1902.

F. Scott Fitzgerald's famous reference to the meeting of old world explorers with the "...fresh, green breast of the new world" in the closing passages of *The Great Gatsby* (New York: Charles Scribner's Sons, 1925, 182) expresses the feelings of awe which still characterize our perceptions of

those early contacts with the American wilderness. Novelists such as Nathaniel Hawthorne and James Fenimore Cooper drew from this rich body of folklore, myth, and historical fact for their plots. Cooper's classic portrayal of the relationship between Native American and European defined the meeting of these two distinct cultures in the American mind. Although the first English settlements on the eastern Long Island frontier provide a wealth of material, only one novella, *Maid of Montauk*, and a novel, *Lords of the Soil*, draw upon this experience.

The interaction between Native American peoples and the first generation of European settlers—the dramatic core of the frontier experience—also interests contemporary anthropologists and ethnologists. These scholars, focusing on the process of acculturation which occurs when two very different cultures come into close contact, have developed some useful models of analysis. The first stage of contact in North America, characterized by equal status interactions where both cultures traded for goods, ended soon after the Dutch and English established settlements, and was followed by a pattern of “directed acculturation.” Once the Europeans established military and technological superiority, they began to impose their control over nearly every institution in Native American culture.

Maid of Montauk and *Lords of the Soil* both take place on Long Island during the Anglo-Dutch war of 1652-54, a little more than a decade after the settlement of Southampton and Southold in 1640. The process of directed acculturation was well under way. The English restricted Native American religious practices and took over control of the best land. The aboriginal people found that as their economic dependence on European goods increased their political independence eroded.

The primary dramatic focus of both books is a raid led by Ninigret, sachem of the Niantics, on the Montauk village of sachem Wyandanch in 1653. Ninigret crossed the Sound to launch his surprise attack on the Montauk, killing many of the men and kidnapping fourteen women, including the daughter of Wyandanch. Both authors demonstrate a familiarity with the colonial records and with the secondary sources available at the time they wrote. Here the similarity ends.

Maid of Montauk is a light soap opera, with cardboard characters who flit across the Long Island landscape speaking in clichés. The cast of characters includes eight Europeans. Three of them—Lion Gardiner, the first English settler on eastern Long Island; Peter Stuyvesant, the governor of New Netherland; and John Underhill, the professional soldier who served both the Dutch and the English—are historical figures. The other five—Sigrid Dare, the heroine; her father, who appears briefly before his death; Sir Harold Fenton, the hero; and the villains, Allard Van Doren and Kryn Van Steen—are fictional.

Of the nine Native American characters, all but Wanasqua, a sympathetic Marsapequa woman who aids Sigrid, and Wayunscut, the ill-fated bridegroom, are named in colonial documents. Wyandanch's daughter, called Won-ia-qua in *Maid of Montauk* and Heather Flower

in *Lords of the Soil*, is not mentioned in the colonial records until 1663/64, when she was appointed sunksquaw by the English (see “Quashawam: Sunksquaw of the Montauk” in this issue of *LIHJ*). The documents list her as Quashawam and identify her as the daughter of Wyandanch (the Montauk sachem may have had more than one daughter, but no other name appears in the primary records).

Sigrid, the English heroine, is rescued from a shipwreck by Wayunscut and taken to Wyandanch’s village, where Won-ia-qua befriends her. One villain, Allard Van Doren, visits Montauk on a secret mission for the Dutch—who seek to turn the Native peoples of Long Island against the English—and attempts to seduce Sigrid. When Wayunscut saves her again, Van Doren is forced to run the gauntlet, an Iroquois innovation imposed on the Montauk by author Monroe, presumably for dramatic effect. After surviving the bloody ordeal, Van Doren now is driven by a fierce hatred of the Montauk matching his passion for Sigrid.

Seeking revenge, he persuades Ninigret to attack the Montauk and kidnap Sigrid, along with some Montauk women. The surprise raid during the wedding ceremony for Wayunscut and Won-ia-qua results in the death of the groom and the capture of several women, including Sigrid and Won-ia-qua, all of whom are taken to Ninigret’s village. Ninigret’s attack and the kidnapping are documented, but the wedding story, which probably comes from David Gardiner’s *Chronicles of East Hampton, County of Suffolk, N. Y.* (1840; reprint, Sag Harbor: I. G. Mairs, 1973), is not corroborated in the colonial records.

With Gardiner’s aid, Wyandanch pays a ransom and the Montauk captives are released. However, Sigrid had been sent to the village of the Marsapeaquas sachem, Tackapousha, an ally of the Dutch, where she is held for Van Doren. At the risk of her life, Wanasqua, the Marsapeaquas woman, comforts Sigrid and tells her that Van Doren soon will come to take her to New Amsterdam as his wife. Wyancombone, a son of Wyandanch, finds Sigrid and brings Sir Harold just in time to save her from the evil Dutchman. With the help of John Underhill and his men, the Montauk destroy Tackapousha’s village and break the Marsapeaquas power forever.

This battle is based on a confused chronology, repeated by many Long Island historians during the nineteenth century. Military campaigns against the western Long Island Native Americans, which actually took place about ten years before Ninigret’s raid, were led by the Dutch, not the English. John Underhill, an English soldier-colonist, was commissioned by New Netherland to lead its troops in one such campaign, but it is not certain whether he attacked the Marsapeaquas or the Carnarsie village of Maspeth, near the East River.

In the last scene, Sigrid and Harold plan their wedding and bid farewell to Wyandanch and Wyancombone, thanking them for all their help. The Montauk men assure Sigrid that the long march to the land of the Marsapeaquas and the bloody battle that followed was a small price to pay for reuniting the lovers. They put Tonto to shame. All of the Montauk,

and Wanasqua, the Marsapequa woman, are characterized as stoic, wise, kind, and loyal to the English settlers; Ninigret and Tackapousha are sullen, crafty, cruel, and, not incidentally, allied with the Dutch. These stereotypes reflect the dualism often found in perceptions of Native Americans; they are either "noble savages" or just plain savages (see Gaynell Stone, "Long Island As America: A New Look at the First Inhabitants," *LIHJ* 1 [Spring 1989]: 159-69).

These prejudices are complemented by a biased view of Dutch characters. Monroe presents Dutchmen as cowardly, cruel, deceitful, and contemptuous of democratic institutions, in contrast to the English who are brave, kind, and honest.

D. H. Lawrence, in his review of James Fenimore Cooper's frontier novels, noted that dominant racially distinct groups contain two contradictory impulses: to extirpate and to glorify the natives (*Studies in Classic American Literature*, Doubleday, 1953, 45). This ambiguity distorts our understanding of the frontier experience. Popular novels and many local histories fulfill our wish for an idealic past without unpleasant complexity and contradiction. It is more reassuring to focus on stories of famous friendships between Natives Americans and white colonists.

The "blood brother" theme is expressed in the relationship between Chingatchcook and Natty Bumppo in Cooper's *Leather-stocking Tales*; Lion Gardiner and Wyandanch in Long Island history; and the Lone Ranger and Tonto in the popular media. The faithful "Indian" companion, accepting his subordinate position with comforting enthusiasm, helps the colonists in their conquest of bad "Indians" like Ninigret.

Monroe's novella reveals a great deal about the conventional myths which cloud our understanding of this period. Unfortunately, we cannot dismiss *Maid of Montauk* as an outdated example of provincial attitudes. As T. H. Breen discovered, when he researched and wrote *Imagining the Past: East Hampton Histories* (see Richard F. Welch's review, *LIHJ* [Fall 1990]: 139-42), many of these myths still have a powerful hold on the popular imagination.

Lords of The Soil is a romantic blend of folklore, history, and myth by Lydia Jocelyn, the daughter of a missionary, and Nathan Cuffee, a Montauk active in tribal affairs. The authors were an unusual pair, drawn together by a common interest in the historical relationship between Native Americans and European settlers. Joycelyn, nearly seventy years old when she began work on the book, had lived for years on a Sioux reservation and was an experienced author. Cuffee, twenty years younger than Lydia, was deeply involved in a court battle to reclaim the tribal lands at Montauk preempted in the 1890s by a group of powerful developers.

Although the nature of the collaboration is not known, Nathan probably was the source for historical settings and descriptions of native customs. For this reason alone, the novel is of interest to students of Long Island history, and to ethnologists as well. It must be acknowledged, however, that the book has little to reward readers who relish a complex plot or

character development.

In 1900 Cuffee testified before a Senate subcommittee about the loss of Shinnecock and Montauk land to the corporations involved in building the Long Island Rail Road. He told the committee that the Shinnecock Hills area west of Southampton village was taken over the protest of a majority of the Shinnecock. Nathan's father and eleven other Shinnecock sent a petition to the New York State Legislature charging that the document, which allegedly granted approval for the land transfer, had several forged signatures and did not represent the will of the majority.

For five years before the novel's publication, Cuffee worked with a group of Montauks to reclaim their ancient lands on eastern Long Island from the same railroad interests who took the Shinnecock land. A year after the novel was published, Cuffee's small group won a major legal victory when an act of the Legislature enabled the Montauk to sue the railroad in the state court. Unfortunately, the court battle ended in 1917, two years after Nathan's death, with a decision for the railroad.

It is not surprising that Cuffee brought to the novel a more critical perspective than that of *Maid of Montauk*. The novel begins with Guy Kingsland, "scion of a noble house," unscrupulously manipulating several sachems to sell the land for the town of East Hampton in 1648. Kingsland is a highborn rogue, perhaps modeled on John Scott, a seventeenth-century adventurer with a reputation for suspicious real estate dealings and Byzantine political intrigue (see "Quashawam: Sunksquaw of the Montauk," in this issue of *LHJ*).

Although the English obsession with land dominates the plot, a brief mention is made of sexual exploitation. The subject, although well documented in Dutch and English primary records, is carefully avoided by most Long Island historians. Kingsland, betrothed to the daughter of a friend, lusts for Wyandanch's daughter, Heather Flower. If she were just "any squaw," he tells himself, he would take his pleasure and leave, but Heather, a truly "noble savage," is from a royal family; there can be no sex without marriage. Kingsland promises to marry her, but because he is on a secret mission she must be silent about their relationship.

However, his desire for land and status supercedes his sexual interests. He soon is involved in a plot with two historical figures—Captain John Mason, the English officer who led the bloody campaign against the Pequots in 1637, and Lion Gardiner—to gain control over Montauk lands. Here the plot takes an intriguing turn, perhaps informed by Cuffee's knowledge of Montauk folk history. Cuffee and Jocelyn draw upon the account of Ninigret's raid and the capture of Wyandanch's daughter used by Monroe in *Maid of Montauk*, but cast Gardiner as the villain instead of the hero who comes to the aid of his Montauk friend and pays the ransom for the return of the sachem's daughter.

In *Lords of the Soil*, Gardiner and Kingsland conspire with Ninigret to attack Wyandanch, offering Gardiner's Island as a hiding place for Niantic warriors waiting for the right moment to attack the unsuspecting Montauk village. The Englishmen plan to take advantage of Wyandanch's

concern for his daughter by offering to pay her ransom in return for favorable real estate terms. The scheme works brilliantly for the English, but only Gardiner gets to enjoy the fruits of the intrigue.

Ironically, Kingsland's fall results from his deceitful affair with Heather Flower, rather than from his intrigue with Ninigret and Gardiner. When Ponitute, a young Montauk admirer of Heather Flower, discovers that Kingsland never intended to marry her, he hunts the Englishman down and shoots him with a poisoned arrow. Guileful to the end, Kingsland begs Ponitute for his life, promising that he will marry Heather Flower, but Ponitute lets the scoundrel die a slow and painful death. Kingsland's desperate and surely false promise to wed Heather Flower is as close as either novel comes to recording an interracial sexual union.

Lords of the Soil ranges widely over events of the seventeenth century. Woven into the story are well-known historical figures, including Richard "Bull" Smith, who dressed in "mixed Indian and English attire" and was sympathetic to Native Americans, and Lady Deborah Moody, the courageous English Quaker who founded Gravesend. The book's dramatic incidents and characters are presented in thickly varnished, idealized form, lifted from accounts in local folklore.

Although Cuffee and Jocelyn sometimes rise above conventional myth-making, Monroe ignores the complexities inherent in nearly all interactions between dominant and subordinate cultural groups. In contrast to the romanticized past in Monroe's novella, in which "good" English and "noble savages" are loyal allies united against "bad" English and "cruel savages," Cuffee and Jocelyn see the forces of greed and revenge corrupting both races. Perhaps the chemistry of their interracial collaboration brought them to a more realistic portrayal of the acculturation process.

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The LIHJ thanks John. G. Peterkin, the founder and president of the Cedar Swamp Historical Society and a member of our advisory board, for the "lost" book on Civil War prisons, reviewed below by USB Professor Wilbur R. Miller. John inscribed these words in our copy: "This is the account of my great-uncle Josiah Carpenter Brownell, a Long Islander in the Civil War."

Josiah C. Brownell. *At Andersonville. A Narrative of Personal Adventure at Andersonville, Florence and Charleston Rebel Prisons*. 1867; reprint, Glen Cove: Glen Cove Public Library and Friends of the Glen Cove Public Library, with an introduction by Daniel E. Russell, 1981. Pp. iv, 40. \$4.00 (paper). To order, send \$4 to the Glen Cove Public Library, Glen Cove Avenue, Glen Cove, NY 11542.

At the close of the Civil War, returning Union prisoners of war published scores of narratives recounting the horrors of Libby, Andersonville, and

other Confederate prisons. These accounts, appearing before the more famous commanders' memoirs and regimental histories, were virtually the first of the vast wave of Civil War literature which has scarcely receded in 130 years. The prisoners' tales recall the slave narratives of the antebellum period in their compelling description of an abusive institution and the hope and frustration of efforts to escape it. They were important in arousing Northern public opinion against the South in support of Radical Republicans' plan of military reconstruction during the late 1860s.

Josiah C. Brownell's pamphlet is one of these tales, particularly interesting to Long Islanders because he was a Glen Cove man who served in the area's most popular unit, the Second New York, or Harris Light Cavalry. Brownell writes with a spare, sometimes laconic eloquence recalling the prose of Ulysses S. Grant's *Personal Memoirs*. Daniel E. Russell's introduction is appropriately brief, describing the conditions in notorious Andersonville Prison and introducing us to Brownell.

Summarizing Brownell's lean account would give away his well-crafted story and spoil the moments of tension. He has given us what is still a good read, with memorable passages. Some that stand out for this reviewer are his description of feigning death as a means of escaping from prison; the vision of Andersonville's commandant, Major Wirtz, the only Confederate executed for war crimes, supervising the beating, then hanging of a gang of prison bullies by their fellow prisoners; the story of Brownell's escape from his second prison at Florence, S.C., aided by a black man who asked about "Ole Marster Lincum" and the rumors that he would set the slaves free. The Civil War has produced a vast amount of fine literature, contemporary and modern. Brownell's story of determination and resourcefulness, elation and despair, is a small classic.

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REVIEWS

ROBERT F. KEELER. *NEWSDAY: A Candid History of the Respectable Tabloid*. New York: Arbor House/Morrow, 1990. Illustrations, notes, bibliography, index. 790 pages. \$24.95

When Harry F. Guggenheim bought his restless wife Alicia Patterson the presses and shabby offices of a defunct newspaper in Hempstead in 1940, the plan was just to keep her busy playing at the family craft of journalism. Instead, Alicia and Harry turned out to be pioneers on a new frontier—the Golden East. They were in the right place at the right time to capitalize on the boom times that would transform Nassau and western Suffolk into a sprawling suburb.

They started a little tabloid called *Newsday*, which found a great deal of its spirit and even some of its start-up nuts and bolts from the *New York Daily News*, the paper Alicia's father founded in 1919. Joseph Medill Patterson came from a Midwestern newspaper dynasty seated at the *Chicago Tribune*; as the country grew westward he headed east to New York with his idea of a picture newspaper for the masses.

His daughter seemed ill-suited for much of anything except extravagant hobbies. She disappointed her father repeatedly, by two marriages ending in divorce and a third to Harry Guggenheim, of whom he did not approve; and, in her career, by surviving only briefly as a reporter at the *Daily News* before Patterson himself fired her. After she botched a story, he later wrote, she had to learn that looking for work elsewhere is “a regular part of newspaper life” (p. 28).

Alicia found work, all right. Funded by her third husband's money and driven by a quest to prove herself to her father and the world, she played the role of founding editor and publisher to the hilt. Relying on a team of tough, hard-drinking, and rather unprincipled newspapermen (some from her father's *Daily News*), the fledgling paper battled ferociously for circulation, advertising, and influence. It grew as Long Island grew around it, each complementing the other.

Newsday was no ivory tower of neutral observers. The higher standards of journalism were not the issue in the beginning. The paper was an aggressive and belligerent protagonist in Long Island's era of growth, destroying any competition in its way, manipulating the public agenda as no other institution could, and laying claim to the new suburbia it was helping to create.

Newsday thrived on sprawl, serving as the expanding community's only

unifying institution. It championed Abraham Levitt and his sons William and Alfred's massive postwar housing project in Island Trees (which Bill Levitt renamed Levittown), and just about every pro-growth option that followed. With *Newsday's* collaboration, the Levitts and many other developers replaced former fields and farms with a fragmented swath of subdivisions, highways, and shopping centers, blurring the boundaries between counties, towns, villages, and hamlets. *Newsday* provided the indispensable glue that held this hodge-podge together.

When the suburbs and the paper could not grow eastward any more—blocked by the resilient small-town habits and isolated economy of the East End—*Newsday* turned westward, tentatively at first, but finally with a voraciousness that would make Joseph Patterson spin in his grave. On its fiftieth birthday, his daughter's "little toy" was attacking New York City the way it once hit Long Island. *New York Newsday*, the paper's city step-child and its last, best hope for going beyond the parochialism of its suburban roots, set out to devour *Newsday's* own godparent, the beleaguered *Daily News*.

The whole fascinating story is told in *Newsday: A Candid History of the Respectable Tabloid*, a monumental account by Robert F. Keeler, a veteran *Newsday* reporter. Keeler spent more than three years researching and interviewing hundreds of sources to produce a history spectacularly rich in detail. So much information, so many people with so many tales to tell, would overwhelm anyone but a master. Keeler is one; his anecdotal narrative is clear, crisp, and compelling.

However, Keeler's subtitle slyly suggests some interesting problems. What serious history is not written candidly? This one, in fact, was commissioned by *Newsday* itself—a kind of authorized biography, which is not a form known for candor. After finishing Keeler's small-print opus, the reader may wonder what was so "respectable" about this tabloid, especially during its formative years, or in its new incarnation as *New York Newsday*. From the shenanigans of ax-grinding, alcoholic editors to the guerilla tactics of the circulation and advertising departments, a "star" reporter Robert Greene allowed to run amok, and Alicia Patterson's personal involvement in presidential politics (she and Adlai Stevenson adored each other), there is little in *Newsday's* initial history to make the word "respectable" pop to mind.

Not until Alicia's death in 1963, and right-winger Harry Guggenheim's delusionary choice of liberal Bill Moyers as publisher, did *Newsday* rise above its scruffy roots—even though it won its first Pulitzer prize in 1954 for exposing corruption among Nassau Republicans involved in Roosevelt Raceway harness racing. Exposing corruption in postwar Nassau and Suffolk was like shooting fish in a barrel. All *Newsday* had to do was stop promoting itself and chasing sirens long enough to take aim and fire.

To the credit of Keeler and his patrons at *Newsday*, his account is candid in the sense that he does not bend over backwards to paint a rosy picture. From seedy editor Alan Hathaway's Fire Island land interests and political involvements (he actually helped to organize campaigns even as he directed

coverage—Alicia did not seem to mind), to Suffolk editor Kirk Price's financial interest in growth around MacArthur Airport, the book appears to tell all. Missing from the narrative is a moral context or viewpoint.

The vast scope and exquisite detail of Keeler's book are reminiscent of the work of another *Newsday* reporter, Robert A. Caro, a prim and precise Ivy Leaguer decidedly out of place among the middle-class crowd that dominated the paper through the 1960s, when he worked there for six years. Caro went on to win a Pulitzer for his exhaustive biography of Robert Moses, the autocratic "master builder" whom *Newsday* championed in its Chamber of Commerce, pro-growth way.

Caro's books, *The Power Broker: Robert Moses and the Fall of New York* (New York: Alfred A. Knopf, 1974), and the first two volumes of *The Years of Lyndon Johnson (The Path to Power* [New York: Alfred A. Knopf, 1982], and *Means of Ascent* [New York: Alfred A. Knopf, 1990]), derive their force from a strong viewpoint and clear moral tone as well as a monumental presentation of fact, anecdote, and detail. Keeler's book is neutral about some of the questionable brands of journalism practiced at *Newsday* over the years. Bob Greene's playing pal with the powers-that-be, editors' signing on to political campaigns, a publisher's fondness for LILCO, Neanderthal office attitudes about women and minorities, an international investigative team's chasing the wrong story, chances for staffers to buy Levitt houses supposedly reserved for war veterans, drunkenness in the newsroom...it all is documented in Keeler's book but without a hint of judgment. Was this normal behavior in the world of American journalism? Did it leave a scar on *Newsday* that survives today? Did the community notice or care? Did other journalists at other newspapers notice or care? Keeler does not say and he has no thesis. There is no point except to offer tales from *Newsday's* first fifty years.

The absence of thematic development sometimes gives Keeler's work the quality of an in-house scrapbook, the sort of history that corporations publish privately on a special occasion. His scrapbook is beautifully executed but there is something odd about a work that is so comprehensive and yet so lacking in point of view. It is grandiose, even though its subject is a paper whose staff in Washington has had a hard time getting phone calls returned. *Newsday's* cast of characters included few celebrated names: in this tale there is no Turner Catledge (the managing editor who gave the *New York Times* its sense of mission from 1951 to 1964). *The Kingdom and the Power*, Gay Talese's book about the *Times* (New York: World Publishing Co., 1969), has a sweep and a scale proportional to its grand subject. Given *Newsday's* less exalted reputation and history, a similarly sweeping treatment comes across as self-conscious, if not self-serving.

As entertainment, *Newsday: A Candid History...* works, especially for readers interested in journalism or Long Island history. As history, the book falls short at some critical moments because Keeler refuses to tell us what he thinks. He merely catalogues. The reader, riding along enjoying the journey, may not notice something remarkable in the passing

scenery—it goes by too fast and with too little warning. Either by design or subconscious self-editing, Keeler misses things.

In one significant case, he describes how Bill Moyers carefully studied *Newsday* and Long Island after accepting Harry Guggenheim's offer to become publisher in 1966. Keeler quotes Moyers's reference to a reporter who had been at *Newsday* for years: "If I had been able to spend a week with Hal Burton before I took the job, I probably wouldn't have come" (p. 395). The comment is astonishing. Was *Newsday's* past and its journalistic tradition so tawdry, and its vision so myopically suburban, that Moyers would have declined? If so, that impression of *Newsday's* first quarter-century is worth some discussion. We will never know what Moyers meant, because the quotation ends and the paragraph goes on blithely cataloguing Moyers's indoctrination process. As a result, Keeler misses a chance to explore a central theme of *Newsday's* history: the bonds that keep it from becoming a truly great national newspaper and its troubled sense of identity.

Glimpses of Moyers's viewpoint come as a deep relief to the reader, eager for a sense of perspective and some moral mileposts. Unlike other *Newsday* insiders cited by Keeler, Moyers had only a brief relationship with the paper (four years) and his was peculiarly platonic. He was not a *Newsday* insider; his affair with the paper was a kind of exercise for a man with no Long Island roots, little experience as a journalist, and no experience as a publisher or businessman. Despite his early stint as a Texas newsman, Moyers came from the world of politics. Lyndon Johnson brought him to the White House as press secretary, a position in which Moyers won national respect. Johnson was the only Democratic president acceptable to Harry Guggenheim, a hawk on Vietnam. For him, Moyers was little more than a big name to give national credibility to his newspaper.

"When I got here," Moyers remarks in one of those refreshingly revealing quotations,

Newsday was like a rodeo at which it was the cowboys who were wild. What I found was a marvelous and charming menagerie of idiosyncratic journalists having a wonderful time publishing a newspaper that was feisty, irreverent and fun, while not recognizing that they had a lot more potential than they could see, because they were having such a good time (ibid).

This is a nice way of saying that *Newsday* was bush league. Moyers adds that,

My sense of things was that *Newsday* had a pronounced sense of its place on Long Island, but that the people of *Newsday* had a limited sense of Long Island's place in the world. There was a sense both on Long Island, and at *Newsday*, of an inferiority complex, that we were parochial, that we were in the shadows of New York (ibid.).

Keeler does not develop these important themes, even after reporting

that an ailing and paranoid Guggenheim dumps Moyers as too anti-Nixon and frantically sells his paper in 1970 to the Chandler family's *Times Mirror* Company in Los Angeles. (It was another delusion; the company no longer was run by Norman Chandler, the arch-conservative patriarch Harry admired.) But read between the lines: Even as *Newsday* developed into a complicated corporate institution, outgrew its old headquarters in Garden City, moved to a new complex in Melville, and became *Times Mirror's* most profitable property, a profound identity crisis continued to plague its staff and leadership. Like Alicia Patterson and Harry Guggenheim, their successors at *Newsday* wanted the paper to be more than a suburban "rag" that covered village boards, high school sports, and ribbon cuttings at shopping malls. They wanted *Newsday* to be accepted as one of America's great newspapers.

The problem may be that no matter how many national and international investigative stories it runs, *Newsday's* suburban franchise—and perhaps its "idiosyncratic" brand of small-town journalism, to use Moyers's word—will never let it stand beside the *New York Times*, the *Washington Post*, or *The Wall Street Journal* as a great newspaper. As quoted by Keeler, Moyers says that his job as publisher was to refine *Newsday* "into a more sophisticated publication, as the island became more sophisticated—more metropolitan is the term we kept using..." (ibid). Moyers perceptively surmised that suburban Nassau and western Suffolk would ripen into a sophisticated, energetic, multi-faceted, "metropolitan" community. However, *Newsday* has to keep covering Long Island's suburban aspect, because that is its franchise.

The inevitable result of *Newsday's* dilemma was the evolution of the spin-off called *New York Newsday*, an aggressive city paper; it is losing millions for *Times Mirror*, but making a big splash in New York City with hard-hitting enterprise journalism and not a little raunch, a la Rupert Murdoch. Its editor, Don Forst, likes the low-blow British tabloid style, so conflicts may be expected with the home office, which suddenly appears conservative compared to its wild relative to the west. Keeler reports that Anthony Marro, *Newsday's* editor, has the last word over Forst, and exercises his power. Marro killed Forst's front-page headline for a story about Imelda Marcos. The headline was one word: "OINK!" (p. 689).

Marro "is a serious journalist" to Keeler, while Forst looks for "a story's conversational value on the streets" (ibid.)—another way of saying that he likes gossip and glitz, and another example of Keeler's carefully euphemistic approach. The point is that Forst's is not the kind of vision likely to win *Newsday* any more Pulitzers. Nevertheless, Keeler does a good job of documenting Forst's style as well as his impact on the organization—but again, draw your own conclusions. If you do, the picture of a nasty man emerges. Marro, on the other hand, does not take shape as a player, except as some vague, benign spirit on high. That is odd, considering his long career at *Newsday*; but given Keeler's position as Marro's inferior on the staff—and the hint that it is the business side that really calls the shots at *Newsday*—perhaps it is not so surprising.

Moreover, it was Marro who personally asked Keeler if he would undertake the history project, Keeler told a gathering of Long Island journalists last year. More fully portrayed are Bill Moyers's successors in the publisher's chair, William Attwood and David Laventhol, the duo that guided *Newsday* through the 1970s and 1980s, when the business side seemed to take over the newspaper's soul. (Keeler does not discuss it, but it is significant that Attwood commuted from Connecticut rather than move to Long Island, as Bill Moyers did.) The corporate makeover was bound to happen; *Newsday* never was so much a journalistic enterprise as it was a vehicle for obtaining and exercising power. For Alicia Patterson, covering the news was fun but it was not so much her interest as was finding success and influence commensurate with her birthright, both social and vocational. However, she was good at the game and Harry did not interfere because the paper took off like a rocket. After Alicia died and Harry made the harebrained attempt to run the paper himself, he had one flash of brilliance (for all the wrong reasons) when he hired Moyers. Ironically, the soft-spoken Texan was no publisher but a great editor in the best traditions of journalism. What happened? Harry got rid of him.

In the post-Moyers era, *Newsday's* true character has come fully into bloom: a monolithic business institution that needs new turf on which to grow, and fiercely protects the turf it already claims. Even as it set its heart on the Big Apple, it fought wars with low-quality, hand-out weeklies to protect its hold on big retail advertisers. Its answer was to regionalize the Long Island paper into several editions, a move that one disgruntled staffer called "Balkanizing" (p. 683) *Newsday's* suburban power base. Meanwhile, *Times Mirror* poured millions into its city adventure without a wince.

The *Newsday* crew in Melville grows increasingly anxious and confused about its step-child to the west. There is fear that one day the tail will wag the dog. Resentment goes both ways. "Just as the Long Island staff grumbled about Forst's outrageous front pages," comments Keeler, "the New York staff griped that they were being stifled by the hopelessly suburban outlook of Mother *Newsday* in Melville" (p. 671). Are the folks back on Long Island doomed to life in the provinces—that part of the world that Ed Koch foolishly called "a joke"—while the New York crew blossoms and exults in the big city?

Such a reversal would be a fitting chapter in *Newsday's* history. The paper's first half-century was full of irony; the groundwork is laid for more in the post-suburban future. With a little critical thinking, it can be traced in Robert Keeler's comprehensive and peculiarly restrained narrative.

PETER B. BOODY

Editor, *Southampton Press*

One Hundred Years Old Today: Anniversary Edition, the Easthampton Star. HELEN S. RATTRAY, Editor and Publisher. East Hampton: East

Hampton Star, 26 December 1985. Pp. 28. Free to subscribers, \$1 postpaid to others.

On 26 December 1985, residents of East Hampton were treated with an anniversary issue of their weekly newspaper. The *East Hampton Star* celebrated its one-hundredth birthday with a special edition outlining the history of the paper and its editors. Articles covered such topics as changes in printing technology, the publication of special issues, the paper's search for a permanent home, and the controversy surrounding the large section of letters to the editor. Other articles provided biographical sketches of the paper's eight editors over the years and of the 1985 staff. This article is a synopsis of the history of the paper and its editors, as well as a review of the hundredth-anniversary issue.

The first 500 copies of the *Easthampton* [one word at the time] *Star* appeared on 26 December 1885. The eight-page collection of social notes, serial fiction, and political, farm, and crime reports from other places on Long Island and across the United States, had only two pages of nominally local news. The rest, as was the custom among small country newspapers, were composed and printed else where—in this case in New York City. However, the intention of the publisher, Walter Burling, was spelled out in the paper's motto: "Devoted to the Interests of the Town of East Hampton." This was to be a local paper.

Walter S. Burling, the founder and financier of the *Star*, was an entrepreneur who followed the Long Island Rail Road east establishing newspapers along the way. With the *Easthampton Star*, he hoped to launch his son George in a journalism career. George's interests, it appeared, were neither in the newspaper business nor in East Hampton; in 1890, Walter Burling sold the newspaper to Edward Boughton, an experienced editor from Connecticut.

Boughton established an editorial policy that has continued for the past century. The *Star* was and is politically independent. One reason for its longevity is that it did not become a mouthpiece for any political party, an error that sounded the death knell for numerous local papers founded in the late-nineteenth century (John Tebbell, *The Compact History of the American Newspaper* [New York: Hawthorn Books, 1963], 250).

While the paper was nonpartisan, it was not apolitical. Boughton espoused many causes, including good roads and improved bicycle paths, better conditions at Camp Wickoff during the Spanish-American War, the need for a Village Improvement Society, and broader understanding between young and old. He also opposed capital punishment, a stand still taken by the paper. There was no editorial page, but commentary was interspersed throughout the paper.

The paper underwent several changes in format and style under Boughton, reflecting changes in the community. With the influx of summer visitors beginning in the 1890s, "social" news appeared. "The Cottage List" on the front page provided information on cottage owners, summer lessees, and street locations. Local advertisements, few at first, now took

two columns on the front page.

Starting in 1907 Boughton began mechanizing the printing operation, first with a typesetting machine and then with a motorized cylinder press. This freed the editor from having to purchase ready-print pages from New York. Instead, he got "boilerplate," long metal castings of pre-set type which he could edit with a hacksaw. With the improved technology and less reliance on outside news, important local news began appearing on the front page, including obituaries and columns with church news, birthdays, notices of who was visiting whom, and who gave an afternoon tea.

Boughton's changes, particularly his increased emphasis on local news, was part of his commitment to the greater community. He expressed his philosophy in an editorial written soon after purchasing the paper: "All these years you've advertised in this Home Paper, and done what you could to help the editor to fight your battles in municipal and country matters, and encouraged him as he has worked to build up the town and bring business to it (*Easthampton Star*, 26 December 1985, 1)." Boughton, a community activist, sought the public's continuing commitment to him and the *Star*.

Under the Burlings the paper was in an old carriage house moved to Main Street, from which it traveled to a building on Main Street proper. Boughton relocated operations to the historic Clinton Academy building, where it stayed for ten years before moving again, this time to 78 Main Street (today's Dayton Agency building), where it remained for thirty-five years.

Edward Boughton died in 1916 and was succeeded as editor by his son Lewis and as publisher by his wife Bertha. When Lewis died two years later, his brother Welby took over as editor, a position he held until 1935. Welby instituted fewer changes than his father, although the paper did reflect the boom of the 1920s with expanded real estate advertisements. Along with the rest of the country, the paper showed an increased awareness of "society," or social class, with the launching of the summer society section in 1927. Welby also invited local columnists to contribute to the paper. Jeannette Edwards (later Rattray) started her column, "Looking Them Over," in 1923. Welby Boughton promoted good citizenship in his commentaries; for the only time in the paper's history, the editor took a stand against land preservation by opposing the purchase of land on the South Fork for state parks.

In 1935 the *Star* passed to Arnold and Jeannette Edwards Rattray, who had met while traveling in China and the Philippines. They returned to Jeannette's home town of East Hampton to get married and work on the paper. Jeannette had written a column for the *Star* since 1923; Arnold, a Californian and a comparative newcomer to East Hampton, started by writing real estate ads. After purchasing the *Star*, the Rattrays continued and strengthened Edward Boughton's emphasis on local news and issues. "We believe strongly that an editorial page with a personal and local flavor must be a part of any successful hometown paper," Arnold asserted in

an editorial. Because the new publishers wanted people to “read about themselves; things they would not find in any other paper in the world [they] filled the *Star* with the good things about smalltown [sic] life. Nature accounts began appearing, and more homey, social notes.” (*ibid*, 11, 14; Tebbell, *Compact History*, 247).

The Ratrays took sides on local controversies from temperance to zoning (they supported both), but maintained the paper’s political independence, avoiding endorsement of candidates. East Hampton was such a small town that they may have been sensitive to the possibility of offending a neighbor they might see walking down the street or in the Post Office, a concern shared by most local editors (the *Star*, 11; Howard Rusk Long, ed., *Main Street Militants: An Anthology from Grassroots Editor* [Carbondale, Illinois: Southern Illinois University, 1977], xiv).

Arnold Rattray nursed the *Star* through the Depression, when the small size of the business and professional directory and the classified ad section reflected the poor economic climate, and he supported the nation’s efforts in World War II. However, if he disagreed with the policies of Presidents Franklin D. Roosevelt or Harry S. Truman, he was not afraid to express it in print. He started the “summer Colony” news column for the social set in 1939, continued to carry an assortment of syndicated columns, increased the price of the paper to a dime from its original nickel, moved operations one last time to the paper’s current site at 153 Main Street, and, true to his interest in local news, published notices of weddings, engagements, and obituaries on the front page.

After her husband died in 1954, Jeannette Edwards Rattray assumed the editorship for four years until her son Everett took over, after which she continued as publisher until 1974. From her office in the house behind the *Star*, she wrote columns and reviews, as well as histories of East Hampton, the Maidstone Club, Montauk, maritime disasters, windmills, and, in collaboration with her father, Everett J. Edwards, “*Whale Off!*”: *The Story of American Shore Whaling* (New York: Frederick A. Stokes, 1932). Her column “Looking Them Over,” started in 1923 and continued for fifty years, chronicled the history of East Hampton and “helped gently steer it where she wanted it to go,” (the *Star*, 5) a point of criticism by some residents. However, as historian, conscience, and booster of her community when it was undergoing major social changes, she helped to maintain and document the traditions of East Hampton.

After pursuing his education at Dartmouth College and the Columbia School of Journalism, Everett Rattray took over from his mother as editor of the *Star*. He edited the paper from 1954 to 1980, and, if the articles in the anniversary issue are to be believed, he sounds more like a god than a mortal man. Perhaps more than any editor of the *Star*, he made the most lasting impression. His liberal philosophy shaped the paper’s editorial policy and changed its reputation dramatically. Like most of his predecessors, Everett supported land preservation and conservation, planning, and zoning:

As the years have passed, however, [the *Star*] has commented more freely on those and wide-ranging national and international issues. Its opinions, though not designed to cause offense, were bound to anger practically everyone in Town at one time or another. That is a price later editors [Everett and Helen Rattray] were willing to pay (*ibid.*, 11).

Everett invited controversy, convinced that the paper “should reflect may local points of view to the point of being provocative” (*ibid.*, 7). For the first time in the paper’s history, the editor, a trained professional, was willing to take a strong political stand on every issue of local importance. Two of his more “radical” changes were to publish letters of any length on any subject, as long as they were not obscene or libelous, and to report all arrests logged by town and village police. Both of these controversial policies are still debated in the letters-to-the-editor pages (telephone interview with Helen Rattray, 21 November 1990).

Circulation increased, the staff grew, and the size of the paper expanded under the watchful eye of Everett Rattray. He moved weddings, engagements and obituaries (still the core of the paper) to the second and third pages, devoting the front page to local news and features; he increased the use and quality of photographs; he added drawings to the heads of regular columns; and he started printing a cartoon by Marvin Kuhn in 1965. The column “Summer Colony” ceased in 1969, because Everett believed that social notes should not be segregated from local news—they were part of it. He decreased the number of syndicated columns, relying more heavily on local or locally-connected writers, and hired a staff columnist in 1965. In 1972 he modernized the printing process from letter press, which used raised, inked type, to offset printing using a photographic process. He also moved the printing operation off-site. Another of Everett’s ideas developed into the *Star*’s trademark—a photograph in the upper right corner of the front page, so that when the paper was folded the photo created a cover.

Everett’s wife Helen was no stranger to the paper. When Everett became publisher after his mother retired in 1974, she assumed the position of editor and, beginning in 1977, wrote a column entitled “Connections.” Everett groomed her as publisher before his death, an event for which he was prepared. Helen complied with her husband’s instructions for a year before instituting her own changes, many of which were as important as his. She has expanded the school, human interest, political, and arts coverage, and instituted detailed coverage of zoning- and planning-board meetings as environmental issues began to divide the community. Although reporters now specialize in a subject area, in 1985 they still carried notebooks for interviews and wrote their stories on manual typewriters. The focus remains on local news, but Helen is more willing to accept the summer residents, the “urbanites” from New York, as part of the community. She solicits submissions from them for book reviews, letters, and contributions to “Guest Words,” a column she started in 1981. She

also took the dramatic step of changing the editorial typeface in 1985, giving the paper a cleaner, more modern look. Circulation continued to increase, as did the advertising and editorial staff.

Helen Rattray believes, as did her predecessors, that the paper serves a leadership role as the conscience for, and mirror of, the town of East Hampton. She encourages strong, forthright editorial commentary to get the community talking about issues. She feels that the paper should bring issues that need to be debated into the local arena so they can be discussed.

East Hampton has grown considerably since the *Star* first appeared. However, its mission essentially is the same—to serve the best interests of the town. Through its features and news coverage, the paper tries to create a link with the past; to keep East Hampton from becoming “Anywhere Resort, U.S.A.”; and to dispel the “us-them” mentality common in an area that is a mecca for summer visitors.

The *Star*'s anniversary issue provides interesting insight into the community of East Hampton town and the newspaper and editors who have served it. The story is at times a bit too rosy, a bit too perfect. There is always a risk when an organization writes its own history—it is easy to focus on the achievements and ignore the more negative aspects. For example, it is hard to believe that the only major controversies in which the paper found itself embroiled in the last one hundred years concerned the reporting of police arrests and the open policy regarding letters to the editor. During the volatile 1960s, the town must have been affected by the war in Vietnam, the burgeoning drug culture, and the civil rights movement, but these issues are mentioned only cursorily in articles from that period. How did they affect East Hampton, and how did the *Star* respond? How were social, economic, and technological changes in the last century reflected in the types of stories, the commentaries, the advertisements? The closest the writers get to analysis is in the articles on police reports and weddings, which put the topic into perspective, contrasting what was acceptable “then” with what was common practice in 1985.

Because reporters are not trained historians, they cannot be expected to provide the in-depth analysis suggested above. The anniversary issue of the *Easthampton Star* provides an interesting and creditable outline of the history of the paper and, tangentially, of the community. The paper is a relatively rare entity. The number of country newspapers or weeklies peaked at 14,500 in 1914 (Tebell, *Compact History*, 252), shrank to 7,612 in 1970 and stands at 7,606 today; however, although the total scarcely changed in the past twenty years, circulation soared from 28 to 53 million (telephone interview with Donald J. Carroll, the executive director of the New York State Press Association, 21 December 1990). During this period of growth in the readership of weeklies, the nation's daily papers managed only a paltry increase, from 62.1 to 63 million (*ibid.*).

Many weeklies have been purchased by larger newspaper chains and so lost their local flavor. The *East Hampton Star* has avoided this fate. It remains truly independent, providing the citizens of East Hampton with

a forum in which to discuss important issues under a closely guarded and actively fostered right to free opinion. Its three successive families of editor-publishers have performed this vital community service for more than a century of accomplishment.

BARBARA E. AUSTEN

Curator, Suffolk County Historical Society

Dear Brother Walt: The Letters of Thomas Jefferson Whitman. Dennis Berthold and Kenneth Price, eds. Kent, Ohio: Kent State University Press, 1984. Pp. 225. \$27.50.

For those whose special interest is Long Island's history and culture this book is a triple treat. It provides new insight into the life of Walt Whitman (through the letters written to him by his favorite brother), tells us more about the Whitman family in the years after they left Long Island, and provides a wonderful glimpse of how, in nineteenth-century America, a Long Island man could rise through the ranks to become an outstanding participant in the nation's newly important field of civil engineering. Thomas Jefferson Whitman was seventh in the line of eight children born to Louisa and Walter Whitman; young Walter was fourteen when "Jeff," as he was known, was born in 1833. Because of their father's financial difficulties, Walt soon took on the role of surrogate father to all his younger siblings. The bond between him and Jeff was especially strong, so much so that in 1840, when Walt headed south to take a post on the *New Orleans Daily Crescent*, it was Jeff who went with him.

Dear Brother Walt contains the 106 known letters of T. J. Whitman, of which seventy-seven are addressed to his brother Walt. Most of the remaining are to his parents or other family members, and some to friends of his and Walt, such as William O'Connor. The letters to Walt reveal the various stages of their relationship, before and after Jeff's marriage. They are particularly good during the Civil War years when Walt was a visitor to Army hospitals and Jeff and his fellow workers at the Brooklyn Water Works were the principal contributors of the funds the elder brother sought to supply the needs of the wounded. In those years Jeff and his wife and two daughters lived with his mother (the father died in 1855, only months before the publication of the first edition of *Leaves of Grass*) and two other brothers, Jesse and Edward, both of whom were seriously ill. In 1863 Jeff wrote thirty-seven letters to Walt from which we learn a great deal of the physical and emotional turmoil that characterized life in the Whitman family. Because Jeff was more realistic about the human failings of their mother, we see another side of the woman Walt insisted on calling "a perfect mother" ["starting from fish-shape Paumanok where I was born / Well begotten, and rais'd by a perfect mother..." (Walt Whitman, "starting from Paumanok," *Leaves of Grass* [1867; reprint, New York: W. W. Norton, 1973], 15)].

Jeff's career as an engineer was very much his own idea. Walt had pushed him toward the printing trade, which he learned, but his interest was elsewhere—even while in New Orleans he wrote to his mother about the poor drainage in the city. He came to engineering in the way many did at the time, through surveying, and his appointment in the 1850s as assistant engineer on the construction of the Brooklyn Water Works was despite his lack of a formal degree. He worked on that project under James P. Kirkwood, a former chief engineer for the construction of the Missouri Pacific Railroad. As the editors point out, "The Brooklyn Water Works was a virtual training ground for the nation's future hydraulic and sanitary engineers, a school perhaps more valuable than any academic institute of the time" (xxvi).

His Brooklyn background and continued diligence at self-education brought Jeff to the major appointment of his career. In 1867 he was named chief engineer of the St. Louis Board of Water Commissioners, which was charged with building a waterworks for one of the most rapidly developing cities in post-Civil War America. For twenty years Jeff held this important post, during which time he became a consultant to other municipalities in the West. He was the most prosperous of the Whitmans and the one who fulfilled Walt's dream of the democratic worker. Conscious of the growing need for professionalization created by advancing technology, Jeff Whitman was an early member of the American Society of Civil Engineers, which he served for one term as vice-president. He died in 1890, two years before the death of Walt.

In commenting on the gradual growing apart of the brothers, the editors point to Walt's need to be depended upon by family members and friends, a dependence which ceased with Jeff's personal and financial success. There is no doubt, however, that the love between Walt and his favored younger brother was the model for that affection which the poet brought to the most compelling of his male relationships. There was something of this relationship with Jeff in such later friendships as those Walt had with Peter Doyle, Harry Stafford, and the soldiers with whom he corresponded long after the war had ended.

The editors do an excellent job in annotating these letters, providing ample background and informative notes without unduly burdening the text. Because Jeff was more learned than some others in the Whitman family, his letters present no problems to the reader and have a wonderful spontaneity. The book contains photos of family members as well as of some of Jeff's St. Louis accomplishments. For its contributions to greater understanding of Walt Whitman and to our knowledge of nineteenth-century social history, the book is highly recommended.

JOANN P. KRIEG
Hofstra University

JEFFREY A. KROESSLER and NINA S. RAPPAPORT. *Historic Preservation in Queens*. Flushing: Queensborough Preservation League,

1990, Illustrations, maps. Pp. 87. \$10.00 (paper).

In spite of heightened awareness of our architectural heritage as a window to the past and a welcome respite from urban sprawl, Queens County can claim embarrassingly few of the landmarks designated by either the New York City Landmarks Commission or the National Register of Historic Places. Citing a bias of preservation professionals against the appreciation of the history and architecture of Queens, the Queensborough Preservation League felt that the time had come to re-examine the legacy of the largest of New York City's five boroughs. Formed in 1985, this coalition of groups and individuals, the League is involved both with advocacy and education.

Using the combined expertise of authors Jeffrey A. Kroessler, a member of the history departments of Baruch and Queens Colleges, and Nina S. Rappaport, the executive director of the Sunnyside Foundation for Community Planning and Preservation, the Queensborough Preservation League has published this eighty-seven page booklet, an invaluable tool for examining Queens in terms of historic preservation of its important sites and, even more importantly, a statement of what remains to be done.

The authors strongly state their perception of a lack of interest in, or awareness of, Queens's unique architectural heritage on the part of preservation professionals: out of a city-wide total of seven hundred buildings and fifty-two historic districts, Queens has a mere forty individual landmarks and but one Historic District (Hunters Point) designated by the City Landmarks Commission. Of the twenty nominations denied by the commission during its twenty-five year tenure, half are in Queens, including the only historic districts denied landmark status.

Queens, like the other boroughs, has a long history. The area that became Queens County, settled a few years after the founding of New Amsterdam, has its share of important industrial development and concentrations of wealth. It was the site of the 1939 and 1964 World's Fairs, and of several innovative WPA projects, as well as fertile ground for important early experiments in planned communities—notable examples of the work of nationally known architects, including the famed Forest Hills Gardens—all leaving an architectural legacy that deserves protection.

Rather than being considered as a polemic on the state of preservation, this book should be interpreted as an attempt to generate community awareness in the face of continued development and the consequent destruction of historic buildings and sites. The book is both a cry for a new awareness of the borough's diminishing architectural and historic landscape, and a call for a new outlook in historic preservation based on the individual merits of a community's history, patterns of growth, and importance of the vernacular styles of local builders and craftsmen.

In terms of judging preservation values, the destruction of many sites named in the book would be as devastating to Queens's land-and street-scape as would be the destruction of Central Park to Manhattan's, or the Soldiers and Sailors Memorial Arch to Brooklyn's. Therefore, the call is

needed and timely, requiring the combined efforts and resources of individuals, the community, and knowledgeable preservation professionals. In addition to providing the most comprehensive list to date of Queens's designated landmarks, the book is a manual on the preservation process. Some of the chapters explore the National Register and the New York City Landmarks Commission, explain what they do and how they function, clarify why sites are or are not nominated, and provide a succinct guide to architectural styles. Other chapters highlight the criteria used to designate a landmark building or district, with short paragraphs on the history and architectural significance of particular buildings or areas, including sites awaiting action and designations rejected.

In Section VI, the most important part of the book, the authors compile an impressive list of largely overlooked sites that are logical candidates for landmark status, a number of which are seriously threatened. The candidates include thirty-five landmarks, such as the 1734 St. James parish house, in Elmhurst; twenty-three historic districts, among them Steinway Historic District, which contains twenty-nine single-family, brick, row houses built by the Steinway Piano Company for their workers and managers in the 1870s; the impressive Forest Hills Gardens; and six scenic landmarks (including Kissena Park, and Flushing Meadows-Corona Park, the site of the 1939 World's Fair).

The book includes twelve pages of maps, numerous illustrations, and a resource directory. Although our architectural legacy will continue to suffer from increasing attrition, the Queensborough Preservation League has more than accomplished its modest but important goals in *Historic Preservation In Queens*—to awaken interest, to show the need, and to offer practical ways of keeping evidence of the past alive for the future.

CAROL A. TRAYNOR

Society for the Preservation of Long Island Antiquities

Mary Field and Van Field. The Illustrated History of the Moriches Bay Area. Center Moriches: Moriches Bay Publications, 1990. Pp. 288. 550 photographs. \$24.95 (paper, 8½" x 11"). On sale in Moriches area shops or from The Ketcham Inn Foundation, Box 626, Center Moriches, NY 11934 (profits from sales are donated to preserving the old stage coach stop known as the Terry/Ketcham Hotel, an Historic Landmark site designated by the town of Brookhaven).

The spectacular success of the recent Public Broadcasting series, *The Civil War*, demonstrates once again the fascination of vintage photographs. Despite prophets from earlier decades who forecast the demise of still photography once motion pictures and television became accepted technologies, this has failed to come to pass. Although live television pictures from the far side of the moon are now commonplace, people still show an appreciation for photographs. Part of the explanation for this behavior is that by their very nature photographs give viewers the

opportunity to look, look again, and yet again, until every nuance of the scene is transferred to memory. Old pictures offer an unhurried view of bygone eras.

Interest in "visual history" also accounts for the increasing number of local histories that utilize photographs to tell the story. Almost every major community is, at one time or another, the subject of such a volume. Their appeal to those who live or lived in the community under review is universal. Hardly a soul picks up one of these books without commenting on some event brought back to mind by the scene being viewed.

The husband-and-wife team of Van and Mary Field produced *The Illustrated History of the Moriches Bay Area* as a labor of love. They scoured the region for illustrations, and intertwined their text with more than 300 years of history. However, since the book is essentially photographic, the detailed text really begins with the era following the Civil War. The authors include 550 photographs in a 288-page book that gives the reader almost a block-by-block history of the Moriches Bay area.

This is an impressive undertaking from which the authors can take great pride. The strength of the book is the phenomenal detail of the photographs, text, and captions. It is one thing to show a picture of two young women walking down a dirt road around the turn of the century; how much richer the message becomes when the reader learns not only the names of the women, but that one lived on until 1982 in a house a few hundred yards from the site of the photograph.

All too often local histories are written by and for people who are familiar with the area under discussion. The casual reader often feels like one who joins a group in deep discussion at a cocktail party. No one disputes the person's right to stand and listen, but no one feels compelled to explain about whom they are talking or the issue being discussed. Happily, the Fields' book makes every reader feel part of the inner circle.

To help those unfamiliar with the locale, the authors wisely include many maps. These often are reproductions of real estate maps which include the names of those who owned each parcel. It is such detail that brings the past to life—such as an 1873 map that shows the route of the "Proposed R. R." One can only imagine all that the coming of the railroad meant to residents of the Moriches.

The book benefits from colorful captions and well-written text. For example, a description of a locomotive at the railroad station notes, somewhat sadly, that "neither steam locomotives or (*sic*) this railroad station are with us any longer." This type of whimsy, that pervades the volume, gives it an especially "friendly" tone.

The Illustrated History of the Moriches Bay Area is the loving work of two dedicated researchers, who, in turn, note their debt to August Stout, Jr., the late founder of the Moriches Bay Historical Society. Yet, despite their devotion to their undertaking, the book suffers from grammatical errors and faulty proofreading. Facing the page with the careless "neither...or" caption is a statement that "all of these structures later moved," in which the omission of "were" after "later" distorts the

meaning.

These problems hardly detract from an excellent work. The quality of the photographs is key to the success of photo-histories. Overall, the quality of the illustrations is good. Most are sharp and clear, although a few are fuzzy and lack detail—no doubt the authors agonized over which to include. Their conclusion to incorporate less than first-class material was wise; better to be complete than to aim for photographic excellence.

Another strong point is the inclusion of many “current” views of scenes that appear in the earlier pictures. Contemporary views show the effect of change as well as how parts of the early community have survived. And the book correctly presents as “history” events and scenes as recent as the 1950s and 1960s.

Van and Mary Field’s *The Illustrated History of Moriches Bay Area* is an easy-to-read and thorough description of a portion of Long Island overlooked by earlier histories. The format, overall photographic quality, writing style, and completeness with which it handles the subject matter give the reader a very enjoyable book that will be of interest both to the long-time Moriches-area resident and to anyone who delights in delving into Long Island’s past.

DONALD E. SIMON
Monroe College

NICHOLAS LANGHART, WILLIAM PETERS, RALPH O. WILLIAMS, and JOHN A. STACK. *Illustrations by JOY BEAR. Houses of Southold: the First 350 Years*. Southold: Southold Town Landmark Preservation Commission, 1990. Illustrations, glossary. Pp. 66. \$15.00 (paper). Add \$2 for postage and handling.

This work presents both the average citizen and the academic reader with a clearly written, well illustrated, and concise introduction to the complexities of interpreting historical architecture. It should be of interest to all residents of the town of Southold as well as to anyone interested in Long Island’s architectural heritage. Beyond Long Island, it is a valuable basis for comparison of local architectural forms with similar forms elsewhere.

Joy Bear is to be complemented for the accuracy and care with which her illustrations are executed. The text and illustrations are presented in an eye-pleasing fashion of brown ink on off-white stock.

The stated purpose of the work is to assist the citizens of Southold “in recognizing the quality and variety of their local architectural legacy, and to encourage the concern for and preservation of this unique and irreplaceable heritage” (vi).

Examples, presented in chronological order by century and style development, are not limited to one or two villages but are selected to represent the entire town. The structures illustrated represent both the public and private ownership. Some have been chosen “because they are

accurate and nearly unchanged examples of their type and style. Others were chosen because their alterations were typical in showing how times and tastes have changed. Still others because they are unique" (vi).

Seventeenth-century houses are represented by four examples with three computer-generated floor plans that add a useful dimension to the interpretation of the text. The sometimes confusing array of eighteenth- and nineteenth-century architectural styles is especially clear, with an interesting and easily digested accumulation of information. Eighteenth-century examples are divided into one- and two-story houses, with eight examples and three floor plans provided for the one-story houses, and four examples with one floor plan for the two-story houses.

Nineteenth-century architectural styles are sub-divided into five types: Georgian—four examples and one floor plan; Greek Revival—two examples and one floor plan; Gothic—four examples and one framing diagram; Italianate—four examples, one floor plan; and Victorian era—four examples and no floor plans. Three of the four Gothic examples are churches or former churches; among these the Cutchogue Library is especially interesting and deserves further investigation.

Houses of the twentieth century are represented by four examples and three floor plans. These examples open avenues of research that can prove especially fruitful in trying to understand the architectural face of contemporary Southold.

One of the strongest attributes of this slim but important work is the way architectural change is related to changes in economics, behavior, and attitude. This provides readers with sound basic information, takes them beyond the mundane, and stimulates thought and further research.

The beginning of the epilogue offers suggestions for further research and questions about current interpretations. This is consistent with the goals of the work, reminding readers that we do not yet have an adequate understanding either of past behavior or its motivation. The more clearly we understand these activities, the more clearly we will understand the forces shaping the present. In a very small space at the latter part of the epilogue, several complex ideas about the economic motivation for settlement are presented. Although it raises important issues, this small section seems inconsistent with the purpose of the work.

Three of the book's most valuable components are the glossary, map, and address sections. Readers unfamiliar with Southold will find the glossary especially valuable; all readers will find the locating of particular houses a worth-while experience, because along the way the quality and diversity of Southold's architectural heritage will become apparent.

To the credit of the Southold Landmark Preservation Commission, the work is unpretentious, readable, and achieves the goals set by the commission.

FRANK TURANO
SUNY at Stony Brook

EXHIBIT REVIEW

Edward Lange Revisited. The Gallery of the Society for the Preservation of Long Island Antiquities, Main Street and Shore Road, Cold Spring Harbor. Through April 1991.

A former library took on new life as the Society for the Preservation of Long Island Antiquities opened its new exhibition gallery in Cold Spring Harbor on 13 November 1990. The inaugural exhibit, *Edward Lange Revisited*, highlights recent discoveries of this talented Long Island landscape artist, whose work provides the most vibrant and colorful record of nineteenth-century Long Island. His views range from sweeping panoramic townscapes to intimate "house portraits." Lange's realistic scenes of home, farm, village, and resort provide an important, and in some cases, the only record of the appearance of pre-suburban Long Island.

The pursuit of an art career on Long Island in the 1880s required more than artistic talent. Lange was both a salesman and an entrepreneur, sometimes sketching a house and subsequently writing to the owner to encourage purchase of the work. He mixed his artistic success with the cheaper and less laborious practice of photography: several of his pieces were intended to be photographed, reproduced, and sold in quantity. As a result of Lange's multiple talents, he left a remarkably rich record of Long Island scenes, including bird's-eye views of newly developed communities, such as Babylon, and composite scenes of communities from Sag Harbor to Cold Spring Harbor, painted in detail that even a camera could not discern.

The exhibition of more than forty items, including original oils and watercolors, sketchbooks, and photographic reproductions on loan from private collectors and institutions, marks the first time that Lange's output can be seen as a whole, offering a comprehensive view of his times and achievements. The exhibit is on view in the Gallery, open Tuesday—Sunday, 12-5 p.m., through April 1991. Admission is \$1.50 for adults and \$1.00 for seniors and children.

THOMAS D. BEAL
SUNY at Stony Brook

BOOK AND EXHIBIT NOTES

Queens Historical Society Newsletter, January-February 1991. Pp. 16. Free.

This bi-monthly, sixteen-page bulletin is filled with articles on the ongoing struggle to preserve architectural and historic landmarks, together with information on current events and exhibitions pertaining to the borough of Queens. The *Newsletter* and the new publication, *Everything You Ever Wanted To Know About Queens: A Book of Trivia*, are available at the Society (open Tuesday, Saturday, and Sunday, 2:30-4 p.m.), by telephone

(718) 939-0647 (in service 24 hours a day), or by writing to the Queens Historical Society, 143-35 37th Avenue, Flushing, NY 11354.

Laurie James, *Men, Women, and Margaret Fuller*. Dix Hills: Golden Heritage Press, 1990. Pp. vi, 508. Notes, bibliography, appendix, index. \$18.50 (paper).

Laurie James, ed. *The Wit and Wisdom of Margaret Fuller Ossoli*. Dix Hills: Golden Heritage Press, 1988. Bibliography. Pp. 95. \$8.50 (paper).

Laurie James, ed. *Why Margaret Fuller Ossoli Is Forgotten*. Dix Hills: Golden Heritage Press, 1988. Bibliography. Pp. 72. \$8.50 (paper).

Laurie James, a Long Island actress and author, has published three books on the life and works of Margaret Fuller, the antebellum feminist, author, and transcendentalist philosopher, who perished in 1850 in a shipwreck off Fire Island.

Vincent F. Seyfried and William Asadorian. *Old Queens, N.Y. in Early Photographs*. New York: Dover Publications, 1991. \$12.95 (paper). This well-documented collection of photographs will be reviewed in our next issue.

“To Love and to Cherish: The Great American Wedding.” The Margaret Melville Blackwell History Museum, The Museums at Stony Brook. 1208 Route 25A, Stony Brook. 21 April—21 July 1991.

Organized by Amy McKune, the curator of The Museums' history collections, this exhibit of “marriageabilia” includes a comprehensive assortment of wedding dresses, gowns, and objects; story-telling and family workshops; and lectures on ethnic traditions, transportation, flowers, cakes, and other wedding-related subjects. The exhibit is open Wednesday through Saturday, 10 a.m. to 5 p.m., Sunday from noon to 5. Admission to all exhibitions at The Museums is \$4 for adults, \$3 for senior citizens, \$2.75 for students, \$2 for children from 6 to 12, and free for members and children under six.

If you are married or know anyone who is, do not fail to attend “To Love and to Cherish: The Great American Wedding.”

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