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REMEMBERING WORLD WAR II
CELEBRATING EARTH

Wisconsin Academy Review

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Artist John N. Colt in his Milwaukee studio. Photo by Francis Ford.

FRONT COVER: Field Day *by John N. Colt. Acrylic on canvas, 78 x 61 1/2 inches. 1987.*
BACK COVER: Intertidal Zone *by John N. Colt. Acrylic on canvas, 88 x 68 inches. 1989.*

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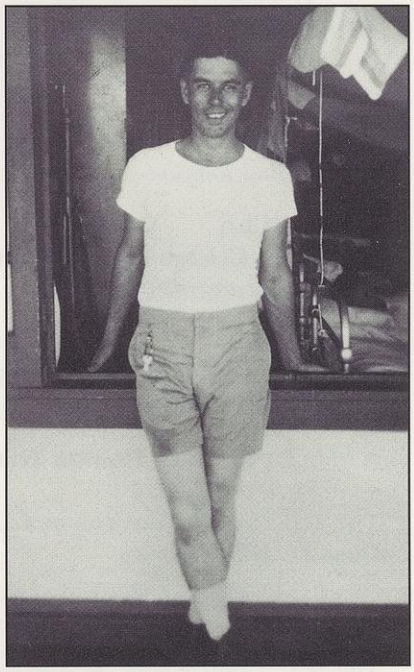
Editor's Notes

Fifty years ago, during the summer of 1944, the war-weary world was gearing up for the desperate battles that would eventually lead in 1945 to the end of fighting in both Europe and the South Pacific. While many Wisconsin citizens are too young to have first-hand knowledge of World War II, those who remember will be living with their own private thoughts during this summer of 1994.

Six of my mother's seven brothers served in various branches of the U.S. military forces during World War II. One of them, my Uncle Jack, died early in the war, a victim of the Bataan Death March. The others eventually came home, some with wounds, all of them in ill health. One left some fingers behind at an air force base in northern England, a point of fascination among my young cousins.

When I look at old pre-war photos of my uncles, I see faces of bright, fun-loving boys and young men. I remember them as they approached middle age—in each instance the sharp wit remained, but, as I recall, it was edged with a bit of cynicism. One uncle, a paratrooper, suffered the effects of shrapnel which he carried in his back. Another had bad lungs, the result of something unpleasantly called jungle rot. Another developed debilitating pain from a strange nerve disorder which I believe the doctors never identified, except to call it some kind of syndrome. It was no less painful or deadly for having no name. None of the uncles is alive today.



Uncle Jack outside his marine barracks in the Philippines. He did not survive the Bataan Death March.

Sometimes I try to imagine how my grandparents must have felt, sending six sons off to war. It seems like an extreme sacrifice for one family to have made, but perhaps it was not unusual.

In this issue of the *Review*, some who remember World War II share their experiences with us. First, however, as a general introduction, Rich Zeitlin and Mark Van Ells provide a history of veterans' organizations from the Civil War to the present. Next is an eloquently told account of one man's participation in the Battle of Normandy, a description of his parachute jump over enemy territory in the dark hours before dawn on June 6, 1944–D-Day. He had just celebrated his twentieth birthday. Turning from Europe to the South Pacific, we learn from meteorologist Reid Bryson how a weather phenomenon we all know as the "jet stream" came to be discovered. Finally, through a gentle bit of fiction, we glimpse small-town life in America during the summer of 1936: peaceful and naive, even as impending evil was smoldering and war clouds were gathering across the sea.

Earlier this year Wisconsin and the world lost an outstanding scientist and remarkable human being when Nobel Laureate Howard Temin died. Dr. Temin was a fellow of the Academy and a generous contributor of his time, energy, and knowledge even after the onset of the cancer that eventually took his life. As a tribute to Dr. Temin, we include memorial comments by some of his colleagues so that those readers who do not know of his research and discoveries will better understand the importance of his work.

Color reproductions of the art of John Colt are featured the Galleria department. This is the second in the series on Wisconsin art which has been made possible through the generosity of the Norman Bassett Foundation.

In the remainder of the issue we explore the controversies surrounding Politically Correct, consider the relationship between art and the environment, take a visual trip to the mud and music of New Orleans during the annual Jazz and Heritage Festival, celebrate Earth through a quick course in phenology, and probe the world of creativity through fiction and poetry.❧

▶ WISCONSIN ACADEMY GALLERY SCHEDULE

June: "Frank Lloyd Wright's Japanism: Japanese Art on Paper From His Collection" (special exhibition)

July: Carl E. Maier, photography

August: Jeanne Ruchti, watercolors

Faith B. Miracle

***Approaching our 125th year** . . . The Wisconsin Academy of Sciences, Arts, and Letters was chartered by the state legislature on March 16, 1870, as an incorporated society serving the people of Wisconsin by encouraging investigation and dissemination of knowledge in the sciences, arts, and humanities.*

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▶ Robin S. Chapman is the author of two books of poetry, *Distance, Rate, Time* (1989) and *Learning to Talk* (1991), both published by Fireweed Press. Her poems have appeared in such journals as *Poetry, The Hudson Review,* and *Southern Review* as well as *The Christian Science Monitor*. She is a 1993–94 recipient of an Individual Artists' Development Award from the Wisconsin Arts Board and a writing residency at Leighton Studios, Banff Center for the Arts. She teaches at the University of Wisconsin–Madison.

▶ John N. Colt was born in Madison and served with the U.S. Submarine Service in the South Pacific during World War II. He has degrees from the University of Wisconsin–Madison and from 1957 to 1990 was professor of art at the University of Wisconsin–Milwaukee. His work has been shown in numerous solo and group exhibitions and is in collections at the Whitney Museum of American Art, New York, and many museums in the Midwest.

▶ Brent Dozier was born in Alabama and has lived in Madison for more than fifteen years. His poems have appeared in *Southern Humanities Review, San Fernando Journal, The Gryphon*, and other magazines and literary journals, including the *Wisconsin Academy Review*.

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▶ Richard L. Jansen (b. 1910) operated a commercial art business in Milwaukee for a time and participated in the Wisconsin Federal Art Project during the late 1930s and early 1940s. His paintings are in collections at the Milwaukee Art Museum and the Charles A. Wustum Museum of Fine Arts in Racine, among others.

▶ Bud Johnson grew up in Kentucky, the setting for his short story "Wings of War." Before becoming a full-time writer and special student in the English department at the University of Wisconsin–Milwaukee, he was an air force sergeant, radio producer, newspaper editor and editor for *Milwaukee* magazine, and a special assistant to the mayor of Milwaukee. His poetry and prose have appeared in numerous journals, and he has won awards from the Wisconsin Regional Writers Association.

▶ Gordon E. King, a combat veteran of World War II, served in both the 101st and 82nd airborne divisions and for thirty-five years worked as a lineman for the Wisconsin Public Service. He and thirty-two "jumping friends" will memorialize their fellowmen "who died young to give us the chance to get old" by repeating their parachute jump over Normandy in observance of the fiftieth anniversary of D-Day.

▶ Angela Peckenpaugh was born in Richmond, Virginia, and has lived in Milwaukee since 1968. She earned degrees from Denison University (Ohio), Ohio University, and the University of Massachusetts. She is an associate professor of English at the University of Wisconsin–Whitewater and is poetry editor of *Affilia*. She has published numerous books of poetry and has contributed to major literary journals, magazines, and anthologies. She has performed poetry on radio and television as well as on tour, and she read at the Library of Congress at the invitation of Gwendolyn Brooks.

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Politics, Community, Education: A Brief History of Veterans Organizations in Wisconsin and America

by Richard H. Zeitlin and Mark D. Van Ells

On May 23 and 24, 1865, over 200,000 Union soldiers marched through the warm and sunny streets of Washington in a Grand Review celebrating their victory in the Civil War. The dusty blue column stretched for twenty-five miles and took two days to pass before the presidential reviewing stand. Never before had so many soldiers been gathered in one place in the United States. Crowds cheered, bands played, and the Union army paraded off the stage of history. But while this force was quickly demobilized, the men composing it faced a long and sometimes difficult readjustment as they returned to civilian life.

Ever since Revolutionary War officers formed the Society of the Cincinnati in 1783, America's ex-soldiers have formed veterans associations. Typically in such groups, veterans seek political advocacy to voice their numerous concerns, strive to continue service to society outside of the military, keep alive the spirit of their wartime camaraderie, and preserve the history of their sacrifices. Over 875,000 Wisconsinites have served in the United States armed services since statehood in 1848, participating in seven major conflicts, a number of minor ones, and a forty-year cold war. Veterans of every war have been active in Wisconsin veterans organizations. What follows is a brief history of American veterans societies since the Civil War, and the story of the Wisconsin men and women who have participated in them.

The Grand Review, Washington, D.C., 1865. Courtesy Library of Congress.

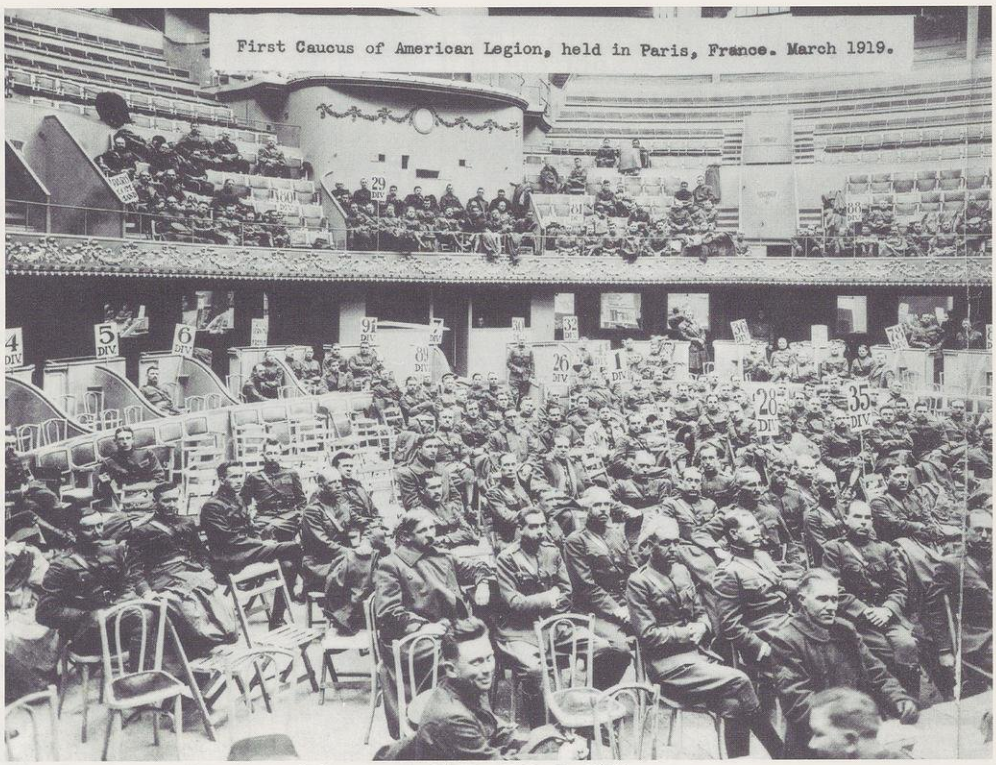
Civil War Veterans

After four years of campaigning, Civil War veterans faced a variety of problems readjusting to the civilian world. Thousands of soldiers returned home sick or wounded, both physically and mentally. Others found it difficult to resume their places in an economy that was industrializing and, at times, greatly changed from the one they had left just a few years earlier. The veterans also felt the distrust of some citizens who feared that "militarism" might threaten American democracy, or that the veterans might spread the "vices and immoralities" of camp to the rest of society.

The debate over the fate of the South was also of concern to Union veterans, since they had been intimately involved with this particular issue, often at the risk of their lives. Most southerners and some northerners, allied in the Democratic party, sought to restore "the Union as it was," with little attention paid to the "late unpleasantness." But many Union veterans favored a vindictive plan of Reconstruction to transform the South—lest the wartime sacrifices be in vain. Republican politicians attracted the votes of Union veterans by rekindling wartime animosities and using them for political gain, a technique known as "waving the Bloody Shirt." Equating the Democrats with southern treason and rebellion, Republicans urged Union veterans to "vote the way you shot." But the Republicans also addressed the veter-

ans' economic concerns by promising to repay the "debt of gratitude" many former soldiers believed the nation owed its saviors.

After the war, numerous veterans political groups emerged, but most of them eventually fell sway to the Republican-dominated Grand Army of the Republic (GAR), founded in Illinois in 1866. Wisconsin's Civil War veterans were very active in the GAR. Indeed, the first post outside of Illinois was formed in Wisconsin, and Grand Army men occupied the Wisconsin State House—with just one exception—between 1865 and 1900. GAR political influence was felt in other northern states, as well as in national politics; Presidents Grant, Hayes, Garfield, Harrison, and McKinley were all GAR members. The Grand Army, it was said, eventually controlled or occupied every political office in the North, from "dog catcher to President."



American Legion first caucus following World War I, Paris, 1919.

Another successful technique to attract members, especially as the debate over Reconstruction waned in the 1870s, was the GAR's promotion of social and charitable activities. It sponsored "camp fires" and dances, encouraged regimental reunions, and created auxiliary organizations for the wives and children of its members. Such activities attracted large numbers of recruits, which in turn increased the GAR's political influence. Due largely to Grand Army initiatives, Congress passed the Dependent Pension Act of 1890 to aid aging Union veterans and their families—the most important federal social benefit enacted before the New Deal. Many states, including Wisconsin, also passed veterans legislation, such as veterans preference for government jobs.

After 1900, the GAR focused on its self-described "educational mission." GAR efforts concentrated on preserving battlefields, erecting monuments, institutionalizing Memorial Day as a national holiday, promoting the use of the Pledge of Allegiance to the flag, and monitoring the content of school history books for adherence to its own brand of orthodoxy on subjects like slavery and dis-union. In 1901, the GAR pressured the Wisconsin State Legislature to establish a museum to preserve the history of the Civil War and "all subsequent wars." (Located in the State Capitol and known for years as the GAR Memorial Hall Museum, this facility evolved into the present-day Wisconsin Veterans Museum, which is located on Madison's Capitol Square and commemorates all Wisconsin veterans.)

Open only to former Union soldiers, the GAR faded away as the veterans of Vicksburg, Gettysburg, and Sherman's March passed on. But during its years of activity, the GAR offered veterans a political voice as well as important social and charitable outlets. The GAR's motto—Fraternity, Charity, Loyalty—summed up the organization's ideology. Later American veterans groups looked upon the GAR as a model for their own organizations, and with good reason. The Grand Army of the Republic is rightly seen as the grandfather of subsequent veterans societies in the United States.

Spanish War Veterans

Following the Spanish-American and Philippine wars (1898–1902), a new generation entered the ranks of the veterans community. The Spanish War veteran shared many of the interests of his Civil War counterpart: the recovery of lost jobs, interest in fraternal activities, memorialization of the dead, and the encouragement of patriotism. But Spanish War veterans also had unique concerns. For example, these men celebrated the unifying effect the wars had on a nation still divided by Civil War sectionalism. Spanish War soldiers also fought overseas—ostensibly to free people from misrule and tyranny—and, as veterans, stressed the "unselfish" nature of their "war for humanity."

Some new readjustment problems also emerged. For example, large numbers of troops contracted tropical diseases which plagued them after discharge. Sent to war with poor planning and largely outmoded equipment, the veterans also championed military preparedness to ensure that future soldiers

Drum corps of Disabled American Veterans Post No. 3, Green Bay, 1930s.

would not face such problems. Despite the veterans' pleas, the nation did not address their concerns.

In response, associations of Spanish War veterans sprang up across the United States. By the end of 1899, a chapter of a group called the Spanish-American War Veterans organized in Milwaukee. In 1904, three associations, including the Spanish-American War Veterans, merged to form the United Spanish War Veterans (USWV), the first major Spanish War veterans association. The USWV's motto—Freedom, Patriotism, and Humanity—and its constitution—which addressed the issues of patriotism, preparedness, and veterans welfare—reflected the concerns of many Spanish War veterans. The USWV allowed only 1898–1902–era veterans to join. "No child can be born into [the USWV]," boasted the organization, "no proclamation of President, edict of King or Czar can command admission . . . the wealth of a Ford or a Rockefeller cannot purchase the position. . . . With the consummation of peace through victory, its roles were forever closed." The most important feature of the USWV, however, was its truly national character; it represented veterans across the nation on a non-partisan basis.

As GAR posts disintegrated due to an aging membership, some Spanish War veterans saw the futility in restrictive membership. Activists in Ohio sought to create an "evergreen" organization. The American Veterans of Foreign Service (AVFS), founded in 1899, was the first group to open membership to veterans of past and future wars. But the AVFS limited membership to those who served overseas since "only those who have felt and seen what we have . . . can speak honestly about our service and our feelings."

Retaining its multi-war membership policy, the AVFS merged with another group in 1914 to form the Veterans of Foreign Wars of the United States (VFW). While the VFW never seriously rivalled the GAR or the USWV before World War I, its organizational innovations made for an enduring association. The VFW's flexible membership policy perpetuated the organization beyond a single generation, and paved the way to the modern veterans community. Today, the VFW has more than 2,100,000 members nationwide, and over 50,000 in Wisconsin.

World War I Veterans

With the rapid demobilization of over 5,000,000 soldiers following World War I, more veterans than ever before in history became part of American society. Organizing began among the troops even before they left Europe. In Paris, a group of army officers led by Theodore Roosevelt, Jr., organized the American Legion in February 1919. That May, the legion drafted a constitution at a caucus in St. Louis and held its first annual convention in Minneapolis that November. Due to the size of the World War veterans population, the legion quickly became the largest veterans society in the nation, despite limiting membership to ex-doughboys. By the late 1930s, the legion claimed over a million members.

Fear of social unrest was one of the main stimuli for the legion's formation and popularity. The Russian Revolution of 1917 and a wave of domestic labor strikes in the war's aftermath caused some veterans to feel that the principles for which they fought were threatened. Having fought a war to make the world "safe for democracy," legionnaires sought, as they saw it, to protect democracy at home and revive the patriotic spirit that existed during the war. The American Legion vowed to "foster and perpetuate a one hundred percent Americanism," and stressed the duties of citizenship to "inculcate a sense of individual obligation to community, state, and nation" and "transmit to posterity the principles of justice, freedom, and democracy." The legion gained notoriety for its strong anti-communist positions during the 1920s and 1930s, and also opposed extreme right-wing groups like the German-American Bund.

But the appeal of the legion went beyond anti-communism, since it also addressed the readjustment concerns of returning soldiers. The legion became the foremost non-partisan political lobbying group for veterans during the inter-war period, on both the state and federal levels. In Wisconsin, the legion was the driving force behind the 1935 legislation authorizing counties to employ a veterans service officer. Trained to

provide former soldiers with expert benefits counselling, a veterans service officer is today the first person a Wisconsin veteran contacts about utilizing his or her benefits. On the national level, Congress passed—after furious legion lobbying—the Servicemen's Readjustment Act of 1944, better known as the GI Bill of Rights. This act, pushed by World War I veterans, provided those of World War II with educational, housing, and unemployment benefits and became the model for much subsequent veterans legislation.

The legion was also a significant social organization for veterans of World War I (known as the Great War). Because of the size of the World War I veterans population, the local legion clubhouse often became the focal point of a community's veterans activities. Legionnaires formed auxiliary organizations for the wives and children of its members and created "fun-making" organizations like the Forty and Eight Club, famed for their miniature automobiles. Because of the legion's prominence, the American Legion Hall sometimes became an important center for community affairs in cities and towns across Wisconsin and America and was used for such purposes as blood drives, wedding receptions, and the traditional Wisconsin fish fry.

During World War II the legion opened membership to veterans of other wars, perpetuating the organization. The American Legion today has a national membership of over 3,000,000, with 70,000 members in Wisconsin.

Scores of other veterans groups emerged across the United States after World War I. The Disabled American Veterans (DAV), founded in 1920, focused on the legislative process, working closely with other veterans groups to promote veterans health care facilities. The DAV became a social organization as well, creating a "ladies auxiliary" and a fun-making Trench Rats Club. Today, the DAV has a national membership of over 1,000,000. Holding its first state convention in 1930 at Madison, the Wisconsin DAV today has 25,000 members.

Other World War I-era associations emphasized fraternal activities. Veterans of the same unit sometimes formed clubs after the war. In Wisconsin, the most prominent unit associations were from the 32nd and 42nd divisions. Ex-servicemen and women often joined more than one group. During the 1920s, a DAV national commander estimated that 90 percent of his organization's members were also legionnaires.

World War II and Korean War Veterans

The 16,000,000 men and women returning from World War II represented the largest influx of veterans in American history. The sheer size of this group not only vitalized and strengthened the veterans community, but also made it a major force in American society. Augmented by over 1,000,000 Korean War veterans just five years later, these men and women followed in the footsteps of their predecessors by seeking the political advocacy and social bonds offered by veterans associations. In doing so, the service men and women of World War II and Korea completed the formation of the twentieth-century veterans community.

WACs on parade in Wausau, June 17, 1944.

Some World War II veterans organized exclusively from the ranks of that conflict. Formed in December 1944, the American Veterans of World War Two (Amvets) recruited over 60,000 members nationwide by mid–1946. Wisconsin's first post was located in Fond du Lac. "World War II was separate and apart," claimed the Amvets. "The men and women who fought in it all felt and hoped it was the war to end all wars. They appreciated the need for a continuation of service together for their country for years to come." Other veterans organized around specific concerns and interests. The American Veterans Committee (AVC), for example, consisted of politically liberal veterans. Advocating civil rights, international peace, and the continuation of New Deal reforms, the AVC

was most active on college campuses filled with student-veterans during the late 1940s. At the University of Wisconsin, a graduate student named John Higham—later a noted historian—was once the local AVC president; in California, an actor named Ronald Reagan briefly was a member. Scores of other groups sprang up after the war, many of which still have chapters in Wisconsin today, including the American Ex-POWs, the U.S. Submarine Veterans of World War II, and the WAC Veterans Association.

While Korean War veterans often joined established organizations, they organized amongst themselves much more slowly. Indeed, their first national association, the Korean War Veterans Association, was not formed until 1985. The Korean War Veterans Memorial Association of Wisconsin worked during the 1980s to create a memorial to the Badger State's veterans of the Chosin Reservoir, Inchon, and Pork Chop Hill. Their efforts paid off. The memorial, located on Highway 51 near Plover, is slated for dedication in June 1994.

Established groups like the VFW, the DAV, and the American Legion also experienced phenomenal growth in the years after World War II and Korea, solidifying their positions as America's largest and most influential veterans organizations. With the absorption of World War II and Korean War veterans, the twentieth-century veterans community emerged, characterized by a few large groups and many smaller ones, with widespread cross-membership, some degree of coordination, and guided by a spirit of cooperation to address the perceived needs of all veterans.

Although the needs and concerns of each generation of veterans has been somewhat different, the philosophy behind their organizations has not been.

Vietnam War Veterans

Those Americans who served in Southeast Asia experienced a particularly difficult readjustment. Returning from an unpopular war, these men and women re-entered American society during a time of traumatic social and political upheaval. Vietnam veterans returned to a public indifferent to their problems; some even experienced overt hostility from fellow citizens. Longing to put the turbulent 1960s and 1970s behind them, Americans ignored the problems faced by the veterans once the war ended.

Many Vietnam veterans expressed dismay at the numbers of Americans left behind. While missing soldiers have always been a tragic consequence of war (nearly 78,000 World War II soldiers are still unaccounted for), guerrilla war and a distrust of government led many veterans to suspect that some of their comrades may still be prisoners in Southeast Asia. Some veterans also suffered medical problems. An illness known by previous generations as "shell shock" or "battle fatigue," Post Traumatic Stress Disorder (PTSD) may have been intensified in Vietnam veterans due to guerrilla warfare and an insufficient amount of time to "depressurize" from combat. Unlike the weeks of demobilization afforded veterans of past wars, Vietnam GIs were sometimes transported from "fire fight to front porch" in less than thirty-six hours. Perhaps the greatest problem facing these veterans was the legacy of the defoliant Agent Orange. By the late 1970s, many former soldiers reported a number of unexplained ailments such as skin rashes and cancerous growths. Investigating veterans soon discovered Agent Orange's main ingredient, dioxin, had been linked to cancer.

Like past generations, Vietnam vets banded together to combat the problems they faced. The first to organize were veterans who opposed the war in which they fought. The Vietnam Veterans Against the War (VVAW), founded in New York in 1967, claimed to have over 20,000 members by 1971. Often located on college campuses (including many in Wisconsin), the VVAW called for an end to American military involvement in Southeast Asia, but also addressed social issues such as the revision of educational and medical benefits. The Washington-based Vietnam Veterans of America (VVA), organized in 1978, was primarily a political voice for Vietnam veterans, but also grew into a community service organization.

Veterans organizing in Wisconsin after Vietnam reflected the state's growing ethnic diversity. The National Association for Black Veterans (whose national headquarters is located in Milwaukee) emerged after the Vietnam War and remains largely composed of its participants. The Asian American Vietnam Veterans, active in Wisconsin's Hmong refugee communities, also formed chapters in the state. Still other Vietnam veterans joined established groups like the VFW, the DAV, and the American Legion. The Wisconsin VFW, for example, today has more than 13,000 veterans of Vietnam service.

Because of their organizing efforts, Vietnam veterans achieved several important victories. For example, veterans organizations led the fight to compensate Agent Orange victims. The VVA and the VVAW first raised the issue in the early 1980s. In 1990, the American Legion commissioned a study of dioxin which, coupled with several legal victories, led Congress to pass the Agent Orange Act of 1991, which required the federal government to extend benefits to veterans affected by specified medical conditions. Like their GAR predecessors, Vietnam veterans also raised public consciousness of their service through their own "educational mission."

In 1982, The Vietnam Veterans Memorial, known simply as The Wall, was dedicated in Washington and is today one of the most visited monuments in the nation's capitol. Eleven years later, a statue depicting the role of women in Vietnam was added to the grounds near The Wall, due largely to the efforts of Diane Carlson Evans, a Vietnam War nurse from Hudson, Wisconsin. In 1986, The Wisconsin Vietnam Veterans Memorial

Veterans ceremony at Camp Randall Stadium in Madison before a football game in 1992. Courtesy Wisconsin Department of Veterans Affairs. Photo by Steve Olson.

Project broke ground for a state Vietnam monument near Neillsville. The Highground, as the site became known, is now a memorial to all of Wisconsin's twentieth-century veterans.

Despite these important victories, the battle for readjustment goes on. The Wisconsin Department of Veterans Affairs estimates that in Wisconsin today there are approximately 10,000 veterans who are either homeless or "at risk" of becoming so. Most of them are veterans of the war in Southeast Asia.

Persian Gulf War Veterans

In sharp contrast to the experience of Vietnam veterans, those of the Persian Gulf War benefitted from strong and vociferous public support at home. Unlike the Vietnam War, even anti-war groups expressed their support. "We are not . . . pro-war," said one Vietnam veteran and spokesman for the Military Families Support Network (an organization of soldiers' relatives opposed to the war), "but we don't want to see the troops mistreated. I just hope no matter what, you support [them] when they come back." Upon their return, gulf war veterans were treated to spectacular displays of affection. On July 6, 1991, Wisconsin's Salute to the Troops parade attracted thousands to Madison's Capitol Square.

But while the gulf war was of short duration, its casualties few, and its veterans' homecoming joyous, these men and women still faced readjustment problems familiar to veterans of past wars. Many returned to find their jobs lost or their marriages failing. Just six months after the war, Wisconsin National Guard support centers reported 27,038 phone calls and 3,921 walk-in visits concerning readjustment difficulties statewide, with 12,662 phone calls and 721 walk-ins in Madison alone.

Not long after the war, some Desert Storm veterans began to suffer from an unexplained illness characterized by numerous somatic complaints, such as fatigue, aching joints, and hair loss. Reminiscent of the Agent Orange crisis among Vietnam veterans, "Gulf War Syndrome," as the illness has become known, is a major concern of veterans organizations today.

By 1994, no association of gulf war veterans had emerged in Wisconsin. But many gulf war vets joined established organizations like the VFW, the DAV, and the American Legion. Veterans of certain units, such as the U.S. Army Reserve's 826th Ordnance Company of Madison, have already held reunions. Maintaining a tradition seen in Wisconsin since the Civil War, veterans of the Persian Gulf War have sought the benefits of membership in veterans organizations.

Conclusion

"War is hell," General William T. Sherman once said, a fact to which most veterans would attest. But throughout American history, many of those who went to war found their return to civilian life nearly as difficult. One method former soldiers have used to cope with this readjustment has been to band together in veterans organizations. Since the Civil War, these associations have provided Wisconsin's veterans—and indeed all America's veterans—with a political voice, outlets for community service and social activities, and a vehicle through which they can preserve the history of their sacrifices. Although the needs and concerns of each generation of veterans has been somewhat different, the philosophy behind their organizations has not been.

At the end of the nineteenth century, the Grand Army of the Republic promoted "Fraternity, Charity, Loyalty." Veterans at the end of the twentieth century might refine that slogan, perhaps to read "Politics, Community, Education."❧

Photos, unless otherwise identified, are from the archives of the Wisconsin Veterans Museum in Madison.

A Small Place in History: Remembering D-Day Fifty Years Later

by Gordon E. King

On a sweltering afternoon in Milwaukee in August 1942, six young Wisconsinites met at the Juneau Hotel. Our meeting was by choice rather than by chance. Each of us had volunteered for service in the parachute troops, a new and untested branch of the U.S. military forces. Until this meeting, none knew the intent of the others. Now, bundled for shipment to a training base, the six of us had subscribed to a common fate. Before we got off the train at Toccoa, Georgia, we had become well acquainted with each other—our drawing-room suite was originally intended for only two or three people.

Toccoa was a sleepy little town in a verdant setting on the south end of the Smoky Mountains, but for a short time in the 1940s it hummed like a hive of pestered bumblebees. For Harold Lambrecht and myself, the regimental-size camp, which was carved out of the timber below the brow of Mount Currahee, could have been most any chunk of Lincoln County near Merrill, albeit a bit more rugged and piney. For George Siegwarth of Wausau and Ed Larsen of Rhinelander, it approximated Wisconsin wilderness. For Felix Verga and Joe Slosarczyk of Milwaukee, it represented a kind of hinterland. Our reason for being there, of course, was to learn how to be paratroopers.

During the last couple of months of basic training, the daily feature was an early-morning, 6–mile run to the top of Mount Currahee and back. The runs, the hours of obstacle courses, log throwing, squat jumps, and pushups, pushups, pushups all combined to harden the men into topnotch physical condition. The results of the intensive training were scarcely believable: Men who had stopped to rest on the first 14–mile hike in September now completed the 120–mile test carrying four or five times the load.

Our first live parachute jump was memorable. There is a solid sense of comfort in a tight-fitting parachute harness, with reserve chute pulled snug to the belly, gear inspected and ready. Add the helmet with chin strap in place. Anyone who has jumped for work or pleasure knows how it feels. But that first jump was a test for the nerves.

Plane loaded, the pilot moved his throttles forward, and we rolled out for takeoff. The great beast shuddered and shook as it swung around, testing for maximum power and free control movement. In a smooth crescendo of sound we lifted off and over the Chattahoochie River.

"STAND UP AND HOOK UP!"

Until familiarity breeds a calm heartbeat, those words can stir the adrenalin.

"CHECK YOUR EQUIPMENT!"

"STAND IN THE DOOR!"

Our eyes and attentions were riveted on our jumpmaster, kneeling by the door with his gaze fixed groundward. With a diminishing "Whrrrrr" of engines throttled back, the ship slowed perceptibly, the jumpmaster jerked his head in, barked "GO!" and gave Number One jumper a sharp swat on the behind for emphasis. "Swish, swish, swish, swish, swish," and the first five were gone. Then it was our turn.

Number One was in the door. Behind him, I could not keep from looking down, despite the oft-repeated order to "look straight out." I was second in line. Strangely, the butterflies had stopped. "GO!" Reflex took over. Out swung the right foot, "One thousand, two thousand, three thous . . . "Whoomp!" Aaah! Infinite relief and relaxation surged through me as I settled in the harness of the beautiful, fully-deployed canopy. I pulled down a little on the front risers, let up s-l-o-w . . . oscillation stopped. What a beautiful ride!

❦

The end of August 1943 found our Wisconsin group cut to four. Verga had gone to the 82nd Airborne, already in combat. Ed Larsen had suffered a leg injury and was told he could jump no more. Our regiment was newly attached to the fledgling 101st Airborne Division.

Our natural lust for life rejected the possibility of death, but it wormed its way into the conscious thought of every soldier with the relentless approach of his own appointed time

August also found us on our way to New York: eventual destination, somewhere in Europe.

Several thousand 101st-ers settled into the bowels of *HMS Samaria*, a well-used boat resurrected for service to His Majesty George VI. Tugs huffing and chuffing on the hawsers, *Samaria* swung out from her berth. We were on our way.

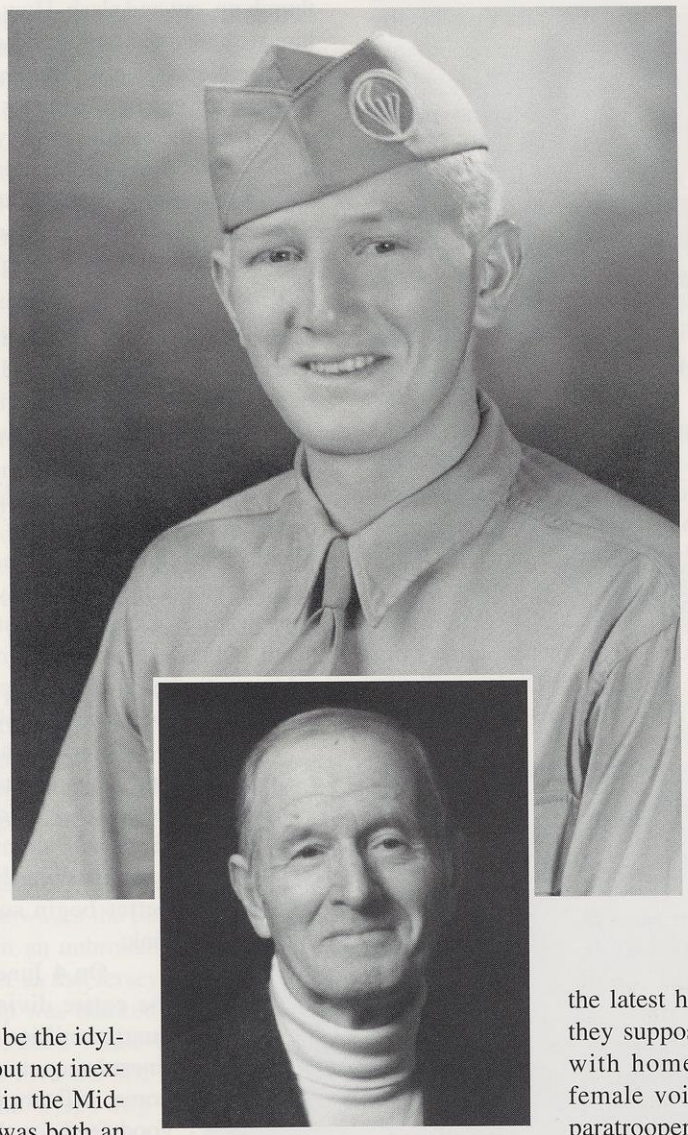
The threat of enemy submarines was considerable as the vessel plowed through North Atlantic swells. On one or two occasions the muffled growls of depth charges were audible, but except for a near collision with *HMS Capetown Castle* and some minor difficulty ingesting the British shipboard menu, our crossing was quiet. (Had I known my brother Alden was on the *Castle*, I could have shouted greetings as she loomed out of the fog, had I been able to shout! Hundreds of us on deck amidship could only gasp in alarm as the gray wall of vapor turned to black wall of ship in an instant. Fortunately, within moments it was apparent that courses had been corrected.)

We landed at Liverpool and vacated the docks in haste. It was best to disperse quickly into the English countryside.

❦

For us, countryside turned out to be the idyllic village of Aldbourne, a short but not inexpensive taxi ride from Swindon, in the Midlands. "Somewhere in England" was both an unnecessary attempt at secrecy and an insult to Wiltshire, but the censor permitted no more precise description. Other battalions were billeted and barracked in villages equally beautiful, equally quaint. The places and the people soon endeared themselves to the troops. Absence of army-camp atmosphere enabled us to enjoy a nine-month plethora of pleasantries with the solid folk of rural England.

However, with the arrival of the first sunny day, the 8th Air Force reminded us that they were on the job. Layer on layer of B–17s striped the morning sky with contrails. They were gathering for flight deep into the enemy heartland in bold defiance of swarms of fighters and thousands of anti-aircraft cannon. They would return diminished in number, bearing in their shot-up fuselages testimony to the B–17's other name, the Flying Fortress.



Gordon E. King, then and now.

As fall turned slowly into winter, "chill" and "damp" were overworked by the meteorologists. The Royal Air Force seemed to work with enthusiasm undampened. Seldom did an evening pass that was not filled with the throbbing hum of several million horsepower. Often we heard the Mosquito bombers shrill overhead, twin-engine plywood speedsters made in Canada and now assigned to mark out the heavy bombers' targets with magnesium flares, indicating the next section of Hamburg or Berlin to be destroyed. It was unchivalrous of the British, but the Luftwaffe had not restricted its attacks to military objectives. The shoes had changed feet. We hoped the air attacks were as successful as London claimed.

But the airmen could not silence Radio Berlin, for which we were somewhat thankful. Herr Goebbels's communicators beamed much good music to England, and the signal was strong. Often their programming featured the latest hit tunes from home. Then, when they supposed we were sufficiently mellow with homesickness, a soft and friendly female voice would coo, "Come on over, paratroopers. We are waiting to give you a warm welcome." The voice would sometimes follow with a list of Allied units and their locations, which did not add to our comfort. Nevertheless, we continued to tune in the German broadcasts, mostly for their good music. Selections on a typical program would range from "Lili Marlene" to stirring Wagnerian drama, and seldom is heard such stirring male choral work as we heard in 1944, *"Deutschland, Deutschland Über Alles."*

In the years to come, we would look back on those days not without longing . . . the dances, often sponsored and always attended by British women's units; the passes to London, Liverpool, Bath, and certain distant or secret locales not beset by hordes of GIs clad in olive drab; the "ping" of a grenade

exploding in a Wiltshire trout pond, promising a meal of fresh fish; the heartening letters from home.

❦

England in winter is murky-dark and highly conducive to training in night combat. Many a fence was flattened by fast-moving glidermen and paratroopers working the bugs out of warfare by darkness. For the unwary, the rare barbed-wire fence could turn the tables. Finally, with spring on the way, England was getting sunny again. The arrival of warmer weather was moving us closer and closer to the inevitable.

On a warm evening in early May 1944 we suited up for full dress rehearsal. Only the absence of maps of France convinced us that this was another dry run, security being unusually tight in the marshalling areas. Our life preservers lent complete reality—we assumed that part of the flight would be over water. Soon the enemy would no longer be our own fellow soldiers in practice combat, and he no longer would be shooting blanks.

Combat life is a sure stimulus to nostalgia, we would learn. We would know spasmodic fear, its pitch rising with each attack, ebbing when the objective was overrun or when reinforcement arrived and you could plod to the rear in weary relief. Nor would it disappear until the official word of victory was confirmed by the individual soldier's senses, permitting him to relax, putting his nervous system in a lower, slower key.

In March 1944 General Maxwell Taylor had come from the 82nd Airborne to take charge of the 101st Division. Training had increased, until we stood poised for attack. The idyllic days were behind us. Time was devoted to honing our macabre art: How to garrote a sentry with a piano wire, how to break his back with a blow from an entrenching tool, where to strike so he would die soundlessly. How to use teeth, thumbs, knees on vital spots . . . be sure to hold the trench knife close in front of you, thumb up, cut and slash. How to break the enemy's arm and kill him with his own knife. These were the lessons of warfare. We were reminded that we were not there to die for our country, but to make the enemy die for his.

Near the middle of May the tension began to build inexorably. Our units dispersed to their scattered airfields and embarkation ports. By truck and by train we pulled in to our tent cities, previously occupied for Exercise Eagle. The next takeoff would test the Screaming Eagle.

❦

Like parts of a gigantic jigsaw puzzle, the Division was scattered across southern England. When time, tide, and moon were right, the pieces would be refitted—on the European continent. The operation was to be known as D-Day. The date was set for 5 June 1944.

The mission was fraught with intangibles, sharpening the nerve-tingling expectation of events at once ecstatic and agonizing. Participants embraced the moment in loneliness and wonder, incessantly nagged by the personal question: What will happen to me? Our natural lust for life rejected the possibility of death, but it wormed its way into the conscious thought of every soldier with the relentless approach of his own appointed time. The wrapping was torn off. We were to kill or be killed.

General Dwight D. Eisenhower talks with paratroopers in England just before they leave for the European continent on D-Day, June 1944. Courtesy Don Pratt Museum, 101st Airborne Division, Fort Campbell.

Perhaps not since the act of Cain did man prepare so industriously or plan so thoroughly to destroy his fellow human. England was half airfield, half ammunition dump, ringed by a naval base. Facetiously, we noted that the operation had better begin soon—the island was starting to sink.

On 4 June 1944—my twentieth birthday—the entire division, and most likely the other quarter-million first-wave troops, enjoyed the finest banquet any of us had tasted since leaving home, officers possibly excepted. It was a last good feed for the condemned. Then late in the day came word of a twenty-four-hour postponement. Winds over the English Channel and the Cotentin Peninsula were gale force.

The delay afforded us more time for study, reflection, or recollection. Some of us took another look at the sand tables, others pulled out maps to impress in memory every feature of the terrain near their particular objectives. Between periods of activity, the moments of silence were intense. What was Red thinking? Awfully quiet, for him. Joe had his pigeons packed and ready—they would be released to wing back to their home cote in England, confirming our landing. It

was an ancient means designed to work if modern methods failed. We wondered how the pigeons would like the plane ride.

Yet again I tried to visualize each crossroad, village, causeway, pillbox, trench of our destination. The Air Force had provided low-level pictures right up to the previous day, one showing a German soldier walking his dog. It was possible that we knew more about the armament and dispersal of the enemy than the enemy himself. We committed to memory one important phrase in his native tongue: *"Kommen sie hier mit der hände hoch, mach shenell!"*

There was one small hitch—what if he knew exactly when we were coming? What if secrecy had failed (with the postponement, chances of this increased), and he was expecting us? We prayed that he knew not the day, nor the hour. We did not yet know that he feared us greatly. In Sicily and Italy, he had given the 82nd Airborne the heinous accolade, "butchers in baggy pants."

❦

On 5 June 1944, the evening calm throughout the south of England was shattered by a pulsating roar, while thousands of overburdened troopers clad in slippery, gas-proofed jumpsuits were pushed or pulled into the caverns of the invasion-striped C–47s. Our major had repeatedly inspected his "stick," making sure we had the four-by-five-inch American flags securely sewn on our right shoulders. The Eagle was on the left. We boarded the plane with time to spare.

Then we were climbing up, pulled into position off the wing of the lead ship, the formation in a great soaring left turn, red and green dots of wingtip lights twinkling in the gathering gloom. Twilight metamorphosed imperceptibly to moonglow as the vast air fleet sped out to sea, away from the friendly shore.

We were headed toward France. D-Day was at hand.

Five hundred feet above the waves the planes thundered, by nines in three V's of three, in an unbroken train coursing south from England, veering east at the Jersey and Guernsey islands, to the continent. Our ship was blacked out as the formation, eager to spawn from its dark whale-like bodies the tense but ready companies of the Five-Oh-Six, rose sharply to 1,500 feet and plunged into the wispy fog shrouding the Cotentin Peninsula.

"STAND UP AND HOOK UP!"

"Stand up! Stand up for Jesus, ye soldiers of the Cross!" The old words came back to me, positive and reassuring. A thousand feet below, German anti-aircraft gunners were scrambling into their clothes, snapping belt buckles stamped *"Gott mit uns."* One of the ironies of war.

I checked Major Horton's gear, gave him the OK slap. Number Three jolted my shoulder as I hung on, left hand gripping the snap fastener, right hand on the door edge. Did the Pathfinders get in? How much do the Germans know? I couldn't recognize a thing. The major was looking out and ahead, trying to spot a check point.

The Screaming Eagle

The "Screaming Eagle" patch worn by members of the 101st Airborne Division.

The emblem of the 101st Airborne Division is grounded in Wisconsin history. It stems from the 101st Infantry Division, Organized Reserves, for which this insignia was approved in 1923 by the Secretary of War, in the following order:

> "Shield: 2 1/2 inches in height, sable, the head of a bald eagle erased proper. The design is based on one of the Civil War traditions of the State of Wisconsin, this State being the territory of this Division. The black shield recalls the old Iron Brigade, one of whose regiments possessed Old Abe, the famous war eagle."

Unknowingly, on D-Day we would carry on a Wisconsin tradition. Our sons and grandsons continue to do so. From the schoolhouse door in Little Rock, through Vietnam and the gulf war, and including a tragic crash at Gander, Newfoundland, many a shoulder carried the head of the Eagle, in the sometimes difficult and always dangerous profession of the airborne soldier.

Gordon E. King

Now the cloud cover had coagulated above us—only here and there did a shaft of moonlight filter through. God, I hope the pilots know where they are. I hope they know where they're going!

A lazy burst of fireworks erupted below us. After a few streaked past, I realized they were bullets, tracers for the German anti-aircraft gunners—and only one-tenth of the rounds were visible!

Throttles open, we rocketed eastward, descending to the planned exit altitude of about 700 feet: ample for parachute deployment, low enough to minimize the defenders' crack at us. The warning light had been on since we crossed the coast, daring us with its malevolent red eye.

Another burst of tracers blossomed from the dark and threatening ground. Instinctively we jerked back from the door, as if the thin aluminum skin of our unarmored craft could somehow protect us. Our luck held—the big bird was untouched. What a job for the pilots! Their orders were explicit: Maintain formation and course regardless of circumstances. Those severely hit would unload as fast as possible, but they were not to jeopardize others by unplanned evasive action.

"GREEN LIGHT! GREEN LIGHT!"

Major Horton was gone. I swung my leg hard out into the prop blast . . . "Thwup!" A good pull down on both front risers to stop oscillation . . . "crunnnnch!" I was on the ground in France.

Now the night practice paid off, as items were unpeeled one by one. With thumping heart I rolled clear of the harness, slid my folding-stock carbine from its jump bag, eased a round into the chamber, pushed the safety on. The radio came out of the bag, all in calibration as I turned the squelch ON, volume LOW. Quickly I scraped together every precious item, stuffing already bulging pockets with another grenade, another handful of .30 caliber.

In the uncertain visibility of cloud-filtered moonlight, I groped up next to the nearest hedgerow. The mottled-green parachute was all but invisible where it lay, close by the line of brush and trees.

CLICK-CLICK!

Aaah, wonderful sound! It told me there was a fellow trooper nearby. Some genius had decided shortly before D-Day to equip each of us with a little cricket, the snapping gadget made famous by a certain popcorn product!

I cricked back. Over the roar of aircraft, only sporadic distant gunfire reminded us that this was not just another field exercise. Quietly the paratroopers came down: alone, in pairs, most of a squad, armed and equipped to destroy the enemy and demolish his weapons of destruction, which were pointed toward the sea. Though the troopers were more dispersed than planned, they would not fail. *"Fallschirmjaeger! Amerikaner Fallschirmjaeger!"* German soldiers piled helter-skelter out of their billets near the drop zones to die in the night before the guns of the silent foe, the American paratroopers

On June 6, as grey dawn pressed inland, the assault landing boats were hard behind, coming in from the sea to their destination, Utah Beach. Marauders (the B–26 medium bombers) swung south low over the beach, their course now parallel to ours, the muffled roar of exploding bombs rolling inland and engulfing us as we hurried past bomb-cratered crossroads, intent on our objective five or six uncertain kilometers away.

CLICK-CLICK!

Aaah, wonderful sound! It told me there was a fellow trooper nearby. Some genius had decided shortly before D-Day to equip each of us with a little cricket, the snapping gadget made famous by a certain popcorn product! I cricked back.

We had no way of knowing that our objective was secure, taken by headquarters personnel and division reserve riflemen. General Maxwell Taylor had organized the grab-bag force which seized the causeway strong points with very little loss of American lives. Our country, our allies, the world we knew and loved, and, most of all, the 4th Division coming in from the sea depended on us. If those descending behind the wall did not seal off the beachhead, only lifeless bodies in the sand would give silent testimony to the attempt.

Paratroopers who didn't know the territory joined up with those who did—a companion battalion, another regiment, a generous mixture of the 82nd and 101st airborne divisions. Confusing though our errant drop pattern was to us, it was more so to the enemy. Hundreds of small engagements, sometimes easier than expected, often more violent than could be imagined, marked the beginning of the end for the Germans in the Cotentin.

As it turned out, Joe Slosarczyk's pigeons didn't mind the plane ride, but they could not survive the swim when Joe hit the Douve River marshes. One week later, Joe himself joined the growing ranks of those killed in action. Major Horton died in Holland before the last leaves fell that autumn.

But by nightfall on 6 June 1944, the beachhead was swarming with Allied troops moving steadily inland. Mounds of materiel to support them were scattered along the causeways and heaped up on the beach. The seaborne forces had poured ashore with surprisingly few casualties from enemy fire.

The first and most critical part of our job was done.❧

In order to connect with other veterans of the 101st or for membership information, write to Old Abe Chapter, 6523 W. Morgan Ave., Milwaukee, WI 53220.

The Discovery of the Jet Stream

Reid A. Bryson

As the fall of 1944 wore on and the typhoon season wound down, the number of military aircraft on the island of Saipan was increasing. We were in the midst of World War II, and we were preparing for some major air raids against Japan.

These were, as everybody had been told for years, to be high altitude, precision, daylight bombing missions. "High altitude" meant 30,000 to 35,000 feet in those days, because that was about as high as the pressurized B–29s could fly. And it was high enough that it was at the extreme upper range of the heavy anti-aircraft guns that the Japanese had in place in their major cities. Of course, it made sense for them to put in heavy anti-aircraft guns, because we'd been telling them for a long time that we were going to come over at high altitudes and do precision, daylight bombing.

As this buildup of air power was going on, the weather was changing from fall to winter. During this weather transition, the area of cold air over the pole and over the big continental northern interiors increases and so the "fronts," the advance edges of that cold air, extend farther and farther south. They were starting to reach down into the Japan Sea and northern Japan by the time we had very many aircraft in place.

One evening in the late fall of 1944, those of us in the 20th Air Force Weather Central were given the job of making a forecast for a large raid over Japan to occur the following day at 30,000 to 35,000 feet. The question we were given was: "What will the winds be at the flight level?"

Weather central, Guam.

This wasn't an easy forecast to make, because we had very little data. And the forecast was for something like twenty hours in the future. Under the circumstances, the assignment to pinpoint the strength of the winds over Tokyo, 1,500 miles away, was quite a challenge.

The fellow in charge of making the wind forecast was Bill Plumley, the same person I'd been on duty with in Honolulu for my first forecasting experience with a typhoon. I was not very busy, so I assisted him.

Bill and I looked at the weather map with dismay. We had one piece of data from Khabarovsk which our "allies" the Soviets provided (they had promised more). We had a sounding of temperature and humidity at each elevation above Khabarovsk and the same kind of information for Vladivostok. We had some surface weather data.

We had, as I recall, the observations of temperature and wind direction that had been observed over Tokyo that afternoon by a reconnaissance aircraft. We had some aircraft reports from the region between Japan and the Marianas as well as a few ship and submarine observations off the Japan coast. We had our own data from Saipan and Guam.

From thousands of miles away in the interior of China and Alaska and off to the east and south, we had other bits and pieces of data, but they didn't have much bearing on the question of what the wind would be over Tokyo on the following day.

We did have some science, however. We knew that the data from Khabarovsk and Vladivostok showed that a cold front was moving south. Cold air was starting to penetrate into the Japanese islands. We knew what the temperatures were in the air south of Japan. And we knew, from what we had learned in our training, that there is a relationship between the horizontal temperature differences in the atmosphere and the vertical wind differences. It's a condition known as the thermal-wind relationship. Simply stated, it says that if you stand with your back to the wind, and the air is colder to the left and warmer to the right, the wind will get stronger from your back as you go up in the atmosphere.

An application of this principle answers the question of why there are mostly west winds in the atmosphere in middle latitudes. The answer is because it is colder in the polar regions and warmer in the tropics. If you stand facing east in the middle latitudes, the Arctic is on your left and the tropics are on your right, so its colder to the left and warmer to the right. And the winds will get stronger and stronger as you go up. The greater the horizontal temperature contrast, the more rapidly the wind increases as you go up. The temperature contrast is great in winter and small in summer, therefore the upper winds are strongest in winter.

So we used that principle. Looking at the weather map we could see that cold air was moving down out of Siberia and warm, muggy tropical air was over the southern part of Japan and all the way from there down to where we were. We reasoned that by the next day there would be a strong contrast of temperature from southern Japan to northern Japan, but shifted a little more to the south.

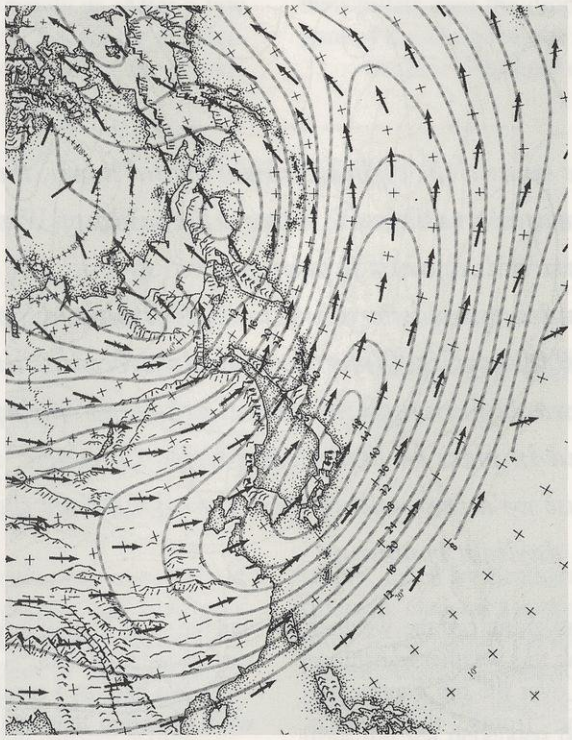


Chart showing the average winds at 48 meters per second (a little over 100 miles per hour) at approximately 30,000 feet over the area near Japan in November as measured in the years following World War II. From Atlas of 300 MB Wind Characteristics for the Northern Hemisphere *by James F. Lahey, Reid A. Bryson, Harold A. Corzine, and Charles W. Hutchins. Madison: University of Wisconsin Press, 1960. Reprinted with permission.*

Applying the thermal-wind relationship, we could then calculate the change of wind from the surface up to 30,000 feet. We did this very carefully, considering the surface temperatures and surface winds and knowing something about the upper air temperatures. We drew a section, a vertical slice, through the atmosphere from the Siberian maritime provinces to the north to the Marianas on the south, reconstructed, the best we could, the distribution of temperature, and from that calculated the distribution of west winds.

We came out with a wind speed of 168 knots from the west at 35,000 feet over Tokyo. We recalculated. It came out 168 knots from the west.

Now that's a very strong wind, because most of the aircraft we dealt with flew at about 180 to 250 knots in those days. A really fast plane would go more than that, but most of the transport aircraft and bombers weren't much faster than the speed we calculated the winds to be.

Having applied our science and arrived at a value, we wrote it down on the forecast form, sent it over to the general, and went on about our other business. It wasn't long before the general was confronting us in the weather station, angrily challenging our forecast. We were standing at attention saying, "Yes, Sir," as the general was telling us how *stupid* we were to come up with a forecast of 168 knots because nobody had ever observed 168 knots, and didn't we really mean 68 knots?

We said, "No Sir. That's what we calculated."

And the general said, "Well, calculate again!"

And we said, "Yes, Sir!" (After all, what do you say to a general when you're only a captain?)

So Bill and I calculated again and we came up with 168 knots.

Again the general was angry. He said, "We're not going to listen to you. We're going to go up there and carry out our mission. We'll measure the winds and then *we'll tell you* what they are instead of asking you what they'll be."

And we said, of course, "Yes, Sir."

❦

Well, the planes took off and went to Japan. And the mission was a failure, because of the winds. The general had the good grace to come back and apologize. "We measured the winds," he said."They were 170 knots."

And it was disastrous. The planes couldn't fly up-wind because they were practically standing still, and that made them sitting ducks for the Japanese anti-aircraft fire. They couldn't fly cross-wind because the crab angle of the aircraft nosing into the wind to go across the target was so great that the bomb sights wouldn't work. They simply weren't designed for a cross-wind that strong. And the planes couldn't go down-wind because they were then going so fast that the degree of accuracy would be poor because of the limitations of the equipment they had available at the time.

Needless to say, there were frantic messages back to Washington: "What do we do now?" and "How about a bomb sight that will work in this wind?" Military meteorologists in Europe hadn't observed winds quite that strong, inasmuch as winds normally aren't as strong there as in Asia. Many pilots hadn't flown quite as high either, because the B–17s and B–24s used mainly by the Air Force weren't pressurized. The B–29s were—and they were more powerful, bigger, heavier aircraft.

In Washington the Air Force called the leading meteorologist of the country, who happened to be the man under whom I later did my doctoral work at the University of Chicago, Professor Carl-Gustaf Rossby. They asked him, "What about those

strong winds?" Rossby said, "Aha. We will call it the *jet stream*," harking back to his previous work on jets in water.

And so, there was the jet stream. Without being aware of it, my forecasting partner, Bill, and I had predicted the "discovery" of the jet stream!

❦

The jet stream and its forecasting became a critical part of the air campaign over Japan, because 168 knots wasn't the strongest that was ever observed during that winter. There were occasions when the aircraft would go to Japan at some lower elevation and aproach from the east, climbing to bombing altitude as they went, and find that as they climbed, their forward speed relative to the ground would get slower, slower, slower.

B–29s above the clouds. U.S. Air Force photo.

One pilot after coming back from a mission told me that it was strange to see the Japanese coast approaching on the radar, then to see it stand still, and then start to back off as they climbed. They were actually moving backward! They weren't ever going to get there. So they turned around and came back to the base.

Eventually we got bomb sights that worked. And later in the spring, when General Curtis LeMay took over as commander of the 20th Air Force, he discovered that while the Japanese had a lot of heavy anti-aircraft guns in their cities, they didn't have any light guns because we had told them we were going to fly over at high altitude, and they believed us. Therefore, they didn't need light anti-aircraft guns.

I wasn't present when General LeMay found out about the absence of light anti-aircraft guns, but Colonel Seaver, who was LeMay's staff weather officer and the liaison between his office and Weather Central, was. He told us that Lemay asked the photo recon people to show him the latest coverage of Tokyo. He then asked where the heavy gun emplacements were and was shown the circled locations. He then asked where the light anti-aircraft guns were.

"There aren't any, General."

LeMay is said to have shifted his perpetual cigar and asked, quite icily:

"How long have you known that?"

"For several months, Sir."

"And you didn't mention it?"

"No, Sir, we didn't think it important for high level missions."

A brief pause, than an order. "Cancel tomorrow's high level mission. Remove the bombs. Remove all defensive machine guns except the twin 20 mm cannon in the tail. Reload with incendiaries. We will fly over at 4,000 feet, at night."

Of course, I don't know whether or not those were his *exact* words, but the results are now part of history. American aircraft losses dropped dramatically. There no longer was strain on the loaded aircraft from having to climb to high altitudes. The Japanese heavy anti-aircraft guns were useless against aircraft at 4,000 feet, and they had no light guns. And the Americans' 20 mm tail cannon were effective against the Japanese night fighters armed with machine guns. The end of the war was in sight.❧

SOME ADDED THOUGHTS ABOUT COMMUNICATING SCIENCE

I have described an instance where the application of simple scientific principles made it possible to solve a problem—the question of high winds over a specific area. But the problem that we did not solve was the question of credibility with the people for whom we were forecasting. My colleague Bill and I had put together a valid forecast under difficult circumstances, based on a sound scientific analysis, and the commanding officer didn't believe it.

It seems as though half the job of a being a scientist is to do the science, and the other half of the job is to let the non-scientist know what the results mean and how reliable or unreliable they are. The application of the science doesn't stop with doing the scientific work if it's going to serve its purpose—and I firmly believe science has a purpose. The translation of science into a credible message that can be understood and believed has to be done very carefully.

I have found the same problem in recent years working with a different challenge, the forecasting of agricultural climate. The problem is one of credibility and converting the results of the research into a format which the user can actually apply to problems—what I like to call "scientific translation," not translation from one language to another, in the sense of Russian to English, but from the specialized jargon of the scientist to the understandable language of the user. After all, if the scientist can't speak in plain English, he or she just may not understand science well enough to be talking about it in the first place.

Reid A. Bryson

Wings of War

by Bud Johnson

That summer between the wars, when the seventeen-year locusts take over Iroquois Park, you can hear their love song a mile away, and when you walk under the trees the discarded skins of nymphs crunch like peanut shells. On the wings of the locusts is the letter W *which people say stands for war, although the only war anyone knows is across the ocean in Spain or in Manchuria, which is even more remote.*

Their shrill call fills the air this muggy August day in 1936 as Willie Jennings comes out of the house after breakfast. Last night when he asked about the locusts, his father was reading his paper and did not want to be bothered. Finally, he said the last time the locusts appeared was right after the boys came home from France, and people thought they saw a *p* on the wings. "Fact is, they're not locusts at all," he shrugged. "They're cicadas." Then he shook his paper and went back to his reading.

The boy breathes in the honeyed scent of the vines along the back yard fence, and watches a flutter of red as a pair of cardinals alight in a wild cherry tree. He wonders how he will fill the blank day before him. His summer vacation is coming to an end, and he is running out of new things to do. Listening to the locusts, he hopes the kids will want to play soldiers, shooting rubber bands at one another, and this time he can be a doughboy instead of a Hun.

Willie's father is a busy man, burdened with the business of the lumber yard and his duties with clubs and organizations.

As his father backs the Studebaker out of the garage under the house, Willie shyly waves goodbye. His father stops the car on the driveway and in his business-like tone asks, "Would you like to come along?"

"Where to? The lumber yard?"

"I have to stop at the office for a minute. Then I'm driving out to E-town to look at a house job. We could get a bite someplace on the road."

The boy is surprised. It's not like his father to issue this kind of invitation out of the blue. Willie's father is a busy man, burdened with the business of the lumber yard and his duties with clubs and organizations. He seldom does anything just for the fun of it. Even after an evening of bowling in the Lumber Men's League, he spends hours compiling team and individual averages as the league secretary.

Willie rarely sees his father in a casual mode, and this morning he is wearing a seersucker suit and a Panama hat, though his balding head must certainly be wet with perspiration from the morning heat well on the way to a hundred degrees.

"O.K.," he says. "I'll run in and tell Ma."

❦

As they drive along Dixie Highway, blasts of hot air stream through the open windows of the sedan, flapping the soft brim of the Panama and threatening to blow it off Mr. Jennings's head. They drive mostly in silence until they see two men in khaki clothes and wide campaign hats on the other side of the road, trying to hitch a ride to the city.

Willie shouts, "Soldiers!"

"Uh huh. From Fort Knox," his father says. "Mostly guys who can't get jobs. Just bums, a lot of them."

The boy turns around to watch the hitchhikers fading away through the rear window.

"Where are their guns?"

"Back at camp, I guess. They don't really need guns any more."

"Why not?"

"Because we're through sending boys over to fight other people's wars."

"The locusts have *w's*. All the kids say it means war."

"It's not really a *w* if you look at it close," Willie's father says. "It's just a kind of a squiggle. If people see a *w* or a *p*, it's the same scrawl. It's an old wives' tale anyway. Like calling them locusts instead of cicadas."

"What's the difference?"

"Locusts are more like grasshoppers."

"Oh."

Maybe his father is right, calling them cicadas instead of locusts, Willie thinks, although he can't really see the difference. About the *w* he is not so sure. He likes to picture himself as one of the soldiers in the wide hats carrying a gun and shooting at enemy soldiers wearing spiked helmets.

❦

The highway winds around Muldraugh Hill, one of the knobs near the Ohio river, and it seems to Willie they will never reach the top. The road is narrow with a sheer wall of dirt and rocks on one side and a low barrier of steel cables on the other, where he looks down upon a wild tangle of trees and underbrush far below. Cars emerging from a blind curve seem to jump at them from nowhere.

"Darn!" his father says. They have come up behind a rattling farm truck barely creeping up the hill. There is no room to pass, and the truck is carrying open barrels of steaming mash from one of the distilleries outside Louisville. The fuming barrels spew mists of slop on the car's windshield, and Willie's father turns on the wipers.

"What's that gook?" Willie asks.

"Mash they make whiskey out of. Ought to be a law against carrying it open like that."

"Is the guy in the truck going to make whiskey?"

"Nope. The distillery did. That's left-over slop farmers feed their hogs."

"Hope the hogs don't get drunk," the boy laughs, but his father ignores him as he drums his fingers on the steering wheel. "Darn!" he says again. "I promised Carl Sanders I'd be there by eleven o'clock."

Street With People *by Richard L. Jansen. Watercolor on paper, 17 x 23 3/8 inches. Works Progress Administration, Wisconsin Federal Art Project. Collection of Charles A. Wustum Museum of Fine Arts, Racine.*

E-town is really Elizabethtown, the seat of Hardin County, with its red brick courthouse as the hub of the circle in the center of the town. When Willie and his father arrive, mud-spattered farm trucks and rusting old cars are parked in front of the stores that line the circle. Farmers have filled the benches on the courthouse lawn, talking, whittling, smoking, spitting, and chewing tobacco.

"Court day," Mr. Jennings says.

His son eyes the bright red Dr. Pepper sign on a drug store across from the courthouse and says he's thirsty.

"Not now," his father says. "We're already late for Carl."

When they reach the construction site, Carl Sanders is busy nailing studs, framing the house with the help of a younger man, probably a cousin or a nephew since he has no sons of his own. He doesn't seem to be bothered that Mr. Jennings has arrived later than he promised.

He puts down his hammer, and jumps from the concrete foundation to shake hands with the lumber man and say hello to the boy. He wears overalls and a straw jimmy which he removes so he can wipe his head with a large blue and white handkerchief. On the dusty, treeless lot it is even hotter than it was on the road.

Around his waist Mr. Sanders wears a nail apron advertising the Jennings Lumber Company. He is a large man with a soft drawling voice, and when he talks he often blinks his eyes. Willie has overheard his father and mother talking about this, saying it's because Mr. Sanders was shell-shocked during the War. Willie often wonders how many Germans he killed.

The boy climbs up on the concrete block foundation and wanders through the wooden skeleton of the roofless house. He watches Mr. Sanders's cousin or nephew put a two-by-four across a saw horse and cut off a piece as a header for a doorway. The carpenter's helper is a chunky, red-faced teenager who chews tobacco as he works. "Hi, kid," he says. "Hot enough for you?"

Willie is watching the helper nail the header in the doorway when his father and Mr. Sanders join them. His father is still wearing his Panama hat, but has taken off his seersucker jacket and slung it over his shoulder. In his short-sleeve shirt his arms are white compared to the ruddiness of Mr. Sanders, who wears no shirt under his overalls.

His father takes notes as Mr. Sanders lists the building materials he will need by the end of the week. The items are familiar to the boy from listening to phone conversations at home: sheathing, gypsum board, roofing, and, of course, nails whose sizes are always indicated in terms of pennies. Willie wonders if they call it a sixpenny nail because it costs six cents.

As they are about to leave, Mr. Sanders tells Willie's father he really appreciates his driving out to E-town to see how the job is coming along.

"Glad to do it," Mr. Jennings says. "You know, I was born in Hardin County."

"You don't say."

"At a place in the hills called Colesburg. In a log cabin."

"Like Abraham Lincoln," Mr. Sanders laughs.

"This was Christmas Day. Snow blowing through the chinks in the logs is what they tell me."

Willie has heard his grandfather Jennings talking about Colesburg where he once taught in a one-room school. And he knows his father was born on Christmas because every year he complains he was cheated out of either a Christmas present or a

birthday present, he doesn't know which. But he has never heard about the cabin or the snow.

Mr. Sanders blinks his eyes. "I live in Hodgenville not far from where Lincoln was borned. They got that cabin there they say he was borned in. You ought to take the boy to see it.

"Maybe some other time," Mr. Jennings says. "I gotta get back to the office for an important meeting with a fellow from a mill down south."

Mr. Sanders winks at the boy. "Get him to take you, sonny. Won't be out of the way much. It's worth the trip. I got a special interest in it, see'ins how Abe Lincoln killed my Pa."

Willie can't believe it. "He did?"

"They had this big do'ins when they opened the park. All the big shots came down from Washington. Even the President. Pa got a job drivin' folks out from the railroad station in his wagon. Five or six miles on a chilly, rainy November day. Don't know how many trips he made. Pa got a cold, then pneumonia.

Mr. Jennings shakes his head.

"Remember the night he died. My sister and me—we was little then—looked out the upstairs window during this big storm. We seen lightning strike the big old sycamore in front, and right then they came in and told us Pa was gone. I'll never forget it."

❦

After they leave Mr. Sanders, Mr. Jennings and his son stop at the drug store in E-town where they sit on a wire-backed stool at the soda fountain and drink glasses of Dr. Pepper. Mr. Jennings man wears his coat again and looks very formal compared to the shirt-sleeved townsmen in the store.

The boy says, "I sure wish we could see that cabin."

His father drums his fingers on the counter, then glances at his watch. Oh well, he sighs, maybe they can stop at the Lincoln place if they hurry, but just for a minute, because he really does have to get back and see the mill man from Mississippi.

They drive faster than the law allows over to Hodgenville where there is a statue of Abraham Lincoln in the courthouse square, and Willie's father says he remembers also seeing one of Jeff Davis in some Kentucky town, he can't remember which, but it was near the place the President of the Confederacy was born.

Outside town, they leave the car at the entrance to the national park and climb the long flight of steps to the memorial building. Over the entrance carved in marble is the inscription: "With Malice Toward None, With Charity For All." Willie asks what kind of ice is mal-ice. His father grunts that the word is malice and it means hard feeling.

Inside the building they find the cabin behind ropes to keep visitors from cutting off splinters as souvenirs. They look for just a minute, but Willie can't get over how small the cabin is. Or how a man as big as the statue outside the Hodgenville courthouse could emerge from such tiny beginnings.

There is not a breath of breeze and the red line on the tin thermometer beside the building's screen door has climbed to 102 degrees.

After they run back to the Studebaker and are on their way again, Willie asks, "Was your cabin as little as that one?"

"Probably."

"What happened to it?"

"Well, nobody saved it. That's for sure. Actually, that cabin of Lincoln's probably isn't the real one. No doubt it's a replica."

"What's a replica?"

"Something to take the place of the real thing."

Willie's father decides they will save time if they return to the city on Route 31E, which is closer to the park than the Dixie Highway, 31W. His son is sorry they won't go past the soldiers again, possibly even give one of them a lift, but he is glad there will be new places to see.

Mr. Jennings drives determinedly, glancing now and then at his wrist watch. If anything, the air coming through the car windows is hotter than it was on the trip from the city. The man doesn't seem to mind and shows no discomfort under his hat, coat, and tie. Every now and then the boy asks about something along the highway and his father gives him a text book reply.

The boy spots a line of red and white signs on the side of the road and shouts, "Hey, there's my name. Willie." He reads aloud the series of messages:

LITTLE WILLIE
MODERN SOUL
BUSTED PAPA'S
BRUSH AND BOWL
NICE WORK WILLIE
BURMA-SHAVE

The boy laughs while repeating "nice work, Willie." He remembers playing with his father's brush and shaving mug and covering his face with soap suds like a white beard. Williams shaving soap is what his father uses. It makes your face feel clean, but Mr. Williams doesn't put up funny signs like the Burma-Shave people. He guesses when he gets old enough to go in the army he might try Burma-Shave, since a brush will just be something else to carry around when he fights the Huns.

❦

The trouble begins just after they pass the Tom Moore distillery near Bardstown. They are rolling along through the hilly farm country when steam hisses from the car's radiator.

"Damn!" Mr. Jennings says, and pulls over to the side of the road. Willie has heard him say "heck" and "darn" before, but he has never heard him use the forbidden real cuss words. He watches as his father removes the cap, and the radiator spouts a geyser of steam.

"Damned thing's overheated," the father says. "We'll have to take it slow and easy, stop and get more water. I'm gonna have a hell of a time getting back to the office on time."

For the first time, Willie notices the back of his father's cotton coat shows a dark spot of perspiration.

They limp along. The father looks at his watch more often than before and each time shakes his head. His son can see he is in no mood for questions and is thankful there is nothing along the way to provoke his curiosity.

The parched radiator is panting for water as they drive up to a weathered store decorated with signs for Mail Pouch chewing tobacco and Nehi soft drinks. In front, there is a Standard Oil sign on the gas pump to welcome motorists. Willie asks his father if they can get something to eat, and both get out of the car. There is not a breath of breeze and the red line on the tin thermometer beside the building's screen door has climbed to 102 degrees.

Sawmill *by Richard L. Jansen. Watercolor on paper, 14 7/8 x 22 3/4 inches. Works Progress Administration, Wisconsin Federal Art Project. Collection of Charles A. Wustum Museum of Fine Arts, Racine.*

A bony, gray-haired storekeeper greets them from behind a counter in front of shelves of canned goods. "Howdy. What can I do you fer?"

The father says they'd like some water for the car and maybe some groceries.

"The bucket's by the pump outside. Water's free. Eats will cost you," the storekeeper says, and Willie watches his adam's apple bob as he talks. "Man oh man, it's a hot one. Ain't you about to keel over in that coat and tie?"

"Hadn't paid much attention."

Willie's father fills the radiator. Then they buy a box of crackers, a package of Kraft cheese and two Nehis—orange for Willie and grape for his father.

Looking at his watch and shaking his head, the father slams his fist into his hand. "Shoot! There's no way in the Sam Hill I can get back to the office in time for that salesman. Might as well forget it."

Willie's face clouds. "I'm sorry," he says. "We shouldn't have gone to see that cabin."

His father is silent for a moment, looks down sternly on his son's face. Then his expression softens, and he laughs for the first time on the trip. "It's not your fault, son. Blame it on the radiator for blowing its top."

There's no use hurrying any longer, he says. Maybe they should just sit there on the side of the road so they won't get cracker crumbs all over the front seat of the Studebaker. The boy offers his father the box of crackers and a piece of cheese. The man loosens his tie and takes off his hat and coat. His head and shirt are both sopping with perspiration. He takes a drink from his purple bottle, puts a piece of cheese between two crackers and takes a bite, flaking crumbs over his seersucker trousers.

"I haven't done this since I was a kid," he says.

The son tries to picture what his father was like when he was his age. Did he always wear a hat and coat even then?

"Did you play baseball?" Willie asks.

"Uh-huh."

Willie thinks his father sounds younger than he usually does, almost like a kid.

❦

"When I was in my teens I was the catcher for Peachtree Baptist Church in one of the amateur leagues."

"Gosh. A catcher. Did you play soldiers, too?"

"Uh-huh. Somewhere there's this snapshot of me and my brother dressed up like soldiers with wooden guns."

"You were in the war like Mr. Sanders?"

"Too young. I worked in a powder plant at a place called Muscle Shoals."

"Gee. You missed the whole thing."

"Wars are no good," his father says. "Two of the older boys on our baseball team were killed in France. Another came back with one leg. Your Aunt Edith—you never knew her—died in the flu epidemic. If they never have another war, it will be too soon for me."

Willie is disappointed that his father has no war stories he can tell the kids, but as they talk he makes many discoveries. Not only was his father born in a log cabin, but he lived on a farm for a while. He can ride a horse and milk a cow. He walked four miles to school every day. He once played drums with his buddies in a dance band. He worked in the office of a candy factory before he went into the lumber business.

They sit by the side of the road eating cheese and crackers, drinking Nehis, and chatting long after the car's radiator cools. It's like a picnic, Willie thinks.The cicadas shrill in the trees behind them, but now Willie knows these are just cicadas, not locusts with wings of war.

❦

Phenology: Celebrating Life on Earth

by Robert Hillebrand

"Had Peas for the first time in the season at Dinner."
George Washington, May 25, 1785

More than fifteen years ago, long before the word for doing it entered my vocabulary, I began keeping records of natural happenings that stirred me. About four years ago I stumbled upon the term phenology, a contraction of the word phenomenology, which is "the branch of science that classifies and describes phenomena without any attempt at explanation" (Webster's Deluxe). *Because I was always something of a dunce in science classes, I was cheered to discover that unwittingly I had been engaged in a branch of formulated knowledge I hadn't known existed.*

Phenologists observe and record their experiences as simple facts. They are under no obligation to interpret them. Indeed, to proceed beyond what is apparent to the senses is to move into the realm of ontology, where theories about the nature of being and other complicated matters enter into the dialog. I doubt that I'll ever be ready for that.

What I like is to be the first in town with asparagus in the pot, fresh berries on my cereal, and bright bouquets of swamp iris for the neighbors. I'm content to leave speculation about how they turned up where I found them to my betters. All I do is keep my records current, stay alert, and then pounce when something edible or decorative shows up alongside one or another of the paths I frequent. And a jolly good job it is, rambling the riverbanks, chronicling the life along the shore, and keeping track of the seasonal changes.

If you'd care to know the water temperature in Fowler Lake on March 25, 1991, the day the magnolia tree down the street blossomed last year, or when the strawberry fields at Lurvey's Farm opened in 1980, call on me. If you believe this is all a lot of twaddle, I guess you'd better flip some pages and try another article. But if your curiosity is piqued, you might want to read on and, mayhaps, join the game. With more folks paying attention to the births and rebirths that occur week-by-week, there will be more occasions for celebration. And records vary, even within a small community, so any number can play.

The fact that I was crunching sugar snap peas on June 18, 1988, does not, of course, mean that someone else may not have gotten to them earlier. If you did, I'd like to know; and if next fall you spot hickory nuts about to drop, I'd like to know that even more. Try as you may to find the earliest gentians, welcome the first wrens, or lead the skaters out onto the ice, someone else is bound to beat you more often than not. But you can tip back a glass or a teacup to that somebody as readily as he or she can to you. Commemorating nature's red letter days is an enterprise in which everyone wins.

To be sure, what you keep track of depends upon your interests. A woman I know who keeps herself on a short leash records nothing but sightings of rainbows and the northern lights; and she only does that when they're visible from her back porch. She saves on shoe leather and that way is never in danger of contracting writer's cramp. A farmer I used to buy eggs from limited his journal to information about egg production and brooder house activities. The only exciting entry he made was when a fox ran off with two of his hens. But they're both part of the clan.

A friend who jots down fluctuations in gasoline prices and the dates he makes tax and mortgage payments seems to me to be edging out of the ballpark and into the territory of unnatural phenomena. But I suppose nature need not be the subject. To each his own.

Whatever you keep track of, the procedure remains standard. Treat yourself to a big fat notebook or, better, a loose leaf binder. Set up a page for each day of the year, and establish a format—date, what sighted, where. Then all you have to do is wander around with your eyes open, trying not to miss a thing.

Maintaining a journal keeps you watchful. After a season or two of record keeping, you'll find that it makes good reading, especially on cold days when winter seems eternal and you

ENTRIES FROM A PHENOLOGIST'S JOURNAL

Feb. 23, 1984	Pussywillows, power lines south of Roosevelt Field, Oconomowoc
March 3, 1985	Redwinged blackbirds return, old fish hatchery grounds, Delafield
March 19, 1985	Spinach up already! Oconomowoc garden
April 3, 1986	Violets, woods behind Waukesha Tech, Pewaukee
March 13, 1990	Ice out on Fowler Lake, Oconomowoc
June 24, 1991	Firefly, backyard woodpile, Oconomowoc
April 25, 1992	Wild asparagus, railroad tracks west of town, Oconomowoc
March 3, 1993	Pussywillows, same location as 1984

can't believe that, ever again, a dandelion will show its face to the sun. And, too, you'll be accumulating material for conversations with the summer crowd down at the green market.

The notes do have a practical use. Before I started keeping mine, I'd often grow so impatient for the taste of a black raspberry that I'd begin hunting them in early June. Consulting the journal last summer, I ascertained that never in the past decade and a half have they ripened before the Fourth of July. Now I bide my time, stocking up on jelly-making supplies so that I'll be prepared when the currants turn red.

I watch for patterns but don't make conjectures or try to develop theories when I observe any. Possibly a hundred years from now, if the climate has changed, long-range developments may be discernible, and my scribblings may be of some small interest to someone, but it's no part of my plan.

❦

Surprises are part of the pleasure. An April 19 swim in Lac La Belle—the earliest ever recorded—beat all odds. Customarily I'm satisfied if I can break the seal by mid-May, and one woeful spring I remained in dry dock until the first of June.

The real jubilation comes, naturally, when you leave pen and paper behind and venture out to discover something new, something unexpected, something rare. The journal itself is frequently a nuisance, but entering tidbits of information into it keeps you vigilant and in touch with the earth.

Phenologically speaking, I'm feeling cramped right now, aching to slip outside and see what's happening. Each season has its own astonishment, and the sound I hear through an open window might just be a flight of whistling swans passing overhead. I've never seen a whistling swan. More likely what I'm hearing will turn out to be the antenna on the roof next door, creaking in the wind; but once out of the house, I'll find the sun going down, the moon rising, or maybe a patch of new mint greening up under the chestnut tree and smelling like summer.❧

Editor's Note: The Wisconsin Phenological Society is an affiliate of the Wisconsin Academy.

The Art of John Colt: On Behalf of Small Creatures

by James M. Auer

The main impression I have of John Colt is that of a highly principled chronicler of the majority of the earth's living creatures: the insects that hover in the air, the worms that burrow through the earth, the fish that swim in the sea. These are the little beings that suffer most when an oil tanker sinks, a hiker steps into a life-laden puddle, a forest burns, or a car hits a tree and dislodges the wild things that live on its leaves and limbs. These are also the tiny beings that inhabit the earth's woods, untilled fields, deserts, and, above all, water.

This, for more decades than he might care to remember, has been John Colt's instinctive constituency. It is for this reason that I look upon him as an intensely political artist. Not because he is "correct" by today's all too human standards of political correctness. But because he is one of the few visual voices willing to speak out for the billions of tiny creatures that dance and die unseen and unheeded, whose beauty is wasted on the majority of human beings.

All too often we fallible humans are inclined to shape our personal political priorities out of issues that directly affect us, our families, peer groups, livelihoods, our quality of life. Sometimes these issues are temporary, sometimes they are as old as life itself. But most always they exclude the countless other living creatures who share this planet with us, and off whom, all too frequently, we heedlessly feed.

Not John Colt.

From Haiti to Oregon, from Lebanon and Southern California to the Bahamas and Mexico, he has investigated, sketched, and finally produced finished works depicting the amazingly vital populations that inhabit the meadows, streams, wooded nooks, tidal pools. Everywhere he has looked he has found character and bravery, motive and struggle, whimsy and individuality.

No living being is exactly like any other living being in a John Colt acrylic or watercolor painting or pastel drawing. Nor is Colt exactly like any other living artist. In a way, these two observations are interlinked. As the son of an artist, Colt seems never to have been eager to have his work resemble that of any other artist. He has been his own person during all five decades of his productive career. As a teacher he has encouraged diversity in his students. He has sought a flowering, not a cloning. As a naturalist, he has similarly sought out spontaneity.

Whether he is drawing a lizard, a beetle, a dragonfly, a starfish, or a conch shell, to him it is different from any other lizard, beetle, dragonfly, starfish, or conch shell. The spark of life is to Colt the spark of difference, the ultimate lesson of his luminous work.

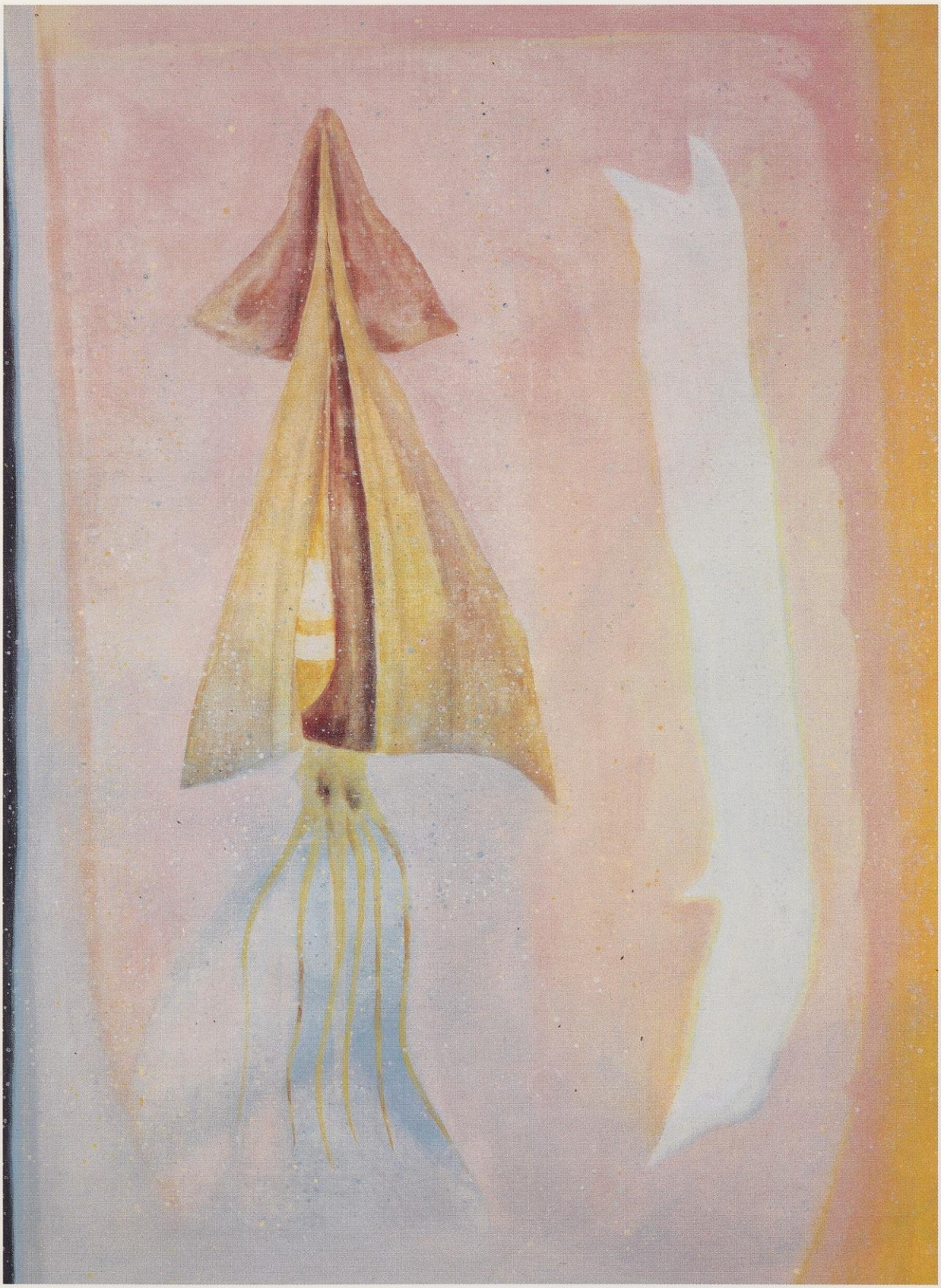
It is no accident, I suspect, that Colt works primarily with powdered pastel and with the water-based media. He is as much of the earth, and of the sea, as are his minute subjects. Early in his career, he drew his creatures large and characterized them on an epic scale, giving them qualities that were very nearly human. Later on, as his powers of observation and draftsmanship developed, he found that he was able to characterize his tiny sitters with fewer and fewer lines, indicating the bright eye of a lizard with a dot, the curving dome of a snail with a touch of his ballpoint pen. Not unexpectedly, as the importance of the work magnified, the size of his creatures minified.

Thus, viewers of Colt's work find themselves looking at the work of a naturalist who is also a fabulist, a poet who is able to isolate and distill the romance he has discovered in the little hidden places, the tiny, unrecognized rituals the rest of us might pass by. Almost invariably, Colt's work reveals a concern with growth and metamorphosis. It has kept him young, and his audience interested.

By speaking for the smallest—and humblest—of Earth's creatures, he has created an art that speaks to all of us. By looking down, into puddles, pools, meandering streams, and clumps of grass, and up, into the teeming summer skies, he has created a mini-universe that reveals more about the solar system and our place in it than many a detailed map of the heavens.

Many fine contemporary artists, skilled both as observers and as reporters, are content to paint the world as they know it. John Colt is different. He paints the world that will survive us.❧

This is a version of an article that appeared in the January 31, 1993 edition of The Milwaukee Journal *and is reprinted here with permission.*



Sea Traveler. *Vinyl on canvas, 40 x 29 inches. 1993.*

Dark Orb. *Vinyl on canvas, 52 x 39 1/2 inches. 1994.*

Woods Duo. *Vinyl on canvas, 52 x 34 inches. 1994.*

Starting Place. *Acrylic and oil on canvas, 69 x 68 inches. 1987.*

This special color section was made possible through the generosity of the Norman Bassett Foundation.

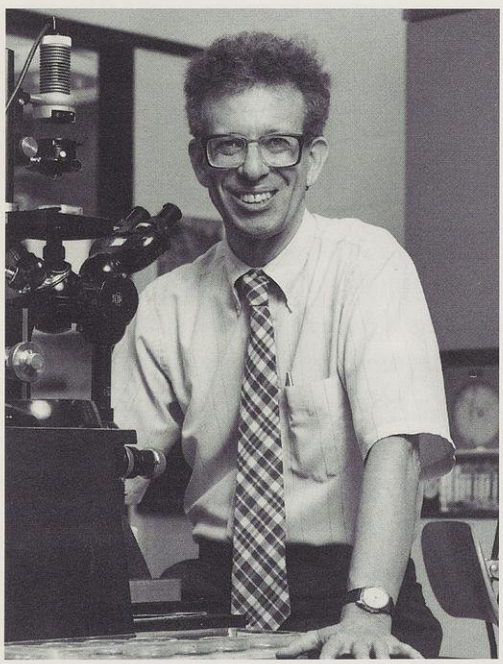
A Man for the Ages: Remembering Howard Temin, Nobel Laureate

by Henry C. Pitot

On February 9, 1994, Nobel Laureate Howard M. Temin died at the age of fifty-nine. Elected a fellow of the Wisconsin Academy in 1982, he had been generous in offering his knowledge at Academy programs, and, during the last years of his life, he was generous with his precious energy, agreeing to discuss with Academy audiences his groundbreaking research on cancer and AIDS. On February 11, a memorial service was held at Beth Israel Center in Madison, at which a number of people spoke in honor of their friend and colleague. We are pleased to share excerpts from the comments of Dr. Pitot and others. Editor.

Howard Martin Temin was born fifty-nine years ago in Philadelphia. His father was a lawyer and his mother was active in education. This background undoubtedly contributed to his incisive thought processes and attention to scientific detail as well as his love for knowledge.

Howard had received his doctoral degree in virology from CalTech under Dr. Renato Dulbecco, with whom he later shared the Nobel Prize. He spent a postdoctoral fellowship with Dr. Harry Rubin, where he demonstrated that the Rous sarcoma virus could convert normal chick cells in tissue culture into cells that had all the characteristics of malignancy. This was the first example of a reproducible tissue culture system in which normal cells could be converted to cancer cells outside the body. Dr. Harold Rusch recognized the great importance of this discovery and in 1960 successfully recruited Howard to the faculty of the McArdle Laboratory at the University of Wisconsin. Thus it was that Howard and I started careers as faculty members in the McArdle Lab during the same year and advanced together up the academic ladder.



Howard M. Temin (1934-1994).

Howard's first laboratory was in the basement of the original McArdle Laboratory on Charter Street in Madison, where he worked beneath steam pipes next to a sump pump whose function was to prevent flooding—not the most ideal laboratory space. In fact, it took a number of months before his laboratory was equipped for the special tissue culture technology that was needed for his research. For the next several years Howard continued his research on the characteristics of the system he developed and the mechanism of the virus-induced transformation to cancer.

About four years after arriving at the McArdle Laboratory, on the basis of his own incisive logic and imagination as well as some preliminary data, he proposed that the Rous sarcoma virus infection of cells, and their subsequent conversion to the cancerous state, involved a reversal of the flow of genetic information. At that time, the dogma of molecular biology stated that all genetic information flowed from DNA to RNA to protein. Howard's proposal that RNA could act as an informational template for DNA was, to say the least, heretical.

Over the next half-decade, he fought a lonely battle against derisive criticism from scientific leaders who refused to consider the possibility that some viruses carry their genetic information in the form of RNA, and that this information is subsequently copied into DNA in infected cells. In fact, he was subjected to veiled ridicule at meetings by some of his closest scientific colleagues. In retrospect, I often wonder if his promotion to full professor was delayed because of his insistence on the validity of his theory.

Finally, in 1970, he and his colleague, Dr. Mitzutani, reported definitive proof of his original theory. Simultaneously, Dr. David Baltimore, working quite independently almost a thousand miles to the east, published experiments that also proved Dr. Temin's theory.

It did not take the scientific world very long to realize the importance of this finding. Not only did these facts explain how RNA viruses caused cancer, but the reaction of this "reverse transcriptase," the enzyme that allowed the virus to copy RNA into DNA, became a mainstay and tool for the advancement of our knowledge in molecular biology. In fact, in an article appearing in the *The New York Times* (February 11, 1994), it was stated that "half the world's biotechnology industry would not be in business" without the original discoveries of Dr. Temin. His discoveries have been instrumental in our search for specific cancer-related genes and their structure and for our understanding of how certain viruses cause human cancer, especially a form of leukemia as well as cancer of the liver. Our knowledge of the pathogenesis and disease mechanism by which the AIDS virus causes its devastating effects is wholly dependent on Temin's theory and its proof.

But Howard's accomplishments were not confined only to the laboratory. He was prominent on the national cancer scene. And even as he stood to accept the Nobel Prize in Sweden in 1975, he shocked the world by scolding the members of the audience at the ceremony for smoking at a time when he and other scientists were honored in their efforts to prevent and cure cancer. In addition to the Nobel Prize, which he shared with Drs. Renato Dulbecco and David Baltimore, he received many other honors from the scientific and lay community, far too numerous to mention here.

At the time of his death he was a member of the National Cancer Advisory Board, the group that has the responsibility for the awarding of federal grants for cancer research. His scientific knowledge, his sense of justice, and his incisive thinking made him a premier member of that policy-setting board. He also has been instrumental in our nation's fight against the AIDS epidemic, and his loss will be sorely felt in that arena.

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As a colleague in the McArdle Laboratory, Howard has been the scientific star among all of us. He was truly a man for all seasons. He was kind and thoughtful to all whom he met—his family, friends, students, and colleagues—and in the scientific arena, truth and fact were the mainstays for which he always fought.

He shared the tangible fruits of his awards and honors in many ways, but especially in his concern for his younger colleagues. He personally transferred significant funds from his own awards to support their research. In the present world of tight research funding, this was truly a charitable act.

But to me and to all who knew him, Howard's outstanding characteristic was his courage: his determination to defend a theory he knew was right. This virtue was exemplified by his persistence, despite the antagonism of many of his scientific colleagues and despite the lack of their support. His brave stance against smoking and tobacco abuse, the cause of one-third of human cancer in our society, is legendary among the public and the scientific communities.

His greatest act of courage, though, was his stand against the disease he fought in his own body, knowing full well that such a fight was likely to be futile. This final act of courage on his part must truly be an inspiration to us all to continue the battle that he waged so well and to know that his spirit remains with us to inspire our efforts to achieve the goals that cancer denied to him.❧

The Howard M. Temin Memorial Fund for Cancer Research has been established at the McArdle Laboratory, University of Wisconsin–Madison Medical School, 1400 University Ave., Madison, WI 53706–1599.

"Howard tried to use his Nobel Prize for noble purposes, but he never wanted the honors to change the man he was. He listed the prize not at the top of his resume, but on page three, sandwiched innocently between two other items."

Justice Shirley S. Abrahamson,
Wisconsin Supreme Court

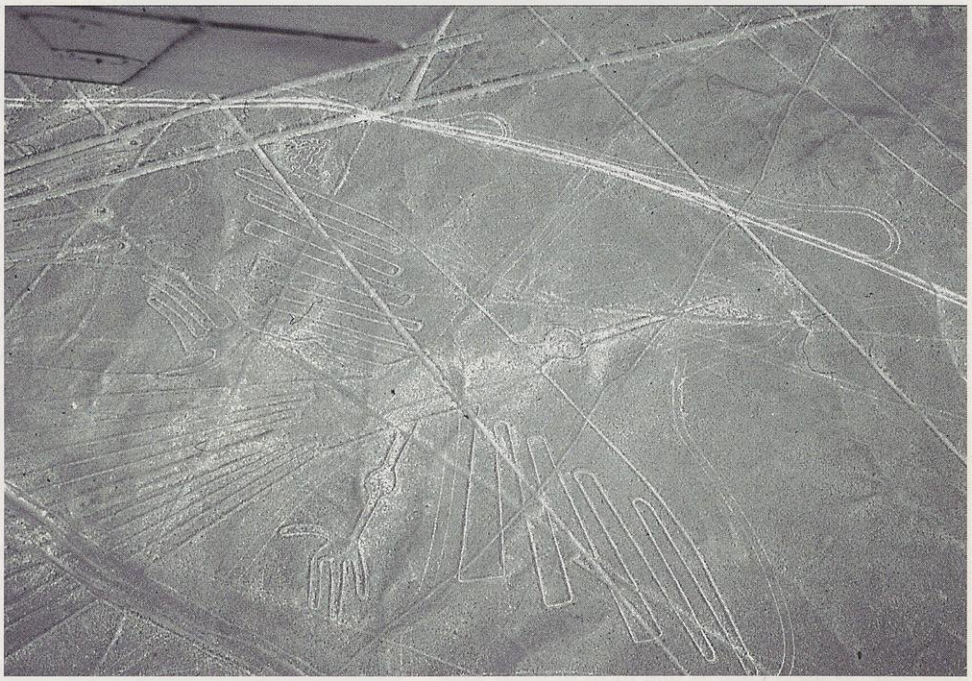
"Howard Temin was an extraordinary scientist. He has provided us profound insights into biology which occasionally he alone championed. He built on these insights, as have many other scientists, to contribute a broad understanding of what cancer is and how it is caused. He also extended the impact of his science to affect the well-being of our society directly by fighting smoking and by promoting intensive, responsible research on the virus known as HIV."

Dr. William Sugden, McArdle Laboratory,
University of Wisconsin–Madison

The Artist and the Environment: Expanding Upon Fragile Ecologies

by Donald E. Thompson

From December 4, 1993, to January 30, 1994, the Madison Art Center hosted a traveling exhibit titled "Fragile Ecologies: Contemporary Artists' Interpretations and Solutions." Although the exhibit itself has now closed and moved on, the detailed catalog by Barbara C. Matilsky, published by Rizzoli for The Queens Museum of Art, New York, is still available. Since the exhibit was made up largely of photographs, plans, drawings, and labels, the catalog more closely resembles the exhibit than is usually the case when art objects appear in photographic reproduction. For all those concerned with contemporary art or with environmental/ecological matters, it is a useful and interesting publication. It is also heartening to see contemporary artists joining in the fight for an improved and diverse environment.

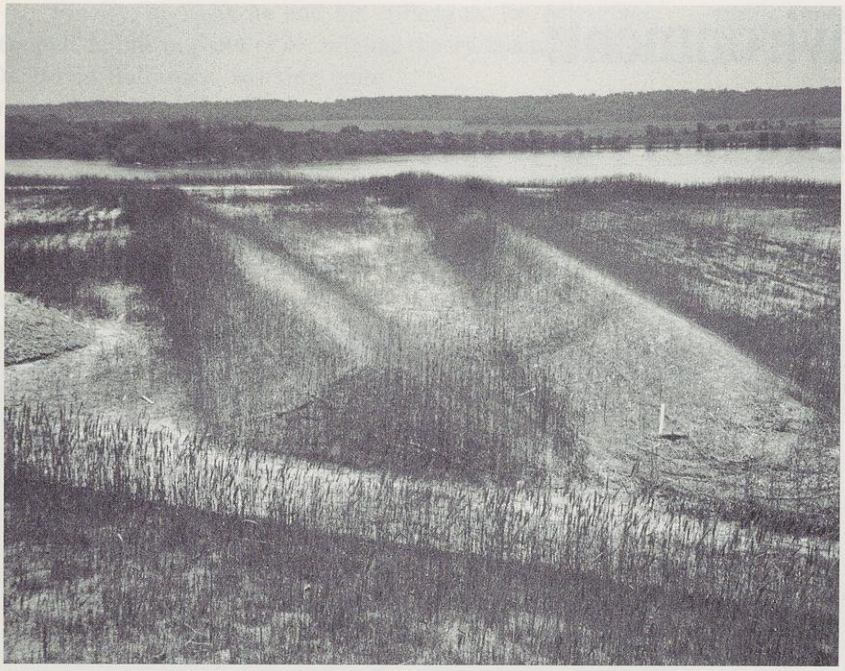


Nazca Bird with its head and beak to the right and tail to the left. It is made of one continuous line or path. Straight lines run diagonally across the top right and left. The irregular parallel lines are the jeep tracks of tourists who are damaging the lines in the course of visiting them.

As the title implies, the exhibit explores the ways in which contemporary artists are involving themselves in the environmental and ecological problems we face today--and, by way of introduction, have faced in the past. My purpose here is not to summarize the exhibit—I recommend the catalog for that—but rather to use the exhibit as a starting point to enlarge upon the ancient, worldwide roots of this movement and to cite some local examples of this art, since most of the presentations in the exhibit and catalog are far removed from Wisconsin.

Before continuing, I should clarify the distinction between environmental and ecological art as I see it. Environmental art is placed in the landscape and made of introduced materials or created out of the landscape itself and may be temporary or permanent. Thus Christo's *Umbellas* or *The Running Fence* are examples of the former; Robert Smithson's *Spiral Jetty* or Jim Reinders's *Carhenge*, to cite a piece of "Outsider" art, are examples of the latter. Ecological art points out and/or offers solutions to ecological problems such as toxic waste, disappearing ecological systems, etc. In one way or another, both interact with their surroundings and change our perception of the landscape and our attitude toward it. We will consider examples of both, though one must remember that art does not always fall neatly into the categories we define.

The introduction to the exhibit and the catalog includes a brief discussion of the history of environmental and ecological art. Speaking as an archaeologist, I am especially



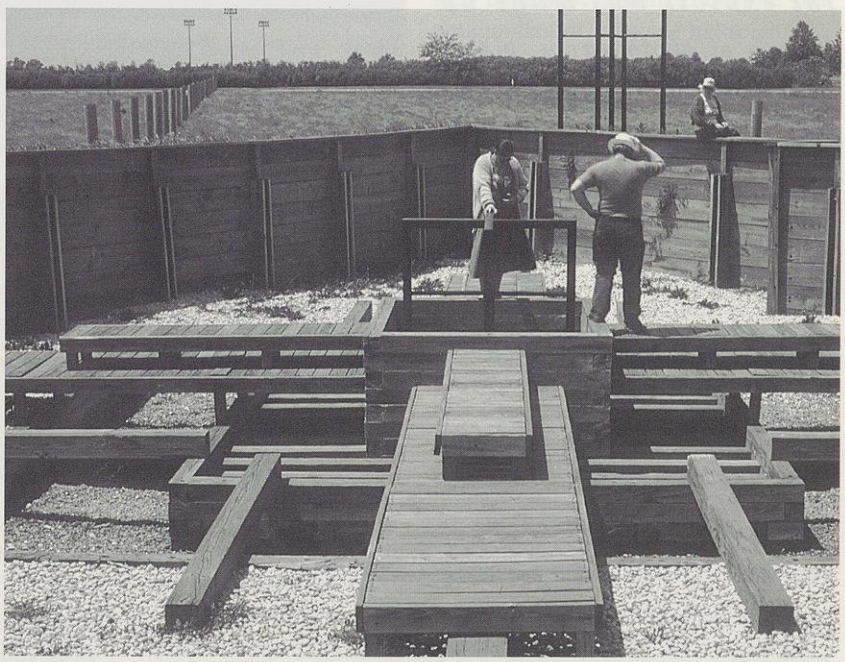
Effigy mound built by earth artist Michael Heizer. The ridges in the center are the whiskers of the catfish; the mound partly visible to the left is its eye. Grass is beginning to grow on the site. The Illinois River is visible in the background.

taken with the time depth and variety of such art. The oldest examples include, of course, the cave paintings of the Upper Paleolithic of Europe. We will probably never know the exact meaning of these, and there is really no reason to suppose they had the same meaning in different areas and/or at different times—or that they had only one meaning at any one time. What is clear is that most of them were not decorative; many were located deep in unoccupied parts of caves, and superimposition of paintings on top of one another occurs. This suggests that the act of painting was more important than the decorative effect. "Action Painting" may not be all that new after all.

Interpretations of the meaning and purpose of this cave art have ranged from hunting magic to social ceremonies (such as rites of passage) to magical restorations of what has been taken from nature. The womb-like analogy of the cave is especially appropriate for this restoration magic or for symbolic rebirth in a new social position in the community. Any one or combination of these interpretations implies an intimate relationship to the natural world and a desire to maintain and perhaps manipulate that relationship.

From these spectacular beginnings, other examples of environmental and perhaps ecological art can be found in the archaeological record. As an Andean specialist, I would like to draw attention to the great desert markings or geoglyphs in the southern Peruvian coastal desert near Nazca. This vast complex of long straight lines, rectangles, trapezoids, and linear outlines of various biomorphs occupies desert tableland above the coastal river basins. Most of the features appear to date from the Early Intermediate Period (200 B.C.–A.D. 600). The lines were made by removing the dark-colored small rocks and pebbles from the surface to reveal the lighter-colored surface beneath, a kind of negative approach analogous to various resist techniques used on pottery and textiles. The removed rocks were often piled at the edges of the lines, increasing the sharpness of the outline.

The function of the lines long has been debated, and, indeed, there may be a number of functions. The most likely explanations would include ritual paths, probably connected in the case of the straight lines with fertility/water/mountain rituals. In the desert, fertility is related to water and the lines appear to be oriented toward water features. The biomorphs, which are the most frequently illustrated, are created with one continuous line, so that it becomes possible to walk the figure, which, from a purely visual point of view, would best be seen hovering above. The exact same figures are also found in other media such as ceramics, textiles, and goldwork, so we may assume they were important in Nazca myth and probably ritual. Certainly, then, the Nazca lines were environmental art, and perhaps they were ecological art as well.



Interior of mound in Mary Miss's Field Rotation *at Governors State University. Posts leading to the mound are visible in the background and remind one of the alignments of Western Europe.*

We do not have to turn to space ships or hot-air balloons to account for them; as ritual paths, they need not be viewed from above, and the Nazca people, as master weavers, were perfectly capable of enlarging a design to any size they wished.

Far to the north and east of Peru, in southern England, a similar technique of removing the surface—in this case sod and soil—was employed to reveal the chalk beneath to depict white horses high on the green hillsides. Although some of these are relatively recent—the Cherhill White Horse, for example, dates to 1780 and others are nineteenth century—the famous Uffington horse has been known for 900 years and may be much older. Of course there may have been others like it which have since been lost, the preservation on the downs not having been as good as that on the Peruvian desert. These horses are certainly environmental art, but, unlike the Nazca lines, there is no reason to suppose they had ecological implications.

Christo may never have constructed a running fence or erected umbellas on the Wisconsin landscape, but in 1982 Naj Wikoff built Prairie Ship ***in the rolling countryside north of Mount Horeb.***

Much closer to home, Wisconsin's own effigy mounds, dating to roughly A.D. 700–1100, certainly qualify as environmental art, but aside from serving in part as places of burial, their function is unknown; and although some of them take the shapes of biomorphs, any suggested ecological function would be highly speculative. They differ from the lines and horses, however, in being additive rather than subtractive in their construction. They have been preserved and have attracted interest in many city, county, state, and federal parks.

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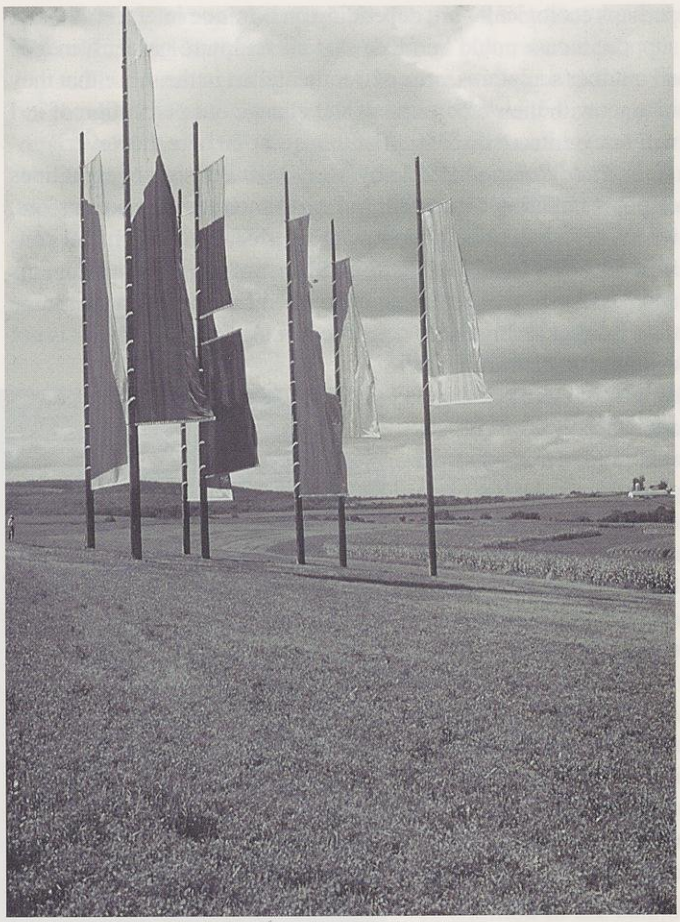
We now shift from this brief enlargement upon some of the ancient predecessors of environmental and ecological art to a discussion of some modern examples that are or have been more accessible to residents of the Upper Midwest than those cited in this exhibit and its catalog. In doing so, however, we at first can remain with the familiar form of our local prehistoric example, effigy mounds.

On the bluffs above the north bank of the Illinois River between LaSalle and Ottawa, earth artist Michael Heizer has constructed five remarkable modern effigy mounds. The site, an area decimated by strip mining, was so torn up and acidic that virtually nothing could grow or live there. In 1984–85, using heavy earth-moving equipment, construction workers leveled and sloped the area for drainage and built the huge effigy mounds under Heizer's direction. The highly acidic soil was then neutralized with limestone, and hardy grasses were planted in biodegradable excelsior to inhibit erosion. Today the area serves as a unique park and is well worth a visit.



Prairie Ship *by Naj Wikoff near Mount Horeb. The piece turns the landscape into a sea and recalls the historic prairie schooners.*

The *Effigy Tumuli Sculpture*, as Heizer calls the complex, recalls but in no way duplicates the ancient effigy mounds of the Upper Midwest. The design and the huge scale alone (one piece is 685 by 80 feet) eliminate any confusion, but the subject matter—a water strider, catfish, frog, snake, and turtle—are also different. The animals are aquatic and relate to the river, which is visible below, and they do recall the ancient tradition. But the site also makes a monumental piece of art in its own right. This restoration project is ecological art, completely in keeping with those described in the exhibit, but ironically Heizer is quoted in a *Smithsonian* magazine article as being uninterested in reclamation sculpture per se; it is the art, not the healing of the land, that interests him. Today vegetation—mainly grass—is returning to the area, and animals are again being sighted. The result, if not the intent, is a healing of the damaged landscape.

Just south of Chicago at Governors State University, University Park, lies one of the best-kept art secrets of the Upper Midwest: The Nathan Manilow Sculpture Park. Surrounding the central university building are about twenty-five pieces of outdoor sculpture, at least two of which qualify as environmental—

perhaps ecological—art, depending on how one interprets them. I suppose a case could be made that all sculpture gardens, indeed all outdoor sculptures, are environmental art in the sense that they interact with their environment and change our perception of it. I will not get into a discussion of this question here, however.

Field Rotation (1981) by Mary Miss consists of eight lines of posts radiating from a central earth mound, which turns out, when ascended, to be hollow with interior wood and metal construction. The overall effect reminds me of the stone alignments and passage graves or tumuli of western Europe, but at the same time it suggests high-tech construction. As far as I know, it is not oriented to astronomical events, but to me it recalls ancient concern with seasons, and in this sense parallels Nancy Holt's pieces in the exhibition and reminds us of our often-forgotten astronomical and seasonal place in the universe.

Martin Puryear's *Bodark Arc* (1982) is much more gentle and less intrusive. It consists of a semi-circular path, which near its center becomes a curving wooden bridge over a bit of water. The ends of the path meet a straight diameter consisting of a line of Osage orange trees, producing an overall D or bow shape. Since Osage orange wood is said to be a favored material for Indian bows, the image is appropriate. Another path, beginning at the center of the straight Osage orange tree line, bisects the semi-circle, meeting the arc at its center—in effect, simulating the arrow of the bow. A bronze chair sits at the wooded end of the arrow; a simple Japanese-looking wooden gateway at the other open-arc end near the water. The effect is to draw attention to the Indian past, but to be very unobtrusive and to let the landscape dominate. The piece changes character greatly with the seasons, unlike *Field Rotation*, which imposes itself much more strongly on the landscape.

Barbara Westfall emphasizes the passing seasons with her winter solstice installation near Mount Horeb.

Christo may never have constructed a running fence or erected umbellas on the Wisconsin landscape, but in 1982 Naj Wikoff built *Prairie Ship* in the rolling countryside north of Mount Horeb. Consisting of eight 90–foot-tall telephone poles with attached multicolored sails of nylon, the ship sailed on a rolling sea of grass and corn, or "amber waves of grain." Constantly moving, flapping, and changing shape in the wind, the sculpture transformed the surrounding landscape, and, at the same time, evoked the verbal image of prairie schooner or covered wagon. Most important, this was a community project involving the assistance of many volunteers, not the least of whom was the farmer, Richard Losenegger, who allowed it to occupy his land for the six weeks of its existence. The ecological component may be small, but *Prairie Ship* was environmental art at its best.

Sometimes artists draw attention to the troubled environment by bringing it indoors. In 1987 the University of Wisconsin– Madison Memorial Union gallery exhibited *A Memory of Clean Water*, a project of Betsy Damon, Robyn Stein, and a team of other artists. The work centered on a 250–foot cast in 8 x 12–foot sections of a Utah dry stream bed which was exhibited as a convex negative, or mold. The casting material consisted of a kind of paper made in part from a pulp of local plant materials with locally derived plant and mineral pigments. A video presentation, photographs, and newspaper clippings augmented the colorful convoluted surface of the cast itself. The title tells the story, and, again, it was a cooperative project, though not a community one.

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My final examples of upper midwestern ecological art are drawn from some of the work of Mount Horeb artist Barbara Westfall. She also has brought the outside in, so to speak, in *Resource Extraction* (1990) at the University of Wisconsin–Madison art department gallery, where earth and tree stumps marked with orange paint recall clearcut logging and a caged live chicken, the resulting displacement of life. More recently *Nature and Culture* (1992) at the Memorial Union gallery in Madison emphasized the destructive effects of human intervention on the environment with hanging thistles and a complex of box elder with the sharp edges of machinery attached like leaves to the limbs and a vine-like interweaving of barbed wire.

More closely related to "Fragile Ecologies," however, has been Westfall's outdoor work. I recall a cold winter solstice in 1990 at her environmental installation, a 20–foot basin painted in descending spirals of red and yellow colored sands with outside stakes designed to cast a long shadow through the center of the piece. Visitors were expected to participate—burn incense, bring a log for the nearby fire, etc.—and thus return to a time when the movements of the sun had real meaning. In this sense she was promoting some of the same ideas that Nancy Holt expresses in the exhibit.

Daylighting the Woods (1992) in the University of Wisconsin–Madison Arboretum gave dignity to trees that were being killed by girdling to allow prairie to re-establish itself in overgrown areas. The death of some flora was necessary for the life of other threatened flora. Humans had stopped the fires that kept the prairie ecology intact and had ploughed up most of it for cropland. Human intervention with fire and knife was now necessary to save what prairie remained or could be restored. This concept was delicately expressed in staining, smoothing, and drawing attention to the girdled trees and by adding music and the calls of increasingly rare birds. This work was obviously more ephemeral than the solstice basin and was oriented toward restoration of an ecosystem rather than the astronomy of the seasons.

In connection with the "Fragile Ecologies" exhibit itself, Westfall and her colleague Renee Miller worked with children from neighborhood and community centers under the Urban Arts Outreach program. At the arboretum the children explored ecological restoration; at the Madison Art Center they built a cooperative art installation of materials gathered at the arboretum, the unifying theme being the relationship between people and nature. This project carries the concepts of ecology and art to the coming generation, an essential undertaking if the message of ecological art is to have a lasting effect.

Daylighting the Woods *in the University of Wisconsin–Madison Arboretum. Artist Barbara Westfall emphasizes the cycle of life and death in the destruction of flora by burning (left) and girdling (right) in order to restore and preserve the prairie ecological system, which has been disrupted by human intervention.*

In this discussion I have tried to enlarge upon the historic and prehistoric background of environmental and ecological art and to provide some contemporary examples that are closer to the Upper Midwest than most of the works cited in the "Fragile Ecologies" exhibit and catalog. It is clear that this art is not completely new, but rather is a revitalization of very old and widespread ideas for dealing with relatively new and immediate problems. The art represents a continuing trend away from art as moveable commodity toward either the permanent unmovable or the ephemeral. It also places emphasis on cooperation, either as a group or community undertaking or as a participatory, sometimes ceremonial, experience for the viewer. But these are also old and widespread ways in different cultural contexts.

This recent ecological art is more widespread than one might think. The February 1994 issue of *Audubon* magazine describes the work of the Polish-Brazilian artist Frans Krajcberg, who uses the burned trunks and roots of Amazonian trees to protest the destruction of the rain forest. But *Audubon*, like *Sierra*, *Wilderness*, and *National Parks* publications, is preaching to the converted. One can hope that the special skills of artists will help convert a new audience.

In the Art Institute of Chicago's centennial exhibit titled "Chicago's Dream: A World's Treasure," which closed in early 1994, one of the labels commented that in the coming twenty-first century the institute should become a forum for dialog rather than serve only as a temple of culture. "Fragile Ecologies" is the kind of exhibit that provides material for just such a dialog.

Selected Sources

In addition to the catalog cited in the text, which has an extensive bibliography, Lucy Lippard's *Overlay: Contemporary Art and the Art of Prehistory* (New York: Pantheon, 1983) provides excellent background. *Carhenge* is described by Jerry Moore in *Archaeology* (Vol. 45, No. 4, August, 1992).

For the Nazca lines, the most recent comprehensive discussion is found in *The Lines of Nazca* edited by Anthony Aveni (Philadelphia: The American Philosophical Society, 1990), but Johan Reinhard's pamphlet "The Nazca Lines: A New Perspective on their Origin and Meaning" (Lima: Editorial Los Pinos, 1985) should not be overlooked.

Michael Heizer's Illinois effigy mounds are discussed by David Bourdon in *Smithsonian* (Vol. 17, No. 1, April, 1986) and the artworks at Governors State University, in *The Nathan Manilow Sculpture Park* (University Park, Illinois: Governor's State University Foundation, no date).

Information on other contemporary environmental art pieces is derived largely from notices, handouts, and contemporary newspaper articles. Barbara Westfall kindly discussed her art with me recently, including work I had seen several years ago.

The "P.C. Controversy" in American Higher Education

by Robert Skloot

It will probably come as old news that, in the last decade, American higher education has been grappling with the question of political correctness, or P.C. I think it is appropriate to consider the origins of this continuing, disputatious event and to assess its effect on the academic life of America. As with any good story, there are sordid moments and moments of courage, but like most stories after they are shorn of exoticism or romance, the central incidents are attractive to a relatively small natural audience. Nonetheless, I believe that the "P.C. Controversy" has become important in the culture of the United States for what it is, what it can be attached to, and how it can be exploited. And I believe there are lessons to be learned.

In recent years, the term political correctness has been applied to the progressive/liberal/leftist community in American academic life as a way to deplore what the traditional/conservative/rightist community sees as a violation of academic principle and educational values by the surrender to pressure groups representing ambitious minorities and their allies. Thus, to be called "P.C." implies both the insult of "selling out" and the accusation of capitulating to (or being part of) a group of academics whose goals, if achieved, could mean the destruction of what is true and lasting in American culture. In some circles, the debate raises images of apocalypse.

The historical roots of the controversy may be found in four sources which, taken together, provide a context for this discussion: demographic, political, pedagogical and historical, and psychological.

Demographic. Since the 1960s, and with accelerating speed in the last decade, the United States has become a more diverse country. In sections of America, notably in large urban areas, it is common to find ethnic presences unique even in a country that mythologizes itself as "created by outsiders." Sections of most American cities have neighborhoods, usually impoverished, that are predominantly, if not exclusively, populated by one ethnic group or another, and not just African-Americans, whose consignment to financially depressed areas has been a part of American history since the nineteenth century.

In the 1990s, it is common to find areas of cities where English is *not* primarily spoken in communities inhabited by immigrants, some of whom are political refugees (Russians, Haitians, Cubans), or by American citizens themselves (Spanish-speaking areas of the East or the South). Thus, the incremental awareness of mainstream American media to the contrary, America today has become a land of "hyphenates," of people whose citizenship or nationality is American, but whose identity acknowledges—and often celebrates—their non-American origins.

At the minimum, one result of this rapid demographic change is the candid challenge to one of the most cherished (and perhaps misunderstood) myths of American culture: that our country was and is a melting pot, where the price of equality demands the subsuming, even negating, of ethnicity. I will return shortly to this concern with American cultural myths and their rejection; it is sufficient to say here that newer terminology for this demographic experience replaces melting pot with tossed salad.

Political. During the 1980s, the movement of political power shifted sharply to the conservative, or right. The dominant programs during that decade were based on ideas taken from free-enterprise economics and laissez-faire governmental ideology. Thus, the political leadership sent out a message: The greatness of America lies in its traditional approaches to problems, approaches which were established by the founders of the country whose wisdom and vision could be recaptured and thus provide reinvigoration to a country whose economy and morality had been weakened by forces alien to the country's history and detrimental to the country's future. The larger result of this thinking was to convince the majority of Americans that there existed a threat to the country's inner essence, a parallel and even greater danger than international, expansionist communism.

While the Cold War heated up, the danger Americans faced came to be defined as a sort of spiritual decline, or malaise, that required immediate attention. The winning slogan of renewal was "It's morning in America!" However, in so large a country as the United States, morning in one place could mean darkness in another. Until November 1992, opposition to this fundamental shift in political philosophy was fragmented, leaderless, and largely neutralized. The results of electing Bill

Clinton to the presidency on a platform advocating change cannot yet be assessed.

Pedagogical and historical. Over the course of the 1980s, the American university was one of the few places where a challenge to the political ideology could be mounted, or at least imagined, in part because it was one of the few places where a kind of counter-ideology had already existed. This counter-ideology was part of the ragged heritage of the social turmoil of the 1960s and 70s, when American higher education was torn apart (as were many social institutions) by the twin events of the civil rights movement and the war in Vietnam. Overstating the force of this counter-ideology is easy and commonplace, but one specific and conspicuous success acknowledged by educational historians is the ascendancy and hard-won prominence of academic programs that emphasized and institutionalized the political and social issues of the 1960s and 70s: ethnic and gender studies and the multicultural awareness that is part of their ideological charter.

This change in one part of a small part of American higher education has had tremendous impact on the understanding and status of university "culture" as a whole. For one reason or another, it focused an extraordinarily bright light on one aspect of American society about which its citizenry has felt great ambivalence and has possessed great ignorance: the university. It is important to keep in mind that these alterations in academic life affected primarily the faculty and curriculum of the university that are gathered under the heading of the humanities, although some historians, sociologists, and legal scholars could be counted also in its ranks. For the most part, however, disciplines in the social, physical, and biological sciences and preprofessional fields were unaffected, and they largely ignored the theoretical and emotional intensity of the P.C. debate.

The most serious threat was to the image of the university. In the history of American society, one institution least accommodating to change has been the university, not only for its tradition of individualism and autonomy, or its bureaucracy (in the larger schools), but because of its founding principle: that academe functions primarily as a repository of accumulating knowledge, little interested in the transitory, and unimpressed by fashion. Therefore, its dominant ethos articulated the objective of providing education in a very conservative sense: seemingly non-ideological, conservationist, and wholly transmittable.

Anyone who has studied the connections between the business community and the American university will tell you that this description is not only false, it is undoubtedly self-serving. The critics on the left despised this image of neutrality and provoked fierce antagonism by insisting that the reality was otherwise. As in many countries, a function of higher education is to prepare the next generation of leaders trained to think in the patterns that have been academically institutionalized—a citizenship function, if you will. Further, the commitment in so many American educational institutions to maintaining a community that is ostensibly detached from political ideology and frequently prefers offering an enjoyable educational experience in "well-roundedness" to a finely-focused career in critical, skeptical thinking provides an environment precisely suited to intolerance of deviation and excessively preoccupied with revalidating its image. Historically speaking, it was the turmoil on American campuses from the mid–1960s to the mid–70s that provided, on one hand, the revolutionary inspiration, and, on the other hand, the image of academic desecration and despoliation that conservative academics were frightened by and determined to avoid. These are the extreme ends of recent academic controversy and commentary.

One final aspect of the pedagogical/historical underpinnings of the P.C. controversy concerns recent trends, or movements, in the area of literary criticism grouped under the heading of postmodernism. Deconstruction, structuralism, and semiotics fit under this umbrella term, in the most general way, as well as any other theory or methodology that is aligned with the diminution of authorial intention and the conviction that in the search for certainty of meaning, not to say truth, failure is inevitable. These ideas and strategies, mostly taken from French literary critics of the 1960s, gained prominence in American literature departments in the 1970s and 80s and came to be perceived by traditionalists as the work of the unreconstructed (or deconstructed) devil whose overthrow of knowledge and shattering of cohesion produced a chaos that was the inevitable product of colleagues who professed and propagated a belief in universal indeterminacy.

Inside academe, these theories came to be seen by traditionalists as a threat to their very existence, and the most sharply witty of them sought to drive a stake through this theoretical heart of cultural darkness by exposing the bizarre past of the representative of the movement in America, the critic Paul de Man of Yale. In return, the P.C. people were quick to point out with precision and enthusiasm that the idea of a non-ideological universe was as ridiculous as a non-ideological text; both are social and political constructs and reflect the biases and concerns of their times. The critic Edward Said's books on culture and imperialism became influential weapons in their side of the debate.

Psychological. This element provided the energy and acrimony that pulsed through the halls and committee rooms of academic life, destroying the veneer of civility that, in theory at least, was required if academic discourse was to be maintained. Because of the public nature of the controversy, professors often became the objects of scorn and ridicule by a public little concerned with the arcane debates of critical theory, but very upset at their perception of the professorial irrelevance that was interfering with their pragmatic sons and daughters receiving the education they were paying for. Certainly, Americans' traditional suspicions of the value of intellectual life was a notable factor in their concerns, and to say that colleges and universities had a public relations problem was like saying that the *Titanic* had a little problem with ice.

One notable consequence of this attitude in the last several years is the publication of a large number of books, written

for a popular public, which decry the condition of academic life, with criticism aimed at teachers, students, and administrators. These books have provided still more fuel for the fires that raged throughout American society, as well as focusing a kind of general discontent that was largely provoked by the demographic and political changes noted above.

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It seems to me that the ferocity of the P.C. debate was inspired and sustained by one belief that took a host of forms in the 1980s and one which ties all the four historical factors together: an ideology of ownership. Because the dominant economic system of America is capitalism, a system that holds out the promise and ideal of acquisition as the prize for competitive endeavor, it is inevitable that non-economic cultural behavior is guided by this principle also.

The 1980s began with a call to rediscover the greatness in America by owning and consuming. Later, the unleashing of individual enterprise took on international proportions with the demise of capitalism's communist enemy. Thus it came to pass, and still passes, that seeking after commodities and status (a commodity in academe) came to dominate American life in a particularly totalizing way. The reclamation of America's traditional strength and values, it was felt, was a natural conclusion to the enterprise of acquisition.

To academe's critics on the political right, nothing represented the degeneracy of higher education more than the lapsing from traditional curricula and the values inherent in it: orderly truth, univocal authority, and individual initiative. Critics from the left proposed that education, rather than being a grand experiment in democracy, was, in reality, a system steeped in racism, sexism, and imperialism that was reflected in all the cultural institutions of society. For them, Western heritage was repressive, even criminal.

In political terms, what was being advanced by the new (radical) forces was ideological treason, a threat to the very ownership of culture and the authority that insured its hegemony. What new groups of citizens were demanding, they said, was cultural anarchy, unending fragmentation, the acceptance of guilt, and admission of repression. In pedagogical terms, the left's worst attack on the right was the threat to the very idea of intellectual ownership by arrogating to itself a new historical understanding having to do with personal, institutional, and national morality. The right was having none of it.

For the left, the enemy were crypto-fascists; for the right, the enemy were tweedy anarchists. What for one side was the glue which bound a culture together in common purpose and vision was for the other an ideology based on authoritarian (and therefore repressive) strategies doomed to atrophy and self-destruction. What for one side was the free play of intellect amidst the permanently ambiguous was for the other a challenge to both truth and goodness. From the left, critics mocked the fear that gripped the right as delusionary and paranoiac; from the right, critics berated the pretensions of the left as unpatriotic and cowardly. In the assessment of the critic Morris Dickstein writing in *The New York Times* (26 October 1991): "Each side is profoundly ideological; each needs the other to confirm the caricature of a monolithic canon freighted with a particular set of values that one camp upholds and the other condemns."

❦

The contentious debates in higher education frequently concentrated on several issues, two of which aroused the most passion and controversy: the ongoing debate over *the canon* and its collision with the political issue of *free speech*.

Much of the debate in the P.C. controversy centers on the curriculum, on what texts students will encounter, and how they encounter them. It is important to point out again that we are discussing a relatively small area of the general curriculum based in the humanities and, to an even lesser extent, in the social sciences.

In the 1980s, academic life struggled with the same stresses as the general population of the United States, and it became similarly polarized: richer vs. poorer, white vs. people of color, men vs. women, gay vs. straight. What was born was called "identity politics," by which is meant the creation of social and academic programs and the securing of social and academic resources by virtue of a group's race, color, gender, disability, and so forth. Groups which spoke for African-Americans, American Indians, homosexuals, the physically impaired, to name a few, advocated forcefully for their inclusion in the curriculum and for the highlighting of the political context of their academic exclusion. In doing so (and not always with cohesion or unity, as for example the painful split between black and white feminists), they were carrying forward the aggressive strategies of the 1960s and 70s and building on the success of several academic programs of those times, most notably the founding of women's studies programs in universities across the country.

The reaction against this agitation was equally forceful, and the battleground became *the canon*: those authors and texts that over several generations had achieved a seeming permanence in academic life of literature, language, and history departments. The pejorative DWEM (Dean White European Men) acronym was born of this assault against a patriarchal, Euro-centric curriculum that by its very presence announced its inhospitality to most non-white, non-male, non-straight members of society. The reaction to this academic revisionism was summed up by the American novelist Saul Bellow who, in an unkind and condescending witticism, announced his readiness to read all the work of any Tolstoy the Zulus had produced.

The multiculturalists, as the opposite camp is called (although they are not a unified group, either), presented a compelling case for change in academic business as usual. Their arguments were both historical and pedagogical: first, that the canon was always changing (after all, nineteenth-century American education was largely accomplished in Latin and Greek), and also that political reality (for example, the new demographics) demanded that changes be made in what was taught to college students (and, by extension, to secondary and primary students as well).

More extreme advocates spoke of enduring the centuries-long, pernicious effects of exclusion, their erasure from history and "canonized" literature, and the need to remedy the situation if America was to fulfill its promise of equality for all its citizens. (Thus, the very absence of groups or "voices" itself became the subject of intense and passionate study.) And they pointed to the discovery of new knowledge which needed integration into curricula or, at the least, a new perspective on how knowledge was created and viewed. Thus, for example, Afro-centrism was to replace Euro-centrism, or be taught co-equally with it, an idea that the distinguished American historian Arthur Schlesinger, Jr., greeted with derision as the perfect way to lose to failure another generation of young blacks and to insure their ghettoization.

And when the debate degenerated into a rancorous dispute over the ownership of language, especially in the formation of gender-neutral language, hope for finding any middle ground came to seem impossible. (Dinesh D'Souza's joke about changing the term for short people to "upwardly challenged" was exactly on target.)

❦

The particularly American component still missing from this context is a political one: that the United States Constitution guarantees that "the right to free speech shall not be abridged." Whatever this means in theory (and it means a lot of things), in practice it is one of the central ideas inculcated in all Americans from their first years of education. It is part of the creed of American individualism and a source of pride that Americans take in their independence and distinctiveness as a people.

When "political correctness" was perceived as moving from a theoretical debate over curricula to a real battle over censorship, that is, of "the new McCarthyism" or the workings of "thought police," all the disparate elements described earlier came together in a kind of cultural hemorrhaging that has not yet been stanched. On my university campus, considerable time and energy were expended for three years by law professors and others to create what was called a "hate speech" code, a rule mandating the punishment of racist, sexist, homophobic, or other antagonistic, minority-directed speech. It was twice tested in court, found in violation of the Constitution's protection of free speech, and allowed to die in silence.

Predictably, the rule had its supporters (those who saw it as a way to prevent or punish episodes of ugly behavior against women and minorities and felt it was justified as a small diminution of the concept of free speech in order to create a greater good), and its detractors (those who saw it as a pandering to the whining demands of irresponsible interest groups and as a terrible assault on the cherished guarantee of free speech in general and of free inquiry in higher education in particular).

In the long run, what will diminish the university is the banishment of skepticism, the failure of critical thinking, or the refusal to challenge the authority of ownership.

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I have only been able to sketch the outlines of the P.C. controversy, a continuing event in American higher education. It is one way to focus on the larger concerns of American society, which is to say to focus on the ways in which power (or in my terms, ownership) is sought and secured. In a democracy, what is important is numbers, or at least the appearance of numbers, and a cynic might remark that the fierceness of the debate was inversely proportional to the influence of intellectuals in American society.

Higher education became involved because for the first time since the 1960s, overtly political issues concerning social justice attracted the attention of citizens inside and outside the university, in part because the American government seemed to many of those citizens to be ignoring or exacerbating those issues and ignoring higher education as well. During the 1980s, concerns about social problems and crumbling infrastructure seemed to be subsumed within a larger concern for entrepreneurial competitiveness and the specter of an authoritarian "evil empire" threatening democracy elsewhere in the world. Focused so relentlessly on that activity, the government seemed hardly concerned with the issue of the ownership of knowledge; and when it looked to academe, it was more concerned with the kind of commercial (rather than intellectual) partnership that had its origin in concerns relating to profit.

This is not to say that the traditionalists approved of governmental policy (with the notable exception of federal expenditures on research); rather, they seemed content to live under a laissez-faire policy that allowed them to continue to function in ways that they knew best and felt most comfortable with. What was surprising was that the general professoriate, never well organized and not accustomed to involvement in those issues, saw themselves united as victims of an attack from a small minority of their peers and a somewhat larger number of their student "clients." Suddenly at stake was the ownership of the single commodity they possessed—knowledge—and the ways in which knowledge was sought and dispensed. Belief was challenged, composure shaken. Battle lines divided, partly according to the simplistic image of the university they held: as precursor and determiner of change, or as conservator and interpreter of the status quo.

❦

In the battle that is being waged, there is much foolishness and stridency, although there is some evidence that the intensity of the controversy is diminishing. In the short run, there is the change in political control in Washington, where the present administration, at least in its early pronouncements, seems to have taken an active, expansive, and creative approach to its relationship with higher education.

But there may also be something to be learned in the long term.

First, there is the need to acknowledge that historians of education will one day be able to integrate and evaluate current events into their understanding of higher education in American society, including the place it holds on the margins of American society. One literature professor, Gerald Graff, has argued for a number of years that "teaching the conflict" in education is the best way to educate students to the world and to their professional commitments.

Second, the P.C. controversy is a kind of back-handed compliment to the university in general and the humanities in particular, because a truly minuscule number of citizens, with negligible access to money and only a little more to power, were able to touch some of the deepest emotional concerns of America. Perhaps along with the images of melting pots and free speech there is to be seen the image of the greater good that we think education, in our less cynical moments, is capable of producing for those engaged in it. Somewhere in all the heated debate over P.C. is the theory that ideas make a difference and that values can be defined through intellectual endeavor.

Third, as with any two-sided political debate, the centrist position becomes hardest to hold and requires great courage to maintain. Stupidity is never in short supply, not even in academe, and neither is rigidity or paranoia, on either side. There are methods to moderate these tendencies, though alas, never a cure for them. It may be a kind of bizarre optimism to believe that neither deconstruction nor multiculturalism will destroy the university; reading too much or too little of Ralph Waldo Emerson or Henry James or Rigoberta Menchu or Toni Morrison is less important than what we decide we want our country and university to be in the new-dawning century.

In the long run, what will diminish the university is the banishment of skepticism, the failure of critical thinking, or the refusal to challenge the authority of ownership. Already, some on the right are being moved by voices of those they never knew or thought worth knowing; some on the left are coming to see that making literary judgments about value is neither indecent nor suicidal.

Lastly, the effects of this debate are already being felt throughout the large and small pockets of American culture. The 1992 quincentennial commemoration of Columbus's voyage to the "new world" was not anything like what was planned originally, and few think we are the worse for the revisioning of the celebration. David Mamet's newest Broadway hit, *Oleanna*, is reaping box office profits from its provocative discussion of P.C., and theater departments throughout America's universities are in the vanguard of coming to grips with the questions of cultural production in their studies of texts and in their productions of those texts. There are many other examples we could cite.

Slowly or quickly, according to one's politics, we are acknowledging that we live in what Edward Said has called "the large, many-windowed house of human culture," and that nobody—or everybody—owns it. It is not bizarre optimism to say that this is some kind of progress.❧

This essay is derived from a lecture presented by Robert Skloot in Austria during the spring of 1993 sponsored by the United States Information Service.

For further reading:

James Atlas. *Battle of the Books* (New York: Norton, 1992). A discussion of the curriculum controversy reflected through a personal testament to the power and effect of traditional literature in one man's life.

Patricia Aufderheide, ed. *Beyond P.C.: Toward a Politics of Understanding* (St. Paul, MN: Graywolf Press, 1992). A collection of essays about the P.C. debate "with passionate volleys across ideological and cultural lines."

Paul Berman, ed. *Debating P.C.: The Controversy Over Political Correctness on College Campuses* (New York: Dell, 1992). An anthology of essays by the central players in the P.C. game. Good introduction by Berman.

Richard Bolton, ed. *Culture Wars: Documents from the Recent Controversies in the Arts* (New York: New Press, 1992). An anthology of primary documents taken from the recent debates over governmental funding for the arts in America. Illustrated.

The Changing Culture of the University, a special issue of *Partisan Review* (Spring, 1991).

Dinesh D'Souza. *Illiberal Education: The Politics of Race and Sex on Campus* (New York, Free Press, 1991). A major book about the P.C. controversy by a young, articulate critic from the political right.

Mark Edmundson, ed. *Wild Orchids and Trotsky: Messages From American Universities* (New York: Penguin, 1993). A collection of critical essays "on the major changes in liberal education in the last few decades."

Gerald Graff. *Beyond the Culture Wars: How Teaching the Conflicts Can Revitalize American Education* (New York: Norton, 1993). An upbeat proposal to restructure higher education by focusing on the educational conflicts themselves.

bell hooks. *YEARNING: race, gender and cultural politics* (Boston: South End Press, 1990). A personal statement about the need to maintain the struggle against racism, sexism, and imperialism while recognizing the temptations to get "lost" in postmodern theory.

Paul Lauter. *Canons and Contexts* (New York: Oxford, 1991). A humane exploration of how to reform American higher education by recognizing the influences on its teachers and on the creation of institutionalized practices, e.g., "the canon."

David Lehmann. *Signs of the Times: Deconstruction and the Fall of Paul de Man* (New York: Poseidon Press, 1991). A spirited and witty attack on deconstructionist theories using the life and career of Paul de Man as its focus.

Arthur M. Schlesinger, Jr. *The Disuniting of America* (New York: Norton, 1992). A temperate call for compromise and commonality by a senior distinguished historian.

Charles Sykes. *Profscam: Professors and the Demise of Higher Education* (Washington: Regnery, 1988). A passionate denunciation of the corruption in academe, with the blame put on the professors "on the left."

Greg Anderson: Scenes From a Weekend of Music, New Orleans Style

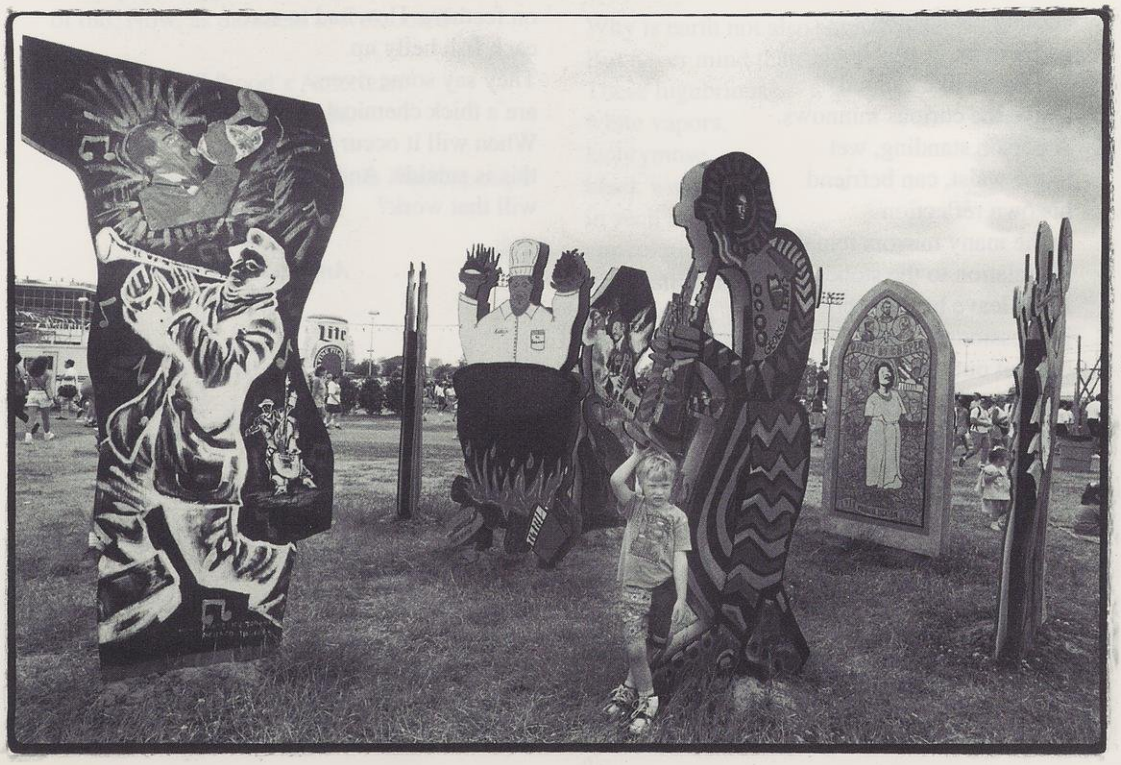
"Chance favors the prepared mind."
Louis Pasteur

The famous photographer Henri Cartier-Bresson was once described as having an acute awareness of his surroundings—so much so that he could identify and capture on film that "decisive moment" when forces came together to illustrate that which he was prepared to photograph. He was described as having an ability to put himself in a state of grace with chance.

It is this type of photography that has always intrigued me the most. I admire those photographers who, through keen observation and preparedness, can express the full range of the human condition.

Greg Anderson


Louisiana
HERITAGE
FAIR
B-97
STAGE


Life

A Tribute to Rivers

Once the river, teeming
with tadpoles, stalked
by crayfish, housed
crafty old carp and was
a haven for children
who stripped to birthday suits
and hugged black inner tubes,
letting the current pull them
to the rapids before
they kicked. Sometimes
they canoed by the quiet
banks watching yellow lilies
open in the sun
like miniature Buddhas.
The brazen water bugs
never ceased to amaze them
charging across the surface
like busy streetcars.
They liked to secretly
stare at a snapper
as it pivoted its
beady eyes or pushed off,
its truncated paws closing
like steam shovel jaws.

A river has many shadows:
the ghosts of light
that play on the side of a boat,
the darkness of leaves
cooling the shallows
under trees. A row boat
can hover like a cloud
above the curious minnows.
A person standing, wet
to the waist, can befriend
his own reflection
in the many mirrors remaking
his relation to the stones.
Birds leave brilliant brief
impressions. Clouds
can put out the sun
like a candle just when
you need to warm
after a swim so you get
a case of the pimply jumps.

Sound really does carry
over water. Too bad the
high whine of a motor isn't
as sweet as
a sheet of rain
pitting the grey surface
or soothing as the waves
retracing the sand ridges
in their infinite returning
kisses.

Why is the bottom mud
with its pockets of cool
such a shocking delight to toes?
And the slimy green weeds
so disgusting to the thighs?
Why are picnic tables
so full of splinters
you must spread a towel
to sit? The Indians
must have been more comfortable
seated on their blankets
when they left those bleached shells.

How I hate to see the rubble
left by others, the broken
bottles and combs, burned corks,
plastic spoons, sandals, fish lines
and rusty cans. All the film
on feathers. How sad to see
each fish belly up.
They say some rivers
are a thick chemical soup.
When will it occur to them
this is suicide. And when
will that work?

Angela Peckenpaugh

July Scene

An eighth floor view
of the city's lake
as the crowd gathers
for the celebration of the 4th.

In the center is another
apartment building with windows
facing the view. In one room
a woman in a red dress looks out,
mirrors behind her reflecting
her classic pose of expectation.

To the left, the white boats
assemble like a family of eager swans,
their lights beginning to flicker
echoing the early stars.

To the right, a ferris wheel
at the amusement park
turns its colors in clockwork
like an electric flower
changing daily, a motor
simulating the lively heart,
a sea creature
beckoning in the wet currents,
an excited breast.
A group gathers on a roof,
pennants flying, their antic
drifting like a gladiatorial audience
of old. Now, as darkness is welcomed

they relive childhood's American
certainties they hope to hold.

Angela Peckenpaugh

Afterward

At last I could tell you
How it was with me,
The muddling through,
Rather than the good news
I thought you needed to hear;

And you, poor sorrowing ghost,
Would know, after these six years
Abroad in the world, that no one escapes
Sorrow and grief and fear—
And if we'd wished to,

When would we learn to take fear
On our laps, sit with grief
At the wake, split sorrow
Like an old skin
To dry new wings in the sun?

As, surely, we have done.

Robin S. Chapmans

Southern Hemisphere of the earth photographed from a U.S. weather satellite

Why is earth not also capitalized?
But never mind that.
These lugubrious
white vapors,
lachrymose,
black water
in such abundance,
convolutions
of the streams,
trade winds,
the sacred disc
of the ice-cap,
tatters of cloud
brought about the world
is dying, dying—
there is the Cape of Good Hope.

Brent Dozier

SACRED GROUND: AMERICANS AND THEIR BATTLEFIELDS by Edward Tabor Linenthal. Chicago and Urbana: The University of Illinois Press, 1991. 227 pp. $29.95.

by Richard H. Zeitlin

Edward Tabor Linenthal's *Sacred Ground* is an account of the genesis, construction, and operation of six American battlefield memorials. A professor of religious studies at the University of Wisconsin-Oshkosh, Linenthal examined such well-known sites as Lexington and Concord, the Alamo, Gettysburg, Little Bighorn, and the *U.S.S. Arizona* memorial at Pearl Harbor. What makes *Sacred Ground* so interesting is its focus on the process by which groups have vied with one another over the years to control the interpretation of these battlefields.

Because the six battlefield memorials Linenthal studied possess symbolic and emotional vitality, the struggle over controlling public interpretation becomes a valuable exercise for competing groups. Linenthal documents how various groups advanced differing interpretations of the battlefield memorials so as to buttress particular social or political agendas. He outlines a system classifying the stages of changing historical interpretations characterizing the stages as veneration, defilement, and re-definition.

During the initial stage in a battlefield memorial's existence, an official orthodoxy is established. Patriotic rhetoric, monument building, landscaping, and physical preservation combine to mark a battlefield site as sacred ground. The memorial then takes on its own life as people flock to the shrine where they can be inspired by its interpretive message. Veneration takes place as the site promotes a belief that the commemorated war was a noble crusade and its participants heroic figures.

Defilement as a stage of dynamic change comes about when a group contests the orthodox interpretation. In the case of the Alamo, Mexican-American organizations criticized the Alamo as a symbol of the creation of Texas by imperialistic (and racist) Anglo-Americans. Especially during the activities associated with the sesquicentennial of the battle in 1986, Chicano leaders demanded recognition for the numbers of Tejanos (Texans of Mexican background) who supported the war of independence and who served alongside the Alamo's defenders. Other Hispanic leaders believed that the Mexican soldiers who were killed storming the Alamo should be remembered.

Finally, an accommodation was reached. A new interpretive exhibit on the Alamo mission's pre-battle past was installed. Remembering the Alamo came to include notions of multi-cultural civic pride, the eternal struggle of freedom against tyranny, and recognition of the site's strong Mexican cultural heritage. The concept of heroic orthodoxy was not replaced, but some type of reconciliation took place.

The process of veneration, defilement, and re-definition greatly affect the management of American battlefield memorials. Linenthal credits the National Park Service (NPS), which operates three of the sites he examined, for its ability to accommodate competing interests. In the book's chapter on the Little Bighorn site, for instance, Linenthal recounts how the centennial of Custer's Last Stand in 1976 witnessed a dramatic confrontation between representatives of the established orthodoxy and the heretical forces of defilement led by Russell Means of the American Indian Movement (AIM).

Standing fast against the orthodox view of the heroic nature of Custer and his Indian-fighting cavalrymen as well as AIM's "impious" belief that Custer was a nineteenth-century harbinger of Lt. Calley, bent on committing atrocities akin to those inflicted almost a century later at My Lai, the NPS began promoting a re-definition of the battlefield's interpretive message. The name of the memorial was changed from the Custer National Battlefield to the Little Bighorn National Battlefield. Park service printed materials and lectures now include the modern historical interpretation, which views the events surrounding Custer's Last Stand as a "vivid feature of a long and tragic episode in our country's history." The efforts of the Indian peoples to maintain their way of life are now acknowledged, and a memorial to the Native American participants of the battle is to be developed at the site.

Sacred Ground has flaws. It omits mentioning a body of literature dealing with historical revivalism or the use of material culture in commemorative contexts. It does not describe the creation of the patriotic orthodoxy interpretation (with reference to class or gender distinctions and in service to an elite perspective). It does not explicitly discuss aesthetic properties. It also is presentistic, developing its contextual force mostly by focusing on modern examples.

Yet, Linenthal's work is fascinating. His histories of the six battlefield sites themselves and the ideas associated with the functions of these sacred places is original. The book is well written and would appeal to academics and non-academics alike. Historic site administrators will greatly benefit from *Sacred Ground* for its insightful treatment of management issues that could apply to various locales in addition to battlefields.

Richard H. Zeitlin is director of the Wisconsin Veterans Museum which opened on Capitol Square in Madison in 1993.

SACRED SPACES AND OTHER PLACES: A Guide to Grottos and Sculptural Environments in the Upper Midwest by Lisa Stone and Jim Zanzi. Chicago: The School of the Art Institute of Chicago Press, 1993. 184 pp. $14.95.

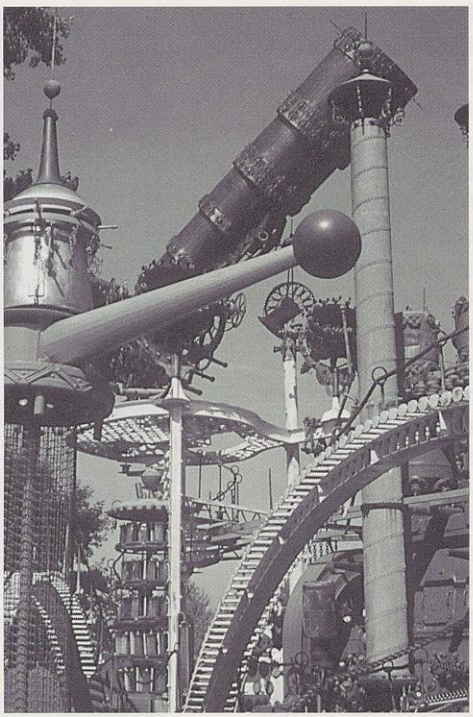
by Donald E. Thompson

This is an interesting and useful book, which I fully intend to use in the future as I visit and learn more about some of the sites described. At the same time, it is a slightly frustrating book in its selection of sites. Perhaps this frustration is in part a result of the authors' attempt to write simultaneously a travel guide and an art historical study.

The book is an outgrowth of an exhibition and an art-history travel class at The School of the Art Institute of Chicago,

the subject of which, to quote the exhibition subtitle, is "The Artist in the Landscape of the Upper Midwest." With appropriate map and site directory, the book covers Wisconsin, Illinois, Iowa, and part of eastern South Dakota and largely concerns itself with what has been variously called "naive," "informal," "grass roots" and "outsider" art. Both extant and destroyed sites are included.

The authors begin with a full discussion of religious grottos, including the work of Father Paul Dobberstein in Iowa and Wisconsin and Father Mathias Wernerus, builder of the well publicized *Dickeyville Grotto*. The history of these and other grottos is discussed in depth and often illustrated with reproductions of postcards and early photographs, which give one a feeling for the places at the time they were built. I often hear people dismiss these grottos as "tacky," yet they fall within a tradition of European religious (and secular) grottos, ranging from Homer's abodes of nymphs through the elaborate and often allegorical garden grottos of Europe to the fantastic creations of "Mad" King Ludwig II. Certainly, they also can be considered as examples of the art of assemblage, upper midwestern counterparts of Simon Rodia's *The Watts Towers*, and not all that far removed from some of the work of the remarkable Catalan architect, Antoni Gaudi. Admittedly, none of these points was probably foremost in the minds of these priests, yet their work should not, in my opinion, be so unceremoniously dismissed. This book helps put the grottos back on the art historical map, so to speak.



Tom Every's spectacular assemblage sculpture, Forevertron, *is omitted from* Sacred Spaces and Other Places.

Little known sites such as the Paul and Matilda Wegner Grotto *are included in* Sacred Spaces and Other Places.

The next section deals with more personal environments, usually built around the home. Fred Smith's well-known *Concrete Park* in Phillips is included here, as are the less frequently visited *Paul and Matilda Wegner Grotto*, which closely reflects the ecclesiastical ones, and a number of other sites. Background material and illustrations, often old ones, accompany the descriptions.

The depicted landscape, which comprises the third section, begins with a discussion of fraternal societies and leads on to a detailed analysis of Ernest Hupeden's *The Painted Forest*, a combination of landscape and Woodman fraternal ritual, miraculously preserved on the walls of a former lodge. This leads into a discussion of panorama painting, which may have inspired Hupeden, and finally to the spectacular and influential photography of H.H. Bennett and his Kilbourn City (Wisconsin Dells) studio, which one may still visit in season.

After discussing a few more sites, the authors continue with a description of art history at The School of the Art Institute of Chicago, including a touching personal reminiscence of Helen Gardner, author of *Art Through the Ages*. The book concludes with the site directory and map.

As I remarked in the beginning, this is an interesting book with much historical and cultural background material. But I wonder about the choices as to what to include and what to omit. If Smith's *Concrete Park* is included, why are Tom Every's fantastic assemblage sculpture, the huge *Forevertron*, and other pieces omitted? If Pendarvis is included, even if only peripherally, why not Villa Louis or Old Wade House? At the end of the site directory five, "Rest Stops" are listed: two restaurants, a bar, a motel, and Wyalusing State Park—all great places, no doubt, but too selective to be worth the space. I also am fond of Wyalusing, for example, but Devil's Lake is just as spectacular, is fairly close to H.H. Bennett's Photo Studio, and was actually photographed by him. Still, it is not included. And I could list other parks, restaurants, etc., that seem just as appropriate. These personal quibbles, however, should not be allowed to detract seriously from the overall value of this most interesting contribution to the artistic landscape of the Upper Midwest

Donald E. Thompson is emeritus professor of anthropology at the University of Wisconsin-Madison.

DOC SAVAGE: ARCH ENEMY OF EVIL by Larry Widen and Chris Miracle. Milwaukee: Fantasticon Press, 1993. 168 pp. $24.95.

by Norman Gilliland

Scenario: It's 1938 and Superman, newly arrived on the comic book scene, flies to the Arctic to build his Fortress of Solitude. The Man of Steel approaches the perfect place on the ice and—what's this? Someone has beaten him to the neighborhood. Someone has already put up a Fortress of Solitude.

And not just *any*one. This Arctic sojourner is Doctor Clark Savage, Jr., known to millions of eager pulp readers as Doc Savage. Unlike Superman, Doc Savage is a native of planet Earth, but his powers approach the superhuman, and his origins are the subject of much wild surmise. Thanks to the devoted delvings of authors Larry Widen and Chris Miracle, we have at our fingertips just about all the data available regarding this colossus of crime-fighters.

They give us synopses of all 182 Doc Savage pulp adventures, profiles of the half-dozen colorful members of his inner circle, a biographical sketch of Doc himself, and the story of his creation.

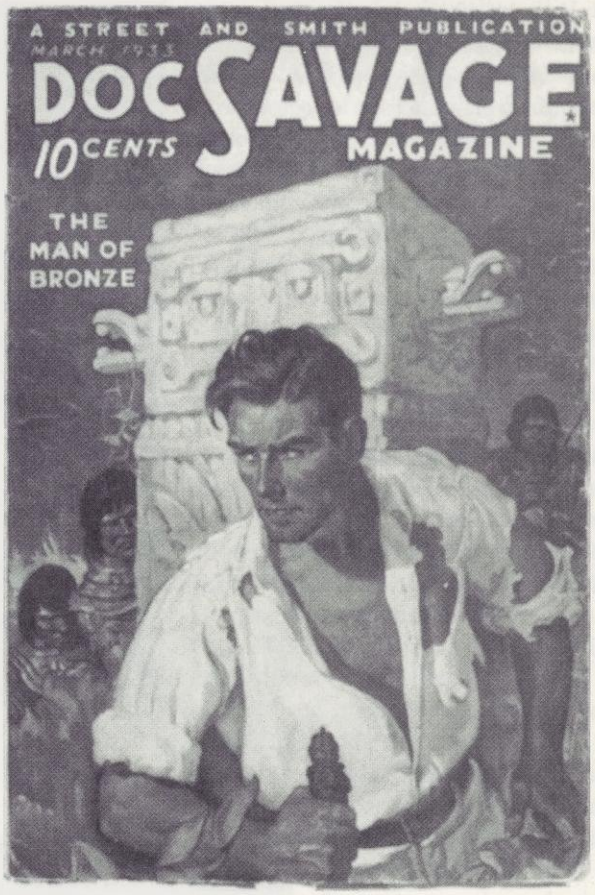
Doc Savage was the invention of someone far less imposing—the editorial staff of Street and Smith, a leading publisher of pulp fiction magazines. During the Great Depression, which left many people powerless to pay for their next meal, Street and Smith spun a series of superheroes, including The Shadow and Doc Savage. Millions wanted an escape from the everyday grind, and Street and Smith prospered by providing it.

Along about 1933 they brought in a bespectacled young Missouri pulp-writer, Lester Dent, to bring their concept to life. Dent conjured a character with the physique of Tarzan, the deductive powers of Sherlock Holmes, and the surgical skills of Dr. Watson. Thanks to an inheritance of Mayan gold, Doc Savage also has the bankroll of John D. Rockefeller

For his headquarters he has the entire eighty-sixth floor of the Empire State Building, an area well-suited to his six-foot-eight-inch frame. Doc's "garage" is similarly impressive—a warehouse hangar on the Hudson that accommodates his personal dirigible, submarine, and other gizmos, including something called an autogyro.

In a decade that sought to cure social ills via lobotomies and sterilizations, Doc has his own secret "crime college" somewhere in Upstate New York, where he and his surgical proteges expunge the criminal memories from the brains of apprehended evil-doers. To his lobotomized charges Doc offers an additional service-job placement at one of his many entrepreneurial outposts.

As the times changed, the needs of the readers changed, and Doc responded. When the Depression gave way to World War II, most of his toys and trappings of the 1930s fell by the wayside, and so did the uncrackable self-confidence and demeanor of the man himself. The criminals took the form of



Volume 1, Number 1, March 1933.

Nazis and Japanese and their minions. By 1949 it was all played out, and Doc went into suspended animation, so to speak, until 1964 when Bantam began issuing a series of reprints that lasted through 1990.

But this evolution is most apparent in the Doc Savage cover art that spans six decades. Authors Widen and Miracle have provided Doc's fans with every pulp cover and every Bantam cover, the work of several artists whose tastes and skills and image of Doc varied considerably, although in the reissues they seem to agree that Doc had a heck of a time keeping a shirt intact.

Widen and Miracle grew up together in Milwaukee and encountered Doc as young readers. They have given us a book that is great fun, a fast-paced romp with The Man of Bronze. (Yes, he also beat Superman in acquiring a metallic moniker.) For the two authors, it clearly was a labor of love. For the hardened fan, it is a must-have companion; for the Doc novice, a backward glance at a time when a dime could buy you an adventure almost beyond imagining.

Norman Gilliland is the music & arts director for Wisconsin Public Radio and host of "Old-Time Radio Drama," which airs Sunday nights on its Ideas Network.

MIDWESTERN FOLK HUMOR, compiled and edited by James P. Leary. Little Rock: August House, 1991. 268 pp. $11.95 paper.

WHAD'YA KNOWLEDGE? by Michael Feldman. New York: William Morrow, 1993. 218 pp. $15.00 cloth.

by James A. Gollata

Leary's book could more accurately be titled *Upper Midwestern Folk Humor*, for as the compiler points out, most of the jokes and stories offered come from Minnesota, Wisconsin, and the Upper Peninsula of Michigan, with only a bit of overlap from adjacent sites. But the rest of the title is acutely accurate, since the tales within are definitely folksy and certainly humorous. Included are entertaining oral tradition narratives about interrelationships between and among individuals and groups, and commentaries on the nature of work and the workings of nature. Most are reflective of universal human activity and concerns, and many are specific to the particular locale. Several are recognizable as having entered or come from the larger sphere of American culture.

The first section of stories reflects the humor of various ethnic groups in approximate order of appearance in the area: Indians, French, Cornish, Germans, Irish, Scandinavians, Finns, Poles, and "Other." From these, stock characters evolve to explain acceptance of or bewilderment with the world. Jan brags to Mary Jane that he has taken her over "the rough spots in life," to which she replies "and you haven't missed any either." Ole wonders why the Bible "says a whole lot about St. Paul, but it doesn't say a thing about Minneapolis."

A second section presents entries about past and/or endangered occupations of the area, with the loggers, the miners, and the farmers: "It was so windy, the hen laid the same egg three times." Finally we are introduced to the townsfolk (the minister "said the grace so long that even the potatoes closed their eyes") and the hunters and fishers, with their traditional stories of encounters with the denizens of the wild.

The book contains a detailed, critical introduction (actually an extensive bibliographic essay on folk narrative) by W.K. McNeil, of the Ozark Folk Center at Mountain View, Arkansas. It also offers collection notes with detailed information on the tellers and locations of tellings, photographs of some of the tellers, a bibliography, and indices of tellers and place names.

Because of the methodology of collection—during storytelling sessions in various locales—and Leary's consequent nearly verbatim transcriptions, the reader must adjust to the style of presentation of some of the tellers, with their chatty, repetitive introductions and conclusions, which at first appear a bit odd in print. It is well worth the little effort required, however, and Leary offers a book of fieldwork and scholarship which is nonetheless very funny. This is a rarity and a delight.

❦

Another delightful rarity is "Whad'Ya Know," Michael Feldman's Saturday morning comedy show on American Public Radio, originating in Madison, on which *Whad'ya Knowledge?* is based. Following the show's quiz categories of "People," "Places," "Things You Should Have Learned in School," "Science," and "Odds and Ends," Feldman presents the typically obscure and/or outrageous questions that he would normally ask of his in-house and call-in contestants. If the quiz questions are sometimes strange and generally humorous in themselves, what is funnier is Feldman's interpretations of and wry comments on the answers, both on the air and in this book. An example: *Question*: Among people who said they would be celibate for life "if the money were right," what was the going price? a) one million b) four to five million c) ten million, and a bonus for signing. *Answer*: b. Then they go and marry and do it for nothing.

Just like listening to the radio. More overtly funny than his book of semi-autobiographical pieces (*Whad'Ya Know*, 1991), this book better succeeds because it directly reflects Feldman's talents as a master of amusing radio repartee.

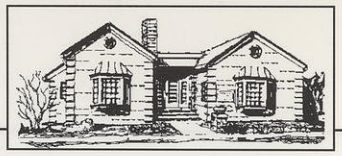
James A. Gollata is director of the library at the University of Wisconsin Center–Richland (Richland Center), where he teaches an Elderhostel course on humor. This is his 101st published book review.

Contributors

Continued from page 3

American History at the University of Wisconsin–Madison and is currently a doctoral candidate in the Department of History there, writing his dissertation on World War II veterans service officers.

► Richard H. Zeitlin is the director of the Wisconsin Veterans Museum in Madison. He graduated from Queens College of the City University of New York with a B.A. degree in history and earned an M.A. and Ph.D. in American history at the University of Wisconsin–Madison. He has published a number of works on topics related to Wisconsin history, immigration history, and environmental history, as well as on veterans and U.S. military affairs.



Business and Education Partnerships: Excerpts from the Project Linkage Report

by Karen Angeline

In 1992 the Wisconsin Academy embarked on a project whose purpose was to increase the quality and quantity of partnerships between Wisconsin schools and the business community. Areas of K–12 mathematics, science, and technology education were to be the focus of the effort.

In December 1993 the Academy published The Struggle for Solutions: Stories from Wisconsin Business-Education Partnerships. *The publication explored the successes and problems of four partnerships which achieved enough stability and visibility to have made a solid impact in their respective communities. Excerpts from two of the case studies are offered here.*

I. Partnership of Industry and Education to Improve Science Instruction

In 1987, several individual partnerships were percolating in Racine and Kenosha. The University of Wisconsin–Parkside was working on staff development programs; Johnson Wax Corporation was bringing its scientists into local classrooms and talking with teachers about what else they could do for the schools; and other things were going on too, but no one project seemed to know what the other was up to.

Eventually, a coalition was formed and these education reform projects came together to seek grant funding. During the two years that funding was available, the members worked together as best they could. A six-part program was developed, called the Elementary Science Education Project. The following is a list of its parts:

► *The Science Resource Network*: Industrial or university scientists from the community became partners with fourth- and fifth-grade teachers, presented workshops and in-services, served as classroom science resources, presented annual specialty projects, and worked with teachers and students on science fairs. This program forged strong links among education, business, and industry.

► *Science Fellows Teacher Training Program*: Elementary teachers without science backgrounds participated in all-day workshops on teaching science and designing curricula. This training prepared them to serve as on-site resources for the other teachers in their individual elementary schools.

► *Elementary Science Alliance*: In this networking opportunity for faculty from schools and post-secondary institutions, participants shared experiences, knowledge, curricula, and teaching techniques through demonstrations and workshops.

► *Science Specialists*: This segment played the pivotal role in coordinating the first three programs. Funded by the Racine and Kenosha school districts, the specialists were the science equivalents of in-school music and art specialists. They served as the contacts for businesspeople, scientists, and teachers wishing to participate in the Science Resource Network, and they encouraged teachers to participate in the Science Fellow and Science Alliance programs. They also kept their colleagues informed of changes in science-teaching methods and content and helped them get comfortable teaching science.

► *Incentives and Awards*: Teachers received mini-grants of up to $250 to help fund classroom projects that showed unique approaches to science education. Annual awards and recognition for excellence in science instruction were also planned.

► *Science Education Advocacy*: This subcommittee of the council monitored federal, state, and local events pertaining to education. The subcommittee summarized the events, made recommendations for action, and sent them to community leaders in Racine.

In addition, the effort resulted in a mobile science exploratorium called the Great White Wave Machine—a large van with eye-catching graphics on the outside and a lab on the inside. Here students could do activities with sound and light waves. All the materials, ideas, and labor for this project were donated by local businesses, scientists, and teachers.

Members of the council enjoyed working together compared with the isolation of working alone. However, things started to change when the council reapplied for its National

Science Foundation grant and was turned down for funding. Gradually, over a year or two, the programs administered by the council reverted to being "owned" by the individuals who had brought them to the table in the first place.

Now, more than five years later, the formal council has dissolved, although the key players are still individually active in their own programs, which operate in much the same way they did before the council was formed. Upon examination of the programs today, it is clear that considerable energy is still going into some of them. So why didn't the council continue to function as a group partnership?

One key reason, already mentioned, was the absence of the National Science Foundation support or other funding after its first two years. Without the funds, the council apparently didn't see much reason to keep working as a group.

Another possible reason for drifting apart was the fact that the council did not develop a formal mission or plan that stood apart from the individuals' work on particular pieces of the project. Further, the project never put aside or was able to raise funds for an administrative coordinator. Realistically, there was just too much administrative work for volunteers to do, according to one of the participants.

In addition, turf skirmishes erupted when one part of the council—perhaps lulled by the "collective" identity of the project—occasionally took credit or public recognition for programs it wasn't technically involved in.

These problems suggest symptoms of unclear vision and undistinguished lines of authority within the partnership—symptoms which left unaddressed in any partnership can cause long-lasting difficulty.

Primarily, however, the major problem was funding. Unfortunately, without the financial resources to create a centralized position, and also without a centralized vision for the project, none of the chief players have much hope for the partnership council to re-form.

II. Adult Role Models in Science (ARMS)

The heart of this partnership is one-to-one role modeling—a volunteer scientist or other professional spends time working with students in their classrooms, acting as living proof that science matters. The partnership was initiated by the Downtown Madison Kiwanis Club in 1988.

What initially brought Kiwanians into the elementary schools was a national Kiwanis service project called Terrific Kids. In Madison, Emerson School was chosen as a project site where volunteers worked with students in such areas as special education, reading, and writing. Emerson was chosen because of its diverse student population (28 percent minority).

While working with Emerson students, some of the volunteers who had backgrounds in science started to think that science topics should be part of the program, so they decided to spin off a science component from the original Terrific Kids program. It would be called ARMS.

ARMS received a grant from the University of Wisconsin–Madison's Center for Biology Education, and the grant was renewed after the first year. It provided funds for microscopes and other equipment and for a thirteen-hour-a-week, on-site coordinator for the fledgling program.

After two years, things were going well at Emerson, and ARMS decided to expand to three more Madison schools. Another grant was sought and received—this time from the Madison Community Foundation—which funded the project for two more years.

The continuity in leadership provided by the administrative coordinator was a key factor in the program's success. Exciting projects such as science fairs and evening programs for parents and students with lively demonstrations often were the catalyst for teacher and community involvement. Out of 460 Emerson students initially, over 250 participated in 175 projects. By the second year, 391 students had participated in 200 projects.

Parent and business-community support, the amount of time the coordinator spends with the teachers, and thorough training of volunteers all contribute to the success of the program. Right now, one of their most challenging issues is getting the volunteers' employers to understand the value of their employees' contributions. From the perspective of the teachers, learning to use the volunteers is also critically important.

Finally, a key part of the project is continuing to plan for the future. ARMS would like to expand to more elementary schools and possibly go into middle schools as well. In addition, it hopes to include two Madison parks as educational sites, allowing students to do hands-on projects in a field setting with their teachers and volunteers. Eventually, they would also like to work with the Madison Children's Museum. And, of course, ARMS continues to value its relationship with the business community.❧

Karen Angeline coordinated Project Linkage for the Wisconsin Academy. Copies of the complete report, which covers all four programs, are available without charge.

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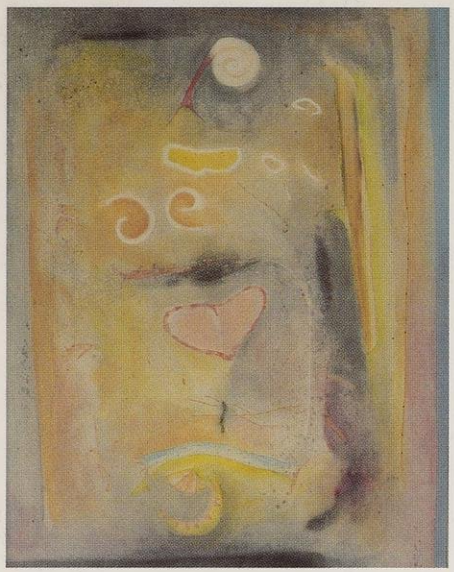

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