



LIBRARIES

UNIVERSITY OF WISCONSIN-MADISON

Wisconsin Academy review. Volume 35, Number 2 March 1989

Madison, Wisconsin: Wisconsin Academy of Sciences, Arts and Letters, March 1989

<https://digital.library.wisc.edu/1711.dl/M7VWMQPYN447R8P>

<http://rightsstatements.org/vocab/InC/1.0/>

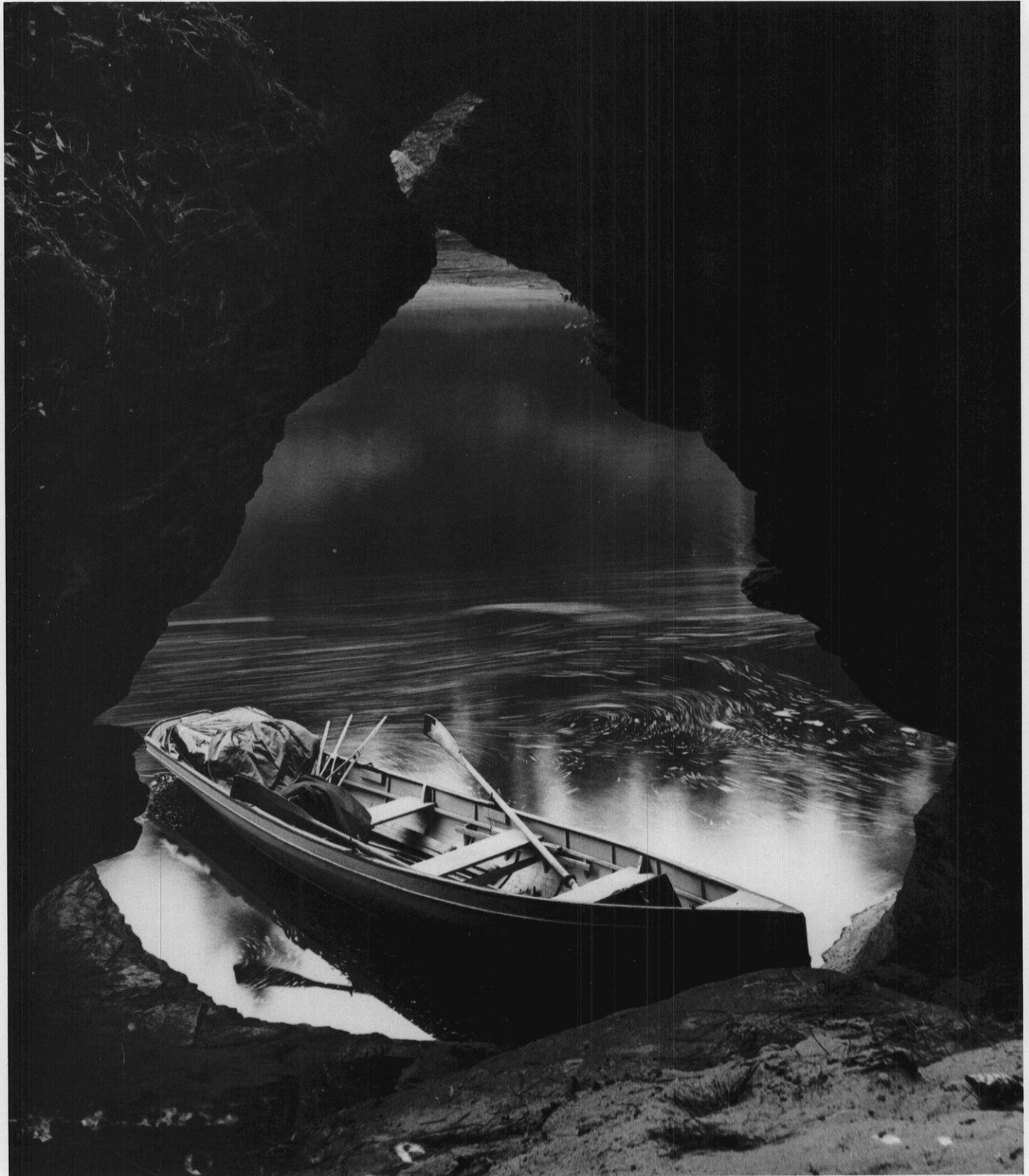
The libraries provide public access to a wide range of material, including online exhibits, digitized collections, archival finding aids, our catalog, online articles, and a growing range of materials in many media.

When possible, we provide rights information in catalog records, finding aids, and other metadata that accompanies collections or items. However, it is always the user's obligation to evaluate copyright and rights issues in light of their own use.

WISCONSIN ACADEMY REVIEW

Published Quarterly by the Wisconsin
Academy of Sciences, Arts, and Letters

March 1989
Volume 35, Number 2



THE WISCONSIN ACADEMY
OF SCIENCES, ARTS AND LETTERS
The Wisconsin Academy was chartered by
the state legislature on March 16, 1870 as
an incorporated society serving the people
of the state of Wisconsin by encouraging
investigation and dissemination of
knowledge in the sciences, arts, and
humanities.

LeRoy R. Lee, Executive Director

Officers

Meredith Ostrom, President
Katharine Lyall, President-Elect
James R. Johnson, Past President
Susan Nurrenbern, Vice President-Sciences
Michael Skindrud, Vice President-Arts
William Urbrock, Vice President-Letters
Pat Blankenburg, Secretary-Treasurer

Councilors

John Barlow, Appleton
Samuel Hope III, Milwaukee
Gary Rohde, River Falls
Terry Haller, Madison
William Stott, Jr., Ripon
Jon Harkness, Wausau
Ann Peckham, Middleton
John Thomson, Mount Horeb

Review

LeRoy R. Lee, Publisher
Patricia C. Powell, Editor

1989 Editorial Board

William Carl Taylor, Sciences
Donald Thompson, Sciences
Warrington Colescott, Arts
Warren Moon, Arts
Gianfranco Pagnucci, Letters
Janet Shaw, Letters
Ellen Hunnicutt, Letters
Dan Perkins, General
Mark Peterson, General

The *Review* (ISSN 0512-1175) is published
quarterly by the Wisconsin Academy of
Sciences, Arts and Letters, 1922 University
Avenue, Madison, WI 53705. All
correspondence, orders, manuscripts, and
change of address information should be
sent to this address. **Distributed to
Annual Members as part of their \$40
dues. Available by subscription at \$15
per year. Individual copies for sale for
\$4 postpaid from the Academy and at
selected Wisconsin bookstores.**

Reproduction in whole or part without
written permission is prohibited. Copyright
© 1989 by the Wisconsin Academy of
Sciences, Arts and Letters. Second class
postage paid at Madison. Typeset at
Impressions, Inc. Printed by American
Printing, Madison.

Sustaining Members

Norman Bassett Foundation
CRAY Research Foundation
John R. Cameron Medical Physics Foundation, Inc.
Evjue Foundation
M & I Bank of Hilldale
Placon Corporation
University of Wisconsin-Eau Claire
University of Wisconsin-Madison,
School of Education
Webcrafters-Frautschi Foundation
Wisconsin Electric System Foundation
Wisconsin Innovarium

Eugenie Mayer Bolz Family Foundation
Exxon Corporation
General Beverage Sales Co.
Janesville Foundation
Madison Print Club
Rayovac Corporation
Wisconsin Council of Teachers of Mathematics
Wisconsin Power and Light Foundation, Inc.
Wisconsin Society of Science Teachers

Patrons

Karl Andersen and Carolyn Heideman
Ira and Ineva Baldwin
Madeleine Doran
Terry Haller
Martha Peterson Gerald and Marion Viste
Frederick Wilson
Joyce and William Wartmann

WISCONSIN ACADEMY REVIEW

Published Quarterly by the Wisconsin
Academy of Sciences, Arts, and Letters.

March 1989
Volume 35, Number 2

CONTENTS

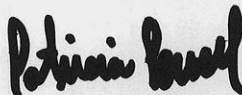
Art History	4	The Cultural Basis for Wisconsin Art Janet Treacy
Law	12	The Largest Jury Verdict in History John Kidwell
Poetry	18	Bathing (poem) Sandra Nelson
History of Medicine	20	Contraception in Antiquity John Scarborough
Poetry	26	One Breath (poem) Antler
Poetry	26	What Child (poem) Brent Dozier
Poetry	26	Rhesus (poem) William R. Stott, Jr.
Poetry	27	Translations of Modern German Poetry Reinhold Grimm
Education	30	Humanities in America Lynne V. Cheney
Education	35	Improving Science, Math, Technology Education David C. Boyer
Poetry	39	Poems by R. C. Chapman
Poetry	40	Poems by Loretta Strehlow
Reader Survey	41	Books That Make a Difference to Wisconsin Readers Faith B. Miracle
Book Reviews	44	Bookmarks/Wisconsin
Poetry	48	Poems by Bonnie Buhrow

On the Cover: Photograph by Henry Hamilton Bennett from the collection of the Milwaukee Art Museum, *Bass Cove*. With permission of H. H. Bennett Studio, Wisconsin Dells.

Editorial

One beautiful fall day we attended a powwow in Wisconsin Dells on the grounds of and hosted by Parsons Trading Post. In some ways this was like any powwow: tepees were set up around the dance grounds; dancers wore outfits of beaded leather with feather bustles; traditional crafts such as porcupine quill work and beading were demonstrated. Dancing was opened by two veterans of foreign wars retrieving eagle feathers. What made this unlike many powwows we have attended was that its primary purpose was social and Anglos and Indians participated in nearly equal numbers. While some dancers were splendidly costumed (1890 Sioux outfit; full wolf-skin headdress over brain-tanned leather), many Anglos and Indians danced in street clothes, and though some did precise toe-toe, heel-heel traditional steps or fancy dances, many were contented with a modulated walk-march. Some drums (the group of five to eight men singing and beating drums is collectively called a drum) were all Indian, some all Anglo, and some mixed, with names like Dakota, Lakota, and Apple Dumpling. The emphasis was not on prize-winning costumes nor dancers but on the pleasures of sharing the beef and fry-bread, smelling the pines, listening to the drums beating out the primordial heart-beat of the universe.

A few weeks later in Chicago we observed a somewhat less exotic form of culture: the Museum of Contemporary Art (MCA), the Terra Museum, and the nearby gallery district. MCA featured a twenty-five year retrospective of German painter Gerhard Richter with over seventy works. Walking from room to room, I could hardly believe the same artist had painted in all these styles: sly and suggestive black-and-white portraits of the famous and infamous taken from newspaper photographs, realistic landscapes; abstract cityscapes in muted tones, enormous geometric abstracts in neon colors, color charts, optical illusions. This retrospective was almost a history of painting for the past quarter century; the artist placed a high priority on exploration of style if not medium. This was my first visit to the Terra Museum of American Art, which opened on April 21, 1987. Built by Chicago native Daniel J. Terra, U.S. Ambassador-at-large for Cultural Affairs, the multi-story building on Michigan Avenue across from the Water Tower complex houses one of the country's finest collection of American paintings, especially from 1850-1950, including Copley, Morse, Whistler, Homer, Cassatt, Sargent, Chase, Prendergast, Dove, Demuth, Hartley, Hopper, Stella, Wyeth, and hundreds of others. Terra made his fortune in the 1930s from a chemical process which allowed a large magazine to print within twenty-four hours instead of requiring a month. His museum is reported to have cost the family \$35 million, and he is also willing to the museum his personal collection of more than 800 paintings, including the Morse "Gallery of the Louvre," which he purchased from Syracuse University in 1980 for \$3.25 million. Though he lives in Washington, he is devoted to the museum, so much so that on the Saturday I first attended he was standing near the admission desk talking to one of the directors. Active and powerful at age seventy-six, he sums up his experience: "Money is fleeting; art is forever."



Patricia Powell

Authors

Antler, a Wauwatosa native living in Milwaukee, has supported himself with his poetry for most of his adult life. He is best known for his long poem "Factory," and for a book of poetry, *Last Words*, published by Ballantine in 1986. He is the winner of the 1985 Walt Whitman national award.

David C. Boyer is the executive vice president of Placon Corporation in Madison. He received his B.S. in general engineering from the University of Illinois at Champaign-Urbana and a Masters of Management from the Kellogg Graduate School at Northwestern University.

Bonnie Buhrow is a research administrator in Madison, where she lives with her husband and five-year-old daughter. She has published poetry in *Cream City Review*, *The Wisconsin Review*, and (forthcoming) *Blue Unicorn* and *The Cape Rock*.

Robin S. Chapman studies children's language development at UW-Madison. Her poems have appeared recently in *Beloit Poetry Review*, *Northeast*, *Nimrod*, *Yankee*, and *Poetry*. Her first chapbook, a set of poems about running called *Distance, Rate, Time*, was published in January by Fireweed Press.

Lynne V. Cheney became chairman of the National Endowment for the Humanities in May 1986. She received a B.A. from Colorado College, M.A. from University of Colorado, and Ph.D. from the University of Wisconsin-Madison in 1970 with a specialization in nineteenth-century British literature.

Originally from Alabama, **Brent Dozier** has lived in Madison for twelve years. He has published poems in *The Gryphon*, *Poem*, *Southern Humanities Review*, *Caesura*, and other magazines including the *Wisconsin Academy Review*.

Reinhold Grimm joined the faculty of UW-Madison in 1967, after having taught at Erlangen and Frankfurt universities in West Germany. Vilas Research Professor of Comparative Literature and German, he has published more than ten books and over a hundred major essays and articles, mainly in German. He has also translated several poets from English to German and German to English. He has been a friend of Enzensberger since their student days in Germany in the 1950s and became acquainted with Kunert when he first published him in the Madison-based journal *Monatshefte*, of which he is editor-in-chief.

John Kidwell is professor of law at the University of Wisconsin Law School in Madison. A faculty member since 1972, he teaches courses in the law of contracts, judicial remedies, patents, copyrights, and property. He did his undergraduate work in English at the University of Iowa and obtained his J.D. in 1970 from Harvard Law School. Most recently he has been involved in establishing a national distribution system, headquartered at UW-Madison, for university-level educational computer software.

Faith B. Miracle is executive director of the Wisconsin Library Association and frequent contributor to the *Wisconsin Academy Review* on Wisconsin authors.

Sandra Nelson publishes poems and stories, most recently in *The*

North American Review, *The Iowa Review*, *Cream City Review*, *The Christian Science Monitor*, *Poet & Critic*, *Kansas Quarterly*, *Wisconsin Review*, and elsewhere. She lives in Milwaukee.

John Scarborough is professor of history of pharmacy and medicine (School of Pharmacy) and classics and ancient history (Departments of Classics and History) at UW-Madison, joining the faculty in 1985. Born in St. Louis, he attended the University of Kansas medical school in the early sixties, then took a Ph.D. in ancient history and history of medicine at the University of Illinois. His research interests generally focus on Greek, Roman, and Byzantine medicine and pharmacy and allied subjects including botany, entomology, and medical astrology, and he is currently working on a translation (with commentary) of Dioscorides' *Materia Medica*. From time to time Scarborough also publishes literary criticism, especially in science fiction.

William R. Stott, Jr. is president of Ripon College, where he also teaches English and ornithology. His poems have appeared in such journals as *Four Quarters*, *Thought*, and *Forum*. He is a graphic artist as well, with his drawings deriving from a lifelong interest in natural history. He is a councilor of the Wisconsin Academy.

Loretta Strehlow is a recent past president of the Wisconsin Fellowship of Poets and teaches a course for adults in writing for publication through Milwaukee Area Technical College. Her poems, short stories, and articles have been widely published in the U.S. and in more than a dozen foreign countries. She lives in Cedarburg with her retired-teacher husband.

Janet Treacy, manager of the Cudahy Gallery of Wisconsin Art since 1987, earned degrees from Mount Mary College and Marquette University. A Milwaukee native, she has served as a board member for the Association of Marquette University Women as well as a review board member for Mount Mary College Starving Artists' Exhibition. From 1978 to 1982, she directed the acquisition of Wisconsin art for St. Joseph's Hospital, Milwaukee. She also served as staff liaison to Artists' Committee of Lakefront Festival of Arts. She curated "The Unique Touch: Monotypes" in the Cudahy and in 1988 she cocurated, together with Assistant Curator Dean Sobel, the Milwaukee Art Museum's centennial celebration exhibition, "100 Years of Wisconsin Art."

Letters

Dear Editor:

I acknowledge the rightness of James P. Danky's objections to the bibliography in my article on private presses in the September *Wisconsin Academy Review* (34:4). Especially I regret misspelling Gretchen Lagana's name, a lapse which I cannot explain. On the other hand I wonder why Mr. Danky wanted a treatise when only "A Look at Some . . ." was offered. I gave four examples of private presses in Wisconsin: the first, the best, and two typical run-of-the-mill presses—one literary and one craft. With detailed background about their setting and with illustrations, I had intended to indicate that private presses are thriving in Wisconsin and that they provide joy in work.

Emerson G. Wulling
Sumac Press, La Crosse

The Cultural Basis for Wisconsin Art

The Early Years

By Janet Treacy

Photographs by P. Richard Eells

The end of the Civil War in 1865 was the beginning of a new awareness of art in America. Museums, art schools, and art magazines appeared. The development of educational institutions, including art schools, became a focus of civic pride. By the end of the nineteenth century, the many artistic influences from abroad were quietly making their way into American culture. As the twentieth century began, so did new traditions for American art.

Many European immigrants bypassed the eastern ports and came directly to the Midwest. Between 1830 and 1850 the immigrants to Wisconsin were mostly German. The German artists brought with them artistic traditions from Munich and Düsseldorf. They encouraged their students to study in Europe to develop technical skills and artistic philosophy, which provided the strong cultural basis for art and art education in Wisconsin. People struggling on the new frontier had little use for sentimental and romantic paintings—still lifes, genre scenes, murals. But by the 1880s people were beginning to appreciate landscape painting. Three fundamental factors—interest in the land, strong belief in formal art education, and emphasis on good draftsmanship and technical skills—bind the strands of art history in Wisconsin.

Painting

The first resident artist in Wisconsin was **Samuel Marsden Brookes** (1816-1892), who moved from England in 1842. He worked in London in 1845-46 to improve his techniques by copying the Old Masters at the National Gallery. Upon his return to Milwaukee, he became well known as a portrait painter. The State Historical Society of Wisconsin commissioned him to paint portraits of prominent pioneer settlers such as Solomon Juneau and Byron Kilbourn. His portraits were traditional and straightforward, but show considerable skill in creating textures and characterizing personalities. Brookes also painted a series of quick sketches of the Wisconsin/Fox River Valley Improvement project. In the 1860s Brookes moved to California and became successful as an American still life artist specializing in fish paintings.

Henry [Heinrich] Vianden (1814-1899), the first German-born artist to settle in Milwaukee, began a long tradition of landscape painting in Wisconsin by teaching a younger generation of artists. In 1849 a third of the population of Milwaukee were German immigrants, and they welcomed the academically trained Vianden as a teacher of painting and drawing. His Düsseldorf style in-



Louis Mayer, *Lady in Black* (Portrait of Carrie Donaldson), 1900, oil on canvas, 31" x 36". Milwaukee Art Museum, Gift of Friends of the Artist.

cluded highly detailed, realistic paintings in a limited range of colors. While traveling, he painted the rivers and wooded areas; he and his students painted outdoors, observing carefully and realistically capturing the scene. Vianden passed on his appreciation of nature to his students Carl von Marr and Susan Frackelton.

Carl Von Marr (1858-1936) also studied in Munich and became known for his portraits and domestic interior scenes. In 1929 the University of Wisconsin at Madison presented von Marr with an honorary doctorate.

In the 1880s a group of professional German-born painters created panoramas—massive paint-

ings rolled on spools and presented to the public in theatres. The movement was short-lived, but one of the group, **Bernhard Schneider** (1843-1907) remained in Cedarburg doing large easel paintings of scenes along the Milwaukee River. Another Panoramist, **Richard Lorenz** (1858-1915) depicted genre scenes, often including horses, both of Wisconsin and the West. He taught Louis Mayer and Edward Steichen.

By the early twentieth century an American style of painting had become more defined, and the German academic style declined. **Louis Mayer** (1869-1969) studied both in Milwaukee and in the academies of Weimar and Munich. Back in Wisconsin he was active in organizing

the Society of Milwaukee Artists in 1901. He progressed from the German academic style of a dark palate and subdued lighting to become more elegant and painterly. In 1912 he moved to New York where he became a well-known sculptor.

American native **Emily Groom** (1876-1975) was more influenced by the Impressionists than the German traditions. Freshness and spontaneity were characteristics of her quick sketches in light and sunny colors. She painted Wisconsin landscapes and still lifes from the many flowers surrounding her Genesee Depot studio. Groom was an influential teacher at the Milwaukee-Downer College and the Milwaukee State Teachers College.



Edward Steichen, *The Pool—Evening, Milwaukee*, 1899, toned gelatin silver print, 13 $\frac{5}{8}$ x 10 $\frac{3}{8}$. Milwaukee Art Museum, Gift of The Milwaukee Journal company.

Photography

In the late nineteenth century photographers as well as painters turned to the American landscape for their subjects. **Henry Hamilton Bennett** (1843-1908) worked in isolation from the art world and appeared unaware of developments in photography. He photographed the dells of the Wisconsin River, inventing his own equipment to make stereoptic photographs of this magnificent scenery. Making his way in a rowboat on the Wisconsin River to choose his subjects, he was known to whitewash deep caverns to gain the lighting effect he desired. He also photographed Indian life, the de-

veloping city of Milwaukee, and the landscape along the new railroad.

Edward Steichen (1879-1973) was studying painting when he began to photograph. He used nature to create abstract forms in his photographs, much like abstract patterns on canvas. The impressionistic treatment of his photographs of the 1890s reflects his training as a painter. Steichen's travels to Paris and New York, and his involvement with Alfred Steiglitz's 291 gallery, brought him in contact with the avant-garde. He moved to sharper images and increasingly abstract forms. In the 1930s he became a commercial photographer for *Vogue* and *Vanity Fair* magazines.



George Mann Niedecken, *Dining Table and Eight Chairs*, c. 1907, oak. Milwaukee Art Museum, Gift of David and Jean Sullivan. Photograph by John Nienhuis.

Architecture and design

The architectural designs of **Frank Lloyd Wright** (1867-1959) from the mid 1890s are indebted to the theories of pure design gaining prominence in Europe and America. From his examination of Japanese prints, Wright learned that nature could be abstracted into geometric forms without compromising its identity. He also learned the importance of structure in a composition. Using both of these ideas to wed his buildings to their sites, Wright generated a new sense of architectural form and space with the development of the Prairie house. The design elements of this unique form, including horizontal bands of windows and hovering roofs, were derived from the long, low undulating lines of the midwest prairie.

Taliesin, a Welsh word meaning "shining brow," was Wright's own home built in 1911 at Spring Green, Wisconsin. Fountains, fireplaces, unexpected large openings within the rooms and its placement on the brow of a hill related Taliesin to the four elements of water, fire, air, and earth. The flowing openness of the

floor plan, derived from Oriental philosophy, was built on the premise of the reality of a room being found in the space itself, not just the walls and the roof. From the theories of pure design Wright ordered his compositions according to simple arithmetical ratios, giving his architecture a classical feeling and a quiet dignity.

Wright wrote profusely in defense of his philosophy. In 1932 Wright established an architecture school, the Taliesin Fellowship in Spring Green. The work-study program developed apprentices in architecture and remains an important vehicle for architectural and social experimentation by continuing to draw new students in to designing buildings that embody Wright's philosophy.

The furniture, murals, and decorative arts designs of **George Mann Niedecken** (1878-1945) reflect his exposure to the Art Nouveau graphic style, the Arts and Crafts Movement, and the study of Japanese prints. Studying under such artists as Richard Lorenz, Louis

Millet, and Alphonse Mucha, Niedecken painted realistic still lifes and landscapes using complex surfaces and linear design elements. The Arts and Crafts Movement in Britain and America gave him a love for fine craftsmanship and simplicity of design. He shared with Frank Lloyd Wright the belief that furnishings should ideally be designed as an integral part of the building structure. Niedecken further believed that the characteristics of the chosen materials should be suited to the given purpose. Niedecken and Wright collaborated on the Frederick Bogk house in Milwaukee in 1917. Niedecken's philosophy of artistic design coincided with the tenets held by Wright. Wright's furniture emphasized perfection of form and design, while Niedecken, with his sense of artistic design, held mastery over technical form and skilled craftsmanship. Their mutual respect led to a collaboration that lasted over fifteen years. Niedecken went on to establish his reputation locally, while Wright became regarded as one of the world's greatest architects.

Cyril Colnik, *Master Piece*, 1891-93, wrought iron, 35" x 48" x 7½". Lent by Gretchen Colnik.

Decorative arts and sculpture

Susan Frackelton (1848-1932) was prominent in the American Arts and Crafts Movement. After studying under Vianden, she displayed an appreciation for nature, often using flowers as motifs for her china painting. Her salt-glazed ceramics utilized the accessible and inexpensive local cream clay. She made her techniques available to others through her book *Tried by Fire*. Earning her livelihood teaching china painting until this art form went out of vogue, she enabled other women to be professional and productive as artists.

Rejecting the idea of a colony of artists, **Cyril Colnik** (1871-1958) pursued his individual course. Along with a group of twenty mastersmiths from Germany, Colnik came to Chicago in 1893 for the World's Columbian Exposition. As an art metalsmith, he took two years, from 1891-93, to complete *Master Piece*, which earned him the title of "master" in the German guild system. *Master Piece* was exhibited in the Liberal Arts Palace at the exposition. Its design was the epitome of the Victorian era, featuring tendrils and whirls of acanthus leaves defying the rigidity of the material. The joining of many individual units into one integrated piece of iron was meticulously done using techniques of forging, carving, filing, and repoussé. He rarely produced single small scale works, concentrating rather on commissions, mostly grilles and gates, working directly with architects. His design and technical skills continue to elicit the respect of contemporary metalsmiths and artist-blacksmiths.



Helen Farnsworth Mears (1871-1916) studied with Auguste Saint-Gaudens, the most influential American sculptor in the nineteenth century; she was his first woman assistant. From him she gained a solid understanding of form and anatomy, while developing a sense of the universal in her own work. Small of stature, she tackled monumental sculptural projects and made even her small bronzes seem large in scale. Her *Genius of Wisconsin* was placed in the Wisconsin State Capitol in Madison.



Gerrit Sinclair, *Juneau Park*, 1934, oil on canvas, 37" x 42". Lent by Journal Communications, Inc. Milwaukee for exhibition, "100 Years of Wisconsin Art."

Regionalism

The German-Düsseldorf style came to be a German-American style at the turn of the century and, by World War I, was becoming an American style. As artists became more integrated into modern society, they drew their subject matter from urban masses and industrialization. By the middle teens the 1913 Armory Show was affecting the Wisconsin artists who traveled to New York and studied at the New York Art Students League.

Milwaukee's art schools took a more prominent role when the Layton School of Art opened in 1920 with the arrival of Gustave Moeller. In 1927 the Milwaukee State Teachers College formed a department of art with the help of Elsa

Ulbricht, who also directed the Ox-Bow Summer School of Painting in Saugatuck, Michigan for many years.

Gustave Moeller (1881-1931) enjoyed painting small towns in Wisconsin, recreating the homes and narrow streets with sunny yellow-green trees, brick-red buildings, and violet-gray shadows. His European studies had stressed good draftsmanship and technique; his prime interests became color and light. Moeller and his contemporaries enjoyed open-air painting and recorded the landscapes in all weathers. In 1914 Moeller joined the faculty of the Milwaukee Normal School, which later became Milwaukee State Teachers College, where he encouraged students until his death in 1931.

Focusing on the Layton School goals of trying to draw subject matter from the community, **Gerrit Sinclair** (1890-1955) also encouraged students to return to the community as artists and teachers. A decade before Regionalism became popular, Sinclair recorded his locale. Sinclair took students on Sunday sketching trips to observe nature as well as man-made forms, another chance to educate the next generation.

Elsa Ulbricht (1885-1980) specialized in portraits with broad areas of light color and relaxed poses. The mood and palette of her paintings belie the anxieties of Americans in the twenties and thirties, which were her productive painting years. She served as director of the WPA (Works Progress

Administration) Milwaukee Handicraft Project, which employed and trained 5,000 unskilled women in the production of crafts such as dolls, books, quilts, and hand-screened prints. Ulbricht was firmly committed to the visual arts and played a central role in expanding art education in Wisconsin.

After studying with the Milwaukee Art Students League, **Francesco Spicuzza** (1883-1962) instructed hundreds of art students in Milwaukee. Spicuzza found many types of flowers available for his pastel and oil studies at his summer home near Cedar Lake. He also executed many portraits in a free and sensitive style. His later impression-

istic work included beach scenes on Lake Michigan. The artist's main concerns were the color effects of light and shadow and the play of light in nature.

Intensely interested in the working man, **Robert von Neumann** (1888-1976) featured canvases with large burly figures engaged in daily toil. The many paintings of groups of fishermen mending their nets, eating their supper, etc. relate his painting to Social Realism. Having begun as a lithographer, von Neumann was an excellent draftsman. His oil paintings have clear, bright colors applied with energetic brush strokes. He taught for twenty-nine years at the Milwaukee State

Teachers College and many summers at the Ox-Bow Summer School of Painting.

John Steuart Curry (1897-1946), Thomas Hart Benton, and Grant Wood are the great triumvirate of Regionalist painters in America. They celebrated the people and the land. Curry drew his subject matter from his rural Kansas upbringing. As he matured, his style and brush strokes became looser, yet he remained true to realism. Curry served as artist-in-residence at the University of Wisconsin, Madison from 1936-1946, working to encourage cultural development through the Rural Art Program.



Robert von Neumann, *Apple Harvest in the Kickapoo Valley*, c. 1943, oil on board, 25" x 37". Milwaukee Art Museum, Gift of Gimbel Bros.



Heinrich Vianden, *View on the Fox River, Wisconsin*, c. 1885-88, oil on canvas, 26" x 31". From the Layton Art Collection, Milwaukee Art Museum, Gift of Friends of the Artist.

The German academy-trained artist-immigrants were fascinated with naturalism and realism. Nature as subject began in Wisconsin with the paintings of Henry Vianden and Bernhard Schneider, and continued into the farmland paintings of John Steuart Curry. The landscape encompassed diverse mediums, from the photographic documentation of H. H. Bennett to the integrated architectural designs of Frank Lloyd Wright. Wisconsin artists have been imbued with a respect for woodlands, rivers, the Great Lakes, and farmlands.

The artist's role as teacher of both

art and professionalism to succeeding generations has been consistent since the 1880s. The first artists from Munich and Düsseldorf emphasized a kinship to the Old Masters and to European academic training. The values of formal education came with these earliest settlers. Although rooted in an academic tradition, the art schools that developed in Wisconsin became less rigid. In particular, Henry Vianden, Richard Lorenz, Frank Lloyd Wright, Emily Groom, and Gustave Moeller, Gerrit Sinclair, and Elsa Ulbricht have all been responsible for the continual emergence of Wisconsin's painters and

sculptors. Artists taught in the new art schools to support themselves, a practice which continues today. Through their teaching they provided a link to historical values of the past and added their own knowledge and craftsmanship. Formal education in art continues to reestablish the fundamentals of traditional art as a cultural basis for art in Wisconsin.

*This article was adapted from the catalogue essay in **100 Years of Wisconsin Art** published by the Milwaukee Art Museum to accompany the 1988 exhibition. ■*

Some Observations on the Largest Jury Verdict in History

Pennzoil v. Texaco

By John Kidwell

On January 4th, 1984 the Board of Directors of Getty Oil acted to approve a transaction in which the Getty Oil Company would be significantly restructured, and Pennzoil would end up owning three-sevenths of the restructured company. A press release indicated that Getty and Pennzoil had reached "an agreement in principle." The directors of Getty Oil and its principal stockholders apparently believed that the agreement was no more than a "gentleman's agreement" and that they were not legally bound until a final written document was executed. This view of the matter led to the largest verdict ever entered in a civil case and then to the largest bankruptcy proceeding in the history of the Republic. The dispute, as it unfolded, was followed with fascination, and sometimes horror, by stockholders, lawyers, financial managers and the merely curious (among whom I count myself) for more than four years. Now that the final chapter seems to have been written, it is worth speculating about the meaning of the case.

It is important, first of all, to be familiar with the events that led up to the fateful meeting of the Getty Oil board of directors.

"A 'gentleman's agreement' is an agreement which is not an agreement, made between two persons, neither of whom is a gentleman, whereby each expects the other to be strictly bound without himself being bound at all."

(Vaisey, J., a twentieth-century English judge)

Background

Getty Oil Company had been created through the efforts of the legendary John Paul Getty and his father George. Although the history of Getty Oil is fascinating, for our purposes there are two salient facts. The first is that by the early 1980s Getty Oil was sixth in ownership of oil reserves though only fourteenth in sales of petroleum products. With the costs of locating new reserves at all-time highs, and with widespread fears of the ability of OPEC to reduce the supply of foreign oil, such reserves were coveted within the oil industry. The second important fact lay in the pattern of ownership of the stock in Getty Oil. Until J. Paul Getty's death in 1976 he had controlled the Getty Oil company because of his own stock in the company and because he was the trustee of the Sarah Getty Trust which owned 40.2 percent of the stock. After J. Paul's death Gordon P. Getty became the central figure because, through a series of mishaps and coincidences, he had become the sole trustee of the trust. Gordon was the second child born in the course of J. Paul Getty's fourth marriage. He was regarded by many of the officers and directors of Getty Oil as unqualified to direct the fortunes of a large oil company. The second major stockholder in Getty Oil was the J. Paul Getty Museum. J. Paul had created the Malibu museum in the 1970s to house his eclectic \$200 million dollar art collection. On his death he left his own 10.8 percent of the Getty Oil stock (worth \$1.2 billion) to the Museum—making the Getty Museum the richest museum in the world. The remaining 49 percent of the Getty stock was held by the investing public, with no single person or institution owning a significant block of shares. The votes of this stock were controlled by the management and Board of Directors of Getty Oil itself.

It doesn't require much analysis to see that this distribution of control is potentially unstable; any two players could successfully defeat any

proposal made by the third. Add that the management of Getty Oil had a low regard for Gordon Getty's business acumen and was taking steps to try to reduce his power within the Sarah Getty Trust, and that Gordon was growing restive with management's decisions, and it is not surprising that Getty Oil soon found itself, in the lingo of corporate takeovers, "in play."

Getty Trust, and the Board of Directors of the Getty Museum moved toward a transaction in which Pennzoil and the Getty Trust would create a new corporate vehicle to purchase all of the Getty shares from the museum plus the public shares. The approval of the Getty Oil Board of Directors was required, however. Pennzoil would end up with 43 percent of Getty and

Any two players could successfully defeat any proposal made by a third; this put the company in play.

The deal

Pennzoil Company, a much smaller oil company than Getty Oil but led by an ambitious oilman named J. Hugh Liedtke, wanted to expand its domestic oil reserves and saw the opportunity to do so by acquiring Getty Oil, taking advantage of the friction and suspicion which existed between Gordon and Getty Oil management. Getty management was afraid of being frozen out if Pennzoil bought a substantial number of the outstanding public shares and then worked with Gordon to take control. The museum saw the chance to cash in its shares at a very attractive price. Even Gordon was afraid that Pennzoil might buy enough public shares to be able to strike a deal with the museum and assume control. It was not clear who would be buying and who would be selling, but if there were to be a transfer of control, everyone wanted to share in the "control premium" usually paid in such cases.

Because of the mutual fears of the three principal players, and through a series of negotiations too complicated to relate here, Pennzoil, the

the trust with 57 percent. Management would be replaced and the Getty Museum and the public shareholders would get out at a good price. On January 1, 1984 the Getty Oil Board of Directors met to discuss a Pennzoil offer, under the constraint that the offer was valid only until the end of the board meeting! After a meeting punctuated by recesses and a demand that Pennzoil raise its price, on the evening of January 2 the board approved the transaction at a price of \$110/share, plus \$5/share in deferred compensation. The agreement provided that if Pennzoil and Gordon Getty could not agree on a restructuring plan within a year, then Getty Oil would be liquidated and its reserves divided in proportion to the ownership of stock. On January 4, 1984 Getty Oil issued a press release which said,

"Getty Oil Company, The J. Paul Getty Museum and Gordon P. Getty, as Trustee of the Sarah C. Getty Trust, announced today that they have agreed in principle with the Pennzoil Company to a merger of Getty Oil and a newly formed entity owned by Pennzoil and the Trustee.

Texaco takes over

In the meantime, watching with interest from the wings, was Texaco, Inc., led by John McKinley. Texaco was (and is) a giant oil company. It had in common with Pennzoil, however, a need for more oil reserves—a need heightened by the failure of some bold, but costly and unsuccessful, oil explorations. Within hours of the Pennzoil announcement, encouraged by investment bankers at First Boston and moving with astonishing speed, Texaco made its own move on Getty—offering to purchase all of the shares of Getty for \$128 per share. Both the Getty Museum and Gordon Getty, on behalf of the trust, quickly accepted the offer—but insisted that the contract contain promises by Texaco to indemnify them for any liability they might have to Pennzoil.

Although the Getty board had announced “an agreement in principle” with Pennzoil, nothing had been signed; the lawyers were drafting documents which were to embody the final terms. An unanswered question is whether the Getty lawyers slowed the drafting to allow other bidders to appear. It does seem clear, however, that Texaco management received assurances from the investment bankers, and probably from Gordon Getty that the owners of Getty Oil were still legally free to accept competing offers. On January 6th, Texaco announced both an agreement to buy the museum’s stock and that the Getty board would soon be meeting to review a “business combination proposal” from Texaco.

Pennzoil strikes back

Pennzoil’s Hugh Liedtke was predictably upset and announced: “We’re going to sue everybody in sight.” On January 10, 1984 Pennzoil sued Getty Oil, Gordon Getty, the Getty Museum, and Texaco in a Delaware state court to block the merger of Texaco and Getty. Pennzoil alleged that Texaco had wrongfully interfered with an

existing contract which committed Getty to the deal it had struck with Pennzoil and asked the Delaware court to enjoin the consummation of the transaction. The Delaware court refused to stop the merger, but did submit a written opinion which held open the door for a damage claim.

Pennzoil then took an eventful step. Usually, once a lawsuit has been initiated in one court, either party is entitled to insist that the litigation proceed in that court. In this case, however, Texaco had not filed certain responsive documents; this allowed Pennzoil to dismiss its claim against Texaco in Delaware and simultaneously to file an action against Texaco in a Texas state court (where Pennzoil had its corporate home), alleging an intentional inducement of breach of contract. The Texas lawsuit, with Texaco as the only defendant, would be center stage for the next four years.

been signed. The fact that the agreement did not need to be in writing, of course, did not relieve Pennzoil of the obligation to prove that there had been an agreement. Pennzoil argued that the notes of the Getty board meeting, the press release, and other statements and circumstances established that an agreement had been reached and that the documents which the lawyers were preparing were intended merely as a record of that agreement. Texaco, of course, urged that one does not commit to multi-billion dollar deals with just a handshake and that everyone knew there was no final deal, though a deal was in sight.

It is also important that the law makes it wrong (a “tort”) for one person to induce a second person to terminate an advantageous relationship, usually a contract, with a third. This rule requires, first, that there be an advantageous relationship between two parties—in this case that advantageous relationship

No matter how large the transaction, an agreement to buy stock need not be in writing.

A bit of law. Surprisingly, an agreement to buy stock need not be in writing—no matter how large the transaction. The general rule of American law is that a contract need be in writing in order to be enforceable only if a statute specifically requires it. Such statutes exist in every jurisdiction but do not include stock transactions; the list of contracts which must be written is remarkably short, including primarily contracts to transfer land, to sell goods for more than \$500, to be responsible for another’s debt, and to perform a contract requiring more than a year. Pennzoil could, then, credibly argue that a contract had been created between it and Getty Oil even though no document had

was allegedly a contract between Getty Oil, the trust, and the museum on the one hand and Pennzoil on the other. Second, the rule requires efforts by the defendant (here, Texaco) to induce one of the parties to terminate the relationship. Third, the inducer (Texaco) must have notice of the existence of the relationship between the other two parties. And finally the wronged party must suffer damages as a result of the wrong. Even before the trial began it was clear that Texaco would pursue a two-fold defense: first that the agreement in principle between the Getty Oil shareholders and Pennzoil was not a contract, but rather only a stage in the negotiations with neither party bound until documents were signed, and second that even if there were a contract Texaco had no knowledge of it, having been assured that the deal was not yet final.

The trial

The trial began on July 1, 1985 before Judge Anthony Farris and a jury of twelve Texas citizens. The most prominent lawyer for Pennzoil was Joe Jamail, a colorful and controversial figure. Jamail was an unusual choice because he had almost no experience in trying big-stakes commercial cases; he was well known because of his extraordinary success in personal injury suits. Texaco's lead lawyer was Richard Miller. Not so colorful as Jamail, he nevertheless commanded the respect of the Texas bar. Controversy erupted even before the trial began when Texaco learned that Jamail had contributed \$10,000 to Judge Farris's reelection fund just two days after Farris had been assigned to the case. Texaco asked to have Judge Farris removed, but another Texas trial court judge refused to do so, noting that the campaign contribution had been made quite publicly and was lawful under Texas law. As it turned out, Farris would not preside over the entire trial; fifteen weeks into the trial, victimized by cancer, Judge Farris stepped down, unable

to proceed. He asked, however, that a replacement judge continue with the trial rather than beginning again, and so it was that Judge Solomon Casseb took over the case in midstream.

The trial began on July 1 and, as expected, Miller attempted to show that even though the deal between Pennzoil and Getty had been in its final stages, no final bargain had been struck. He urged that the investment bankers who had advised Texaco to enter the bidding for Getty had been quite correct to do so, but even if those advisers had been wrong, Texaco had no reason to suspect that. Jamail, on the other hand, tried the case in much the same way that he might have tried a personal injury case, working to get the sympathy of the jury and seeking to paint what had been done as dishonorable. He noted more than once that Pennzoil and Getty representatives had exchanged handshakes and drunk champagne, presumably in celebration of the deal.

place I don't owe you a cent, and in the second place if I do owe you anything it is only ten cents and not ten dollars," such an argument erodes the credibility of the denial of liability.

Pennzoil's theory of damages was that when it bought three-sevenths of Getty for \$2.5 billion it bought the right to Getty's reserves. Getty's damages, then, could be measured by the cost of acquiring comparable reserves by exploration, minus the cost of the Getty acquisition. Getty presented expert testimony that the cost of successful exploration was \$10/barrel. It followed that three-sevenths of the Getty reserves, if acquired by exploration, would be worth \$10 billion. Subtract the \$2.5 billion that Pennzoil had expected to pay, and you are left with damages of \$7.5 billion! There are a great many reasons to doubt the appropriateness of this figure. First, it significantly overvalues the Getty reserves, which consisted largely of oil that was expensive to remove from the

Texaco challenged Pennzoil on the question of liability but left the assertions about damages unanswered.

One of the most controversial decisions that Texaco's lawyers made during the trial was to put nearly all of their effort into challenging Pennzoil on the question of liability, leaving Pennzoil's assertions about damages largely unanswered. This decision reflected a widespread belief among defense lawyers that it is risky to emphasize weaknesses in a plaintiff's damage claim because juries interpret this as a concession on the question of liability. They argue that while there is nothing logically wrong with argument of the form, "... in the first

ground and process. It fails to take into account the time period over which the exploration and removal of oil would occur. It also suggests that the Getty Museum, the board, and the trust, as well as the stock market, had outrageously undervalued the Getty Oil Company. In fact, it is more plausible to argue that what Pennzoil lost was the right to acquire stock worth \$128/share (what Texaco paid) at a price of approximately \$112.50/share (what Getty had agreed to pay); this method of calculating damages would yield recovery of \$500 million. These alternatives, however, were not provided to the jury.

Four and a half months after it had begun, the trial came to a dramatic conclusion; on November 19, 1985 the jury returned a verdict for Pennzoil for \$7.53 billion in compensatory damages plus \$3 billion in punitive damages. With interest, the grand total awarded was \$11,120,976,110.83. Texaco's lawyers and managers, as well as the financial community, were aghast. Most assumed that the verdict would quickly be overturned, if not by the trial court, then on appeal. Texaco's decision to avoid the damages question became even

more questionable when, on December 10, the trial judge Casseb upheld the jury's verdict; appeals courts are reluctant to overturn jury verdicts unless the record of the trial itself indicates that the jury behaved unreasonably—and Texaco's strategic decision meant there was little in the record to support an alternative measure of liability. Texaco was hoist on its own tactical petard.

The appeals

Texaco planned, of course, to appeal, and they wanted to prevent Pennzoil from enforcing its judgment during the appeal. But Texas law prevented a winning plaintiff from enforcing its judgment during appeal only if the losing party posted a bond equal to the verdict amount plus interest and costs—which would have been over \$11 billion dollars in this case! In a novel and desperate effort to get out of the Texas courts, Texaco filed an action in a Federal District Court in New York state (where Texaco had its corporate home), arguing that the Texas bond requirement violated federal law as well as the U.S. Constitution. On December

18th the Federal District Court granted the order, holding that Texaco did not need to post the bond. Pennzoil appealed, but the Federal Circuit Court upheld the District Court. In June of 1986, the United States Supreme Court agreed to review the decision; it heard argument on January 12, 1987. In the meantime, of course, Texaco was receiving relief from the bond rule and pursuing its appeal in the Texas courts.

On February 12, 1987 the Texas Appeals Court (an intermediate state appellate court) upheld the compensatory award, but reduced the punitive damage award from \$3 billion to \$1 billion. On April 6, 1987 the U.S. Supreme Court ruled unanimously that the New York Federal District Court had acted improperly in interfering with the Texas appeals procedures. Many began to realize that the impossible might happen and Pennzoil might really win.

Throughout the months after the verdict was announced two things sustained Texaco. First was their disbelief that the verdict would actually be sustained; the stock market and Texaco's creditors shared that sense of disbelief, and Texaco continued, to a great extent, with "business as usual." Texaco and Pennzoil engaged in periodic negotiations, but to little effect. Second, Texaco was prepared to enter Chapter 11 Bankruptcy if necessary in order to avoid the full effect of the judgment. Pennzoil did not believe that Texaco would actually file a Chapter 11 petition, because if it did Texaco management would lose much of its power to the federal bankruptcy trustee.

This time Pennzoil was wrong. On April 19, 1987 Texaco became the world's largest bankrupt. Negotiations continued between Pennzoil and the creditor's committee for the bankrupt Texaco, and finally, in early 1988, Texaco offered to pay \$3 billion dollars to settle Pennzoil's claim, and Pennzoil accepted. The battle was, more or less, over.

The verdict awarded Pennzoil more than \$11 billion in compensatory damages.

So what?

That is the story, or at least a short version of some of it. What does it mean? As with most really interesting stories, the lessons are ambiguous, and different people assign different meanings to the tale.

First, the case offered nothing new in the way of contract or tort law; it represented only an effort to apply well-established law in a case involving some very large numbers.

Second, as to our jury system, some have argued that the case teaches that it is unwise to rely on the jury in complex cases in which

anti-corporate prejudice may result in vindictive verdicts; they argue that juries should not be expected to be capable of handling extraordinarily complex commercial or technological disputes. Others argue that the case demonstrates that corporate America will be held accountable in the jury room for ordinary standards of commercial behavior. Without passing on whether this particular decision was right or wrong, I would argue that the case exemplifies just how committed the judicial system is to the jury—so committed that we are willing to grant juries the authority to make extraordinary awards, and, on occasion, to be wrong.



Third, the case does offer some new learning as to the principle of federalism—that principle which balances the powers of the federal and state governments, and which assures the legal autonomy of the states. Critics of the decision would argue that the case proves just how vulnerable one may be when forced to go before a state court, with a jury, where regional or local prejudice can be used to the injury of an innocent person. Most suggest that the case provided the opportunity for the Supreme Court to reaffirm just how deeply committed it is to permitting states to manage their own affairs.

Fourth, as to Wall Street and the takeover game, it is probable, at least while the memory of *Pennzoil v. Texaco* remains vivid in people's minds, that there will be changes, at least in form, in takeover negotiations. One of the first documents likely to be exchanged in the course of negotiations in many major business deals will be a memorandum explicitly setting forth the understandings of the parties as to what is necessary before a binding contract arises—and in many cases one could expect the parties to agree that no contract is final until an unambiguous document is signed by both parties!

Finally, as to major commercial litigation, we can continue to expect major litigation to occur in the shadow of bankruptcy reorganization, and we may see more of it conducted in the style, or even under the leadership, of flamboyant personal injury trial lawyers; success, after all, breeds imitation.

Those interested in learning more about the case might read *Oil & Honor: the Texaco-Pennzoil Wars* by Thomas Petzinger, Jr., (which contains a thorough bibliography) or *Texaco and the \$10 Billion Jury* by James Shannon (a member of the jury).■

Bathing

I never washed the other foot. I remember
holding the left, when being struck
by the cow tongue
texture of my towel. The left slipped
down under while the landscape of strings
crossed like embracing
worms. I can count on the pits
being clean; Egyptian mummy
style, I insert each hand in an armpit
and rub. I am balanced. My toes
are a pew of heads emerging all shiny
from God. Jesus' balance was broken
because one nail held both feet. The medieval Jesus,
using two nails, preserved the center. When you die
you are all mixed up, bent over a chair, seized by
St. Vitus' dance. To become a tagged stiff,
they pound you into a board so your coat
hanger body fits in the cell. I am Buddha
in my tub. My breasts resemble my knees
poking up. They are icebergs and I suck
the water under my back as I rise
to show how big I am. My neighbor makes water
of my yard. Tai chi. I walk around his wake,
slow and quiet. My dogs freeze. He can float
from a tree like a waving scarf. When you throw
a pot for the first time it rolls like the sun
warped 45 of "A Hard Days Night." It wiggles
in sickness and falls dead. The mud
must be right to rise. In church
you are one voice as you sing, an organ
pumping. I am all tongue
and breath—an iceberg rising. See how
the ghost of me takes form as I float
up. A clear edge emerges.

Sandra Nelson

Contraception in Antiquity

The Case of Pennyroyal

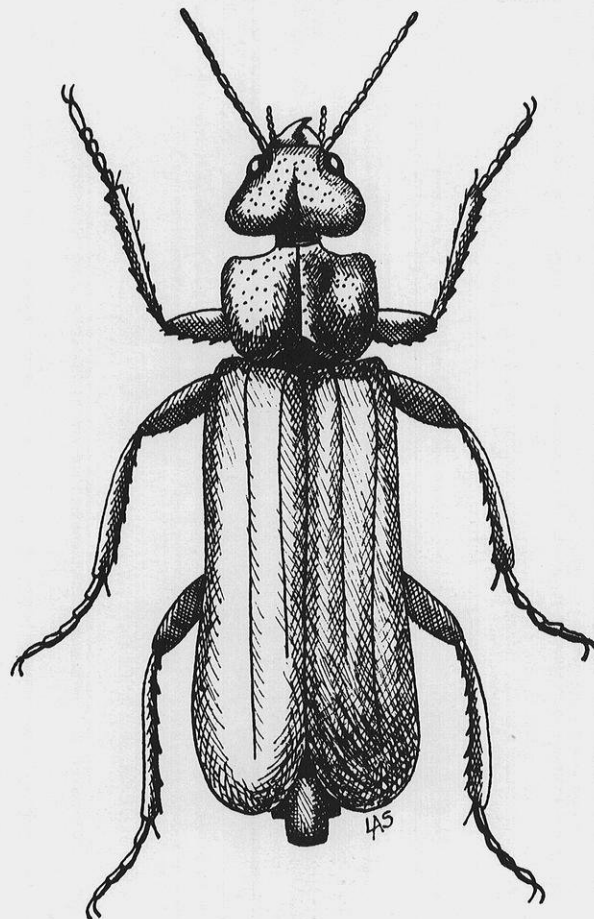
By John Scarborough

We laughed until we cried, reduced to a writhing and tear-laced mirth as pun followed pun, and the actors pranced through their roles in the comedy. Sex and scatology pummeled us with their continuous reminders of our humanity in the midst of an inhumane war. The great Aristophanes did it again: in this play, *Lysistrata*, we laughed while we brooded on the war with Sparta, now in its twentieth year, and we laughed uproariously at Aristophanes' marvelous fantasy of a sex-strike which could easily end the war. Laughed until we cried. Laughed with pain as we recognized ourselves in the characters who panted for wives and mistresses determined to forego sex until the fighting stopped—and what a splendid touch the playwright gave in making both Spartan and Athenian women join in their denials to their men. And some of the funniest lines were those which lampooned the ever-present call girls here in Athens.

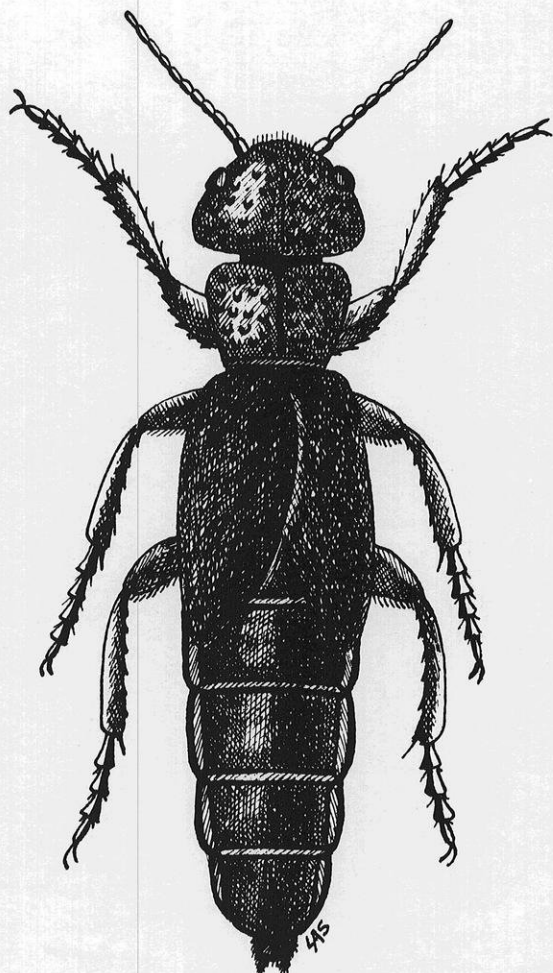
Over our evening wine, we chuckle together over Aristophanes' punning lines about the Boeotian woman—named Ismenia in the play—whose depilated sexual parts bore hilarious comparison "... with neatly trimmed pennyroyal plots," certainly a double-pun recalling the fair plains of Boeotia herself. One of our more lucid companions remembers that Aristophanes had used this side-splitting pun previously in his comedy, *Peace*, produced at the City Dionysia some ten years ago. In the *Peace*, so our friend says, the line made allusion to a woman named Opora's sexual attractiveness, and a "pennyroyal potion" was recommended to her as a remedy for "too much fruit," a waggish pun on her name. Yes, we all know how *blēchōn* (pennyroyal) figures in the routines among the call girls, mistresses, and common prostitutes here in Athens: they quaff it regularly, and its properties in preventing pregnancies are storied by women all over Greece. Thebes seems to be one of those cities which sends pennyroyal in packets to be sold in the markets (whenever they can function during this awful war), and everyone knows that Boeotia's plains grow prodigious amounts of this herb. Our friend, now feeling the effects of his wine consumed neat, is muttering that some midwife told him how the pennyroyal is burned during birthing, since it gives that heady "minty" odor so favored by the midwives as they assist bringing babies into this grumpy world. And wouldn't we know it, but our friend has to add his usual, rather irreverent comment, after a sensible bit of information: "the pennyroyal's too late," and we hiss him into silence. After all, midwives brought us too, and we must offer respect, even in drunken moments.

In Aristophanes' *Lysistrata* (produced probably in 411 B.C.) and *Peace* (produced for the City Dionysia in Athens, 421 B.C.), there are open references to the properties of *blēchōn* (pennyroyal: *Mentha pulegium* L.) in apparent commonly accepted association with the practices of abortion and contraception among Athenian and Greek women. That the playwright could make puns on the name of an herb suggests his audience would know exactly the plant and exactly the purpose for which it was used, and the rollicking puns on the name of pennyroyal would be understood by almost everyone. The account above is a lightly fictionalized assembly of data from disparate Greek texts which mention pennyroyal and its common employment by women in classical antiquity, women of all social strata from the nobility through slave girls who served as prostitutes. Intertwined with the use of pennyroyal as a contraceptive is the often ignored but always present profession of prostitution in antiquity, and one has to assume that whatever specifics might emerge in the formal medical texts of ancient times (e.g., the various anonymous authors of works within what is called the Hippocratic corpus) about contraception and abortion come ultimately from the ranks of equally anonymous midwives and prostitutes, who would know pennyroyal and other substances from necessity.

As is true among moderns, Greeks and Romans were fascinated and intrigued by contraceptive and aphrodisiacal substances, and even in antiquity there were those who proclaimed finding the "perfect" aphrodisiac coupled with an effective contraceptive. One reads, for example, in Theophrastus' *Enquiry into Plants* (of about 300 B.C.) that an "Indian" had discovered not only aphrodisiac substances of great reliability, but that he used also the same herbal preparation as an anaphrodisiac. Theophrastus says simply that such is not impossible, although rather improbable (*Enquiry*, IX, 18.3-11). Contraceptives and aphrodisiacs in turn were linked to abortifacients, so that when one reads about *kantharis* (known in modern folklore as "Spanish fly"), an aphrodisiac prepared from blister beetles, it is frequently in company with herbs such as pennyroyal. In Nicander's *Alexipharmaca* (of about 130 B.C.), a curious work on toxicology set into Homeric-style hexameters, one discovers a purported remedy against *kantharis*-poisoning, which incorporates *glēchōn* (an alternate spelling of *blēchōn*), *kykeōn*, and water (*Alexipharmaca*, 128-29). *Kykeōn* is the name of a potion in Homer's *Iliad*, XI, 624 and 641, and tradition recorded that it consisted of grated cheese, Pramnian wine, and barley-groats; *kykeōn* could also mean simply honey combined with magical drugs, so the actual



Lytta vesicatoria. "Spanish Fly" Beetle. Central and southern Europe, Mediterranean littoral. Metallic yellow-green to blue-green elytra. Drawn by Lysa Scarborough after Riley, Ovenden, and Hargreaves. Up to 25 mm [1"]. Courtesy of the American Institute of the History of Pharmacy.



Meloë variegatus. Oil beetle. Central and southern Europe, Mediterranean littoral. Metallic gold-black to gold-green elytra, same for abdominal segments. Lysa Scarborough after Boháč. Up to 42 mm [1 1/2"] Courtesy of the American Institute of the History of Pharmacy.

ingredients of this venerated recipe must remain uncertain. But poisonings from *kantharis* concoctions were common enough to warrant even a poet to borrow data from an earlier work on the subject, and most people knew the ordinary blister beetle (*Lytta vesicatoria*) from which this infamous aphrodisiac was manufactured. And Nicander's symptomatology is accurate, as he recounts the effects in his other poison-lore poem, the *Theriaca*, in lines 757 and 758: babbling, delirium, and watery eyes. In *Alexipharmaca*, Nicander relates how *kantharis* smells like pitch and tastes very much like juniper berries, and he continues his description of physiological effects which shows that Greeks knew enough pharmacy and toxicology to know the disastrous results from consuming this would-be sexual stimulant: first one experienced a biting sensation on the lips, followed shortly by similar sensations in the stomach, in turn followed by sharp pains in the lower belly and bladder, accompanied by grave discomfort in the chest, particularly at the point of the xiphisternum; last occur fainting spells and delusions (*Alexipharmaca*, 115-28).

The great pharmacologist, Dioscorides of Anazarbus (fl. about A.D. 65) also was well aware of the popularity of *kantharides*, and in his recounting of two kinds of blister beetles (the second called *bouprestis*, the oil beetle [*Meloë variegatus*]), suggests reasonably safe uses for the supposed aphrodisiac, including "bringing down the menses" and as a diuretic in cases of dropsy (Dioscorides, *Materia Medica*, II, 61.2). Dioscorides recognizes a portion of the older traditions of links between the contraceptive and abortifacient properties of *kantharis* by carefully noting its strong power to induce menstrual flow, and then carefully separating that property from its generalized effect as a diuretic.

By contrast to the caution displayed regarding blister beetle solutions, pennyroyal was widely used—and with knowledge of what the herbal preparation could do, and why it could be safely employed. In about 350 B.C., the unknown author of the work in the Hippocratic collection known as *Diseases*, Book III, recommended that pennyroyal be drunk with wine and celery as a mild diuretic (*Diseases*, III, 17.23). Theophrastus mentions the pennyroyal in context with herbs which were used to help in difficult deliveries (*Enquiry*, XVI, 1), a use which fits well with pennyroyal's powers as implied in Aristophanes' *Lysistrata* and *Peace*. Among the quirky *Mimes* by Herodas (about 250 B.C.) is the "Breakfast Party," which is a discussion among some women regarding the virtues of not having children; pennyroyal appears among the recommended substances in what appears to be a contra-

ceptive salad (*Mimes*, IX, 13). And of course there are numerous references to pennyroyal in the gigantic gathering of medical matters by Galen of Pergamon (A.D. 129-after 210): in several passages, Galen notes that pennyroyal is a superb substance for bringing on the menses (the old term for such a drug is "emmenagogue"), and pennyroyal potions would indeed have "brought down the menstrals" (Galen, *Mixtures and Properties of Simples*, VI, 3.7), phraseology reflecting that by Dioscorides. Any drug which had the property of inducing the menstrals would be favored by women seeking to avoid conception, whether they were the prostitutes and call girls of Aristophanes' Athens or the presumably married women of Herodas' *Mimes*, who wanted no children or who wanted no more than the number they had already produced.

There is little doubt that the *glēchōn* or *blēchōn* recorded in Greek by the Hippocratic authors, Aristophanes, Herodas, Nicander, Dioscorides, Galen, and others (the Latin for pennyroyal is *pulegium* or *puleium*, illustrated by passages in Celsus' *On Medicine* [of about A.D. 37] and Pliny the Elder's *Natural History* [A.D. 77]) is *Mentha pulegium* L., the common European pennyroyal. Distribution of *M. pulegium* occurs in all latitudes of Europe, excepting the northern climes, and it is frequently seen in the countries of the Mediterranean seaboard and generally throughout the Middle East. Dioscorides had summed up the accurate description of the plant's relevant pharmaceutical properties: "*glēchōn* is a widely known herb, and is warming, thinning, and digestive [in its properties]. Given in a drink, it expels the menses, as well as afterbirth and the fetus" (*Materia Medica*, III, 31.1). And the painting of the flowering herb which appears in the famous sixth century illuminated text of Dioscorides, known as the Vienna Codex (or the Juliana Anicia Codex of A.D. 512), shows well that ancient botanists clearly distinguished its hairy appearance; modern botany texts speak too of its "hairy" look, with the corolla hairy outside, and the calyx slightly two-lipped, lobes unequal and hairy, and the throat closed by hairs. Not only is the pennyroyal a very good natural insecticide, its aroma is also somewhere between peppermint and camphor, giving it the strong sweetish smell so warmly recommended by Soranus of Ephesus (about A.D. 117) in the delivery chamber.

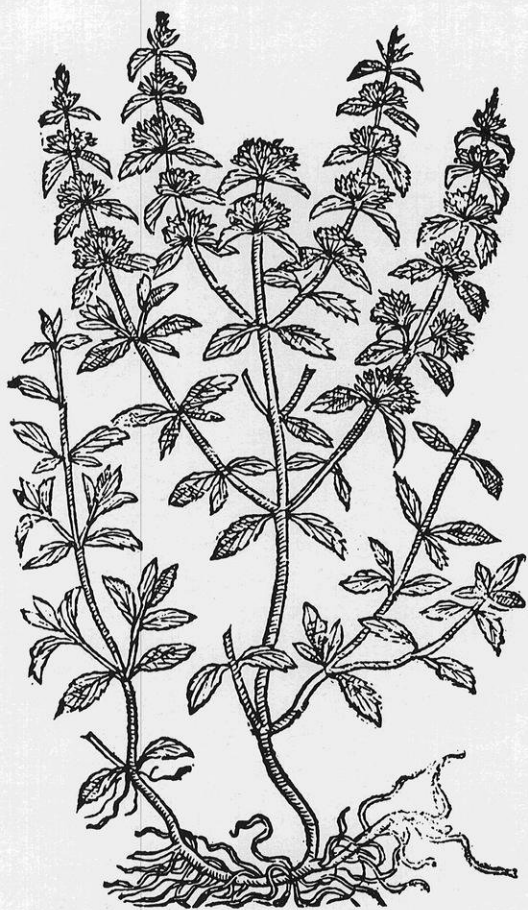
Most important, however, is the pharmaceutical use that pennyroyal—and its extract, the ketone Pulegone—has had among women until quite recently. "Pennyroyal Oil" or "Pulegium Oil" was a favored,

† 1 *Pulegium regium*.
Pennic Royall.



Illustrations of pennyroyal from page 671 of *The Herbal or General History of Plants* by John Gerard. The complete 1633 edition as enlarged and revised by Thomas Johnson. Rptd. New York: Dover Publications, 1975.

† 2 *Pulegium mas.*
Upright Pennie Royall.



natural emmenagogue and abortifacient before the 1950s (especially in Europe), for in excretion "Pennyroyal Oil" mildly irritates the kidneys and bladder, reflexly stimulating uterine contractions. Yet these raw data obscure the extremely toxic effects of "Pennyroyal Oil," with convulsions resulting from as little as 4 ml. "Pennyroyal Oil" contains not less than 85 percent Pulegone, while the natural extract found in the dried leaves and flowering tops of *M. pulegium*, *M. longifolia* (L.) Hudson, and *Hedeoma pulegioides* (L.) Pers. [this last is an American species] contains approximately 1 percent of the volatile oil, along with tannin and some bitter principles. One is struck by how much safer was the ancient preparation of this contraceptive/abortifacient, and one may also comprehend why folk medical sources reflected in Nicander's poems would have joined the urinary effects of pennyroyal with those of blister beetle potions. Ancient midwives, prostitutes, and physicians knew well which preparation "worked" and gave desired results with few toxic side effects. By contrast, modern women who have hoped for a quick and painless abortifacient by using the prepared "Pennyroyal Oil" have found tragedy instead, with occasional deaths reported in recent years from self-administration of the 85 percent pure Pulegone.

Pennyroyal was certainly not the only herb in the Greco-Roman pharmacopoeia deemed useful in preventing pregnancies, but it seems to have been one of the most commonly employed and probably one of the least harmful. In his justly famous *Gynecology*, Soranus of Ephesus provides a lengthy listing of those plants and other substances thought to be contraceptive and/or abortifacient, ranging from the bark of pine and tanning sumac to alum, oak galls, pomegranate peels, myrrh, peppercorns, and the mysterious—and now extinct—plant called *silphium*. Pennyroyal does not appear in Soranus' list, even while he says in his opinion that the "harm from these substances is very great, since they disturb the stomach" (*Gynecology*, I, 63). Soranus recommends pennyroyal be burned for that delightful odor in the birthing chamber (*ibid.*, III, 32.5), as well as an ingredient in a hot water bath to free an embedded uterine clot (*ibid.*, III, 32.1). And lurking throughout Soranus' account of contraception and abortion in the *Gynecology* is a striking uncertainty of just what was "contraception" as opposed to abortion. Apparently Roman physicians and their Greek predecessors debated the difference between *atokion* ("contraceptive") and *phthorion* ("abortifacient"), and Soranus feels constrained to make the following definitions, as one finds them in the Greek text of *Gynecology*, I, 19.60:

[a contraceptive] does not allow conception to occur, but an abortifacient destroys that which has been conceived. Let us, then, term one an 'abortifacient' (*phthorion*) and the other a 'contraceptive' (*atokion*). On the other hand, some say that the 'casting out' (*ekbolion*) is synonymous with an abortifacient (*phthorion*); yet others assert that there is a difference since a 'casting out' does not occur with drugs (*pharmaka*) but from shakings and leapings

...

Prostitutes and midwives would not have worried about these theoretical arguments, questions of terminologies so cherished by Greco-Roman physicians who debated ancient philosophy's careful distinctions among bodily functions, structures, and substances. In the instance of pennyroyal, folk medical sources transmitted a reliability and lack of toxicity for this particular "pregnancy preventer," no matter what medical theory might have to say about it.

One needs to emphasize that Greek and Roman medicine and pharmacy functioned in a far different manner than what we assume "medicine" to be in the modern world: there were no medical schools (that is 'teaching institutions'), no licensure which ensured a legal standing for the profession, and no theoretical concepts comparable to our "germ theory" which generally underpinned medical theory and practice. A doctor was a doctor because he said he was, and his public reputation guaranteed or denied him patients. And even though many of the Hippocratic writers might espouse the famous theory of four Elements, Qualities, and Humors (made canonical in western medical theory by Galen's adaptations and streamlining of earlier Greek theory), there were many Greek and Roman physicians who rejected theory as useless in practice. Dioscorides of Anazarbus, one of the greatest pharmacologists and pharmacognocists of any century, refused to admit humors as he analyzed what drugs did in the human body, even while Galen of Pergamon insisted upon 'humoral pathology,' as it was called until the late nineteenth century. Aristophanes' audiences would know many herbal preparations through personal experience, and the largest difference between ancient medicine and its modern forms is the simplest one of all: most citizens of the Greek and Roman worlds lived on or near farms, and their childhoods were fashioned—at least 95 percent of them—by intimate and almost instinctive knowledge of plants, animals, and the rigors of agriculture. Prostitutes and midwives were practitioners of a very old kind of "folk medicine," surviving today in most rural areas of eastern Europe, Asia, Africa, and South America. In antiquity, midwives would have known about the many uses of pennyroyal in birthing, and prostitutes of all grades would have valued the herb for exactly the same properties which made it so useful in difficult deliveries.

References and Bibliography

Greek and Latin texts (in order of appearance of first citations):

Convenient texts and translations of Aristophanes, *Lysistrata* and *Peace*, are in B. B. Rogers, ed. and trans., *Aristophanes*, 3 vols. London: William Heinemann, 1924 [Loeb Classical Library], vols. 3 and 2 respectively. One should not, however, trust the usually prudish muffling by Rogers's translations of Aristophanes' delightful and zesty obscenities, most of which are bluntly and accurately explicated in Jeffrey Henderson, *The Maculate Muse: Obscene Language in Attic Comedy*, New Haven: Yale University Press, 1975. Henderson offers a detailed commentary on the *Lysistrata* in his ed. [Greek text] with introduction, *Aristophanes' Lysistrata*, Oxford: Clarendon Press, 1987.

Theophrastus, *Enquiry into Plants* (often cited by its Latinized title *Historia Plantarum*, or *HP*) is available in an English translation accompanied by the Greek text in Arthur Hort, ed. and trans., *Theophrastus: Enquiry into Plants and Minor Works*, 2 vols. London: William Heinemann, 1916 [Loeb Classical Library]. Unhappily, *Enquiry* IX, 18.3-11, is omitted (in both Greek and English) by the squeakily Victorian Hort, so that one must still consult the Greek text (with a Latin translation) in F. Wimmer, ed., *Theophrasti Eresii opera*, Paris: Didot, 1866, p. 159-61. A rather inadequate translation of these omitted passages was rendered by Chalmers L. Gemmill, "The Missing Passage in Hort's Translation of Theophrastus," *Bulletin of the New York Academy of Medicine* 49 (1973), 127-29, and there is a limited commentary on *HP* IX, 18 in Anthony Preus, "Drugs and Psychic States in Theophrastus' *Historia plantarum* 9. 8-20," in W. W. Fortenbaugh and R. W. Sharples, eds., *Theophrastean Studies*, vol. III (New Brunswick, NJ: Transaction Books, 1988), 76-99.

Nicander's *Theriaca* and *Alexipharmaca*—puzzling and usually quirky hexameters as they are—are edited and translated by A.S.F. Gow and A. F. Scholfield, *Nicander: The Poems and Poetical Fragments*. Cambridge: Cambridge University Press, 1953. Commentary on Nicander's poison-lore is found in John Scarborough, "Nicander's Toxicology, I: Snakes," and "Nicander's Toxicology, II: Spiders, Scorpions, Insects and Myriapods," *Pharmacy in History* 19 (1977), 3-23, and 21 (1979), 3-34 and 73-92.

There is no reliable English translation of Dioscorides' magnificent *Materia Medica*, and translations in the essay above are rendered from the standard Greek text, ed. by Max Wellmann, *Pedanii Dioscoridis Anazarbei De materia medica*, 3 vols. Berlin: Weidmann, 1906-14. In German, however, one may consult with confidence the translation (made from edited Greek texts in the early nineteenth century) by J. Berendes, *Des Pedanios Dioskurides aus Anazarbos Arzneimit-*

tellehre, Stuttgart: Enke, 1902. Commentary on Dioscorides and his time and medical practice, as well as a translation of the fundamental introduction of Dioscorides' work, is provided in John Scarborough and Vivian Nutton, "The Preface of Dioscorides' *Materia Medica*: Introduction, Translation, Commentary," *Transactions and Studies of the College of Physicians of Philadelphia* n.s. 4 (1982), 187-227.

Current opinion among scholars on the problem holds that Hippocrates of Cos (fl. about 425 B.C.) is not the author of any of the writings we have under his name in Greek; thus one speaks of the 'Hippocratic writings' or 'Hippocratic corpus,' when referring to the "works" of Hippocrates. The text of the Hippocratic *Diseases* III, used above, is that ed. with German trans. by Paul Potter, *Hippokrates: Über die Krankheiten III*, Berlin: Akademie-Verlag, 1980 [*Corpus Medicorum Graecorum* I 2,3]. In English there are the four volumes as ed. and trans. by W.H.S. Jones and E.T. Whittington, *Hippocrates*, London: William Heinemann, 1923-31; and G.E.R. Lloyd, ed. [no Greek texts], *Hippocratic Writings*, New York: Penguin Books/Pelican Classics, 1978. A fine, abbreviated guide to the Hippocratic tracts is Paul Potter, *A Short Handbook of Hippocratic Medicine*, Quebec: Les Editions du Sphinx, 1988.

Much of Herodas' (or Herondas') *Mimes* has been recovered from papyri as unearthed in Egyptian sites, so that specialist scholars continually debate restoration of lines and even entire books. The interpretation in the essay above is based on the text offered by I. C. Cunningham, ed., *Herodas: Mimiambi*, Oxford: Clarendon Press, 1971, p. 55, although the present author differs from Cunningham's comment (p. 204) that pennyroyal is merely a laxative. Herodas' lines are stuffed with a natural obscenity, so that the edition and translation by Walter Headlam (ed. by A. D. Knox), *Herodas: The Mimes and Fragments*, Cambridge: Cambridge University Press, 1922, often obscures what the Greek really means.

Galen's huge corpus is represented most fully in C. G. Kühn, ed., *Claudii Galeni Opera omnia*, Leipzig: Cnoblichius, 1821-33, 20 vols, in 22 parts (rptd. Hildesheim: Georg Olms, 1964-65). No modern edition or translation exists of Galen's *Simples*, and the Greek text used in the essay above is that of the Kühn ed., vol. XI, p. 857. A summary of Galen's medicine and theoretical approaches, as well as a commentary on recent editions and translations into English can be found in John Scarborough, "The Galenic Question," *Sudhoffs Archiv* 65 (1981), 1-31, and "Galen Redivivus," *Journal of the History of Medicine and Allied Sciences* 43 (1988), 313-21.

Cornelius Celsus, *De medicina*, is available in a good edition with translation in the Loeb Classical Library: W. G. Spencer, ed. and trans., *Celsus: De medicina*, London: William Heinemann, 1935-38, 3 vols.

Pliny the Elder's *Natural History* consumes ten vol-

umes in the Loeb Classical Library, although the English translation is not exceptionally reliable: H. Rackham, W.H.S. Jones, and D.E. Eichholz, eds. and trans., *Pliny: Natural History*, London: William Heinemann, 1938-62. Far better is the edition and translation into French, ed. J. Beaujeu, A. Ernout, J. André, et al., *Plinie l'Ancien: Histoire naturelle*, Paris: Société d'Édition 'Les Belles Lettres' [Collection . . . Budé], 1950-85, 35 vols. to date. Unlike the Loeb's, the Budé edition of Pliny has a useful commentary.

The standard text of Soranus' *Gynecology* is that ed. by J. Ilberg, *Sorani Gynaeciorum*, Leipzig: Teubner, 1927 [*Corpus Medicorum Graecorum* IV], and translations in the essay above are rendered from this Greek text. A solid, if somewhat overly modernized English rendering is Owsei Temkin, trans., *Soranus' Gynecology*, Baltimore: Johns Hopkins University Press, 1956. Some commentary concerning contraception vis-à-vis abortion is in Ronald Stephens and John Scarborough, "Hippocrates and Abortion," *Journal of the American Medical Association*, forthcoming.

Some Modern Studies

General accounts of Greek prostitution:

Sarah B. Pomeroy, *Goddesses, Whores, Wives, and Slaves*. New York: Schocken Books, 1975.

Sarah B. Pomeroy, *Women in Hellenistic Egypt*. New York: Schocken Books, 1984.

Aline Rouselle, *Porneia*, trans. from the French by F. Pheasant. Oxford: Blackwell, 1988.

John Scarborough, "Proper Conduct and Sexual Mores" in *Facets of Hellenic Life*. Boston: Houghton Mifflin, 1976, 174-90.

Theophrastus' Botany and Pharmacology:

G.E.R. Lloyd, "Theophrastus, the Hippocratics and the Root-Cutters" in *Science, Folklore and Ideology*. Cambridge: Cambridge University Press, 1983, 119-35.

John Scarborough, "Theophrastus on Herbals and Herbal Remedies," *Journal of the History of Biology* 11 (1978), 353-85.

Dioscorides:

John M. Riddle, *Dioscorides on Pharmacy and Medicine*. Austin: University of Texas Press, 1985.

Greco-Roman Medicine, Pharmacy, and Medical Folklore:

Ralph Jackson, *Doctors and Diseases in the Roman Empire*. London: British Museum, 1988.

E. D. Phillips, *Greek Medicine*. London: Thames and Hudson, 1973.

John Scarborough, ed. *Folklore and Folkmedicines*. Madison: American Institute of the History of Pharmacy, 1987.

John Scarborough, *Roman Medicine*. London: Thames and Hudson, 1969; rptd. 1976. ■

What Child

From a photograph
in *National Geographic*, May 1984

What child is this,
in its fire-hardened,
blackened little casket,
crib on fissured marble,
buckled, given way—
gaunt lattice—
in a villa of overwhelmed Pompeii

the child itself
is nothing but its osteal
remains, configuration
in the friable pumice.
in the ash, and flecks of charcoal—
and they have taken it away,
for a solemn analysis.

© copyright 1988 Brent Dozier

One Breath

One of your breaths contains
all the air
a Mayfly breathes
in its life.

Antler

Rhesus

Face fixed
In a sardonic grin,
He finishes picking at
The salted certainties of self,
Rises,
And begins to dance
An antic frenzy
On the plated branches
Of his cage.
Slight but vital,
He works wild
In the neon light;
Working to the man's shadowed bulk,
Masked by night.
He works and wakens in his blood,
Fierce fires along his veins.

William R. Stott, Jr.

Translations of Modern German Poetry

By Reinhold Grimm

Finnish Tango *In memory of Felix Pollak*

That which existed last night is and isn't
The little boat that departs
and the little boat that approaches
The hair once so close is strange hair
That's easy to say It's always like that
The gray lake is still the gray lake though
The new bread of last night is stale
No one dances No one whispers No one cries
The smoke has dissolved and yet hasn't
The gray lake is blue now Someone calls
Someone laughs Someone is gone
All is so bright It was half dark
The little boat will not always return
It is the same and yet isn't
No one's around The rock is a rock
The rock ceases being a rock
The rock turns into a rock again
It's always like that Nothing
dissolves and nothing remains What existed
is and isn't and is No one
can grasp that That which existed last night
That's easy to say How bright
the summer here is and how brief

Hans Magnus Enzensberger
Translation published in Northwest Review
26(2) 1988, p. 42

Observation

By chance
observing a blind man:
his insect-like groping
across the braille dots.
Fingers in lieu of eyes:
how the world becomes perceptible
and yet remains invisible.
There's nothing new about that
but precisely therefore
it's worthy of being observed.

Günter Kunert

The poets

Hans Magnus Enzensberger, who lives in Munich, and Günter Kunert, who moved from East to West Germany in 1979 and now lives near Hamburg, were both born in 1929 (in Kaufbeuren, Bavaria and Berlin, respectively) and have worked as free-lance writers since the 1950s. They rank among the finest and foremost poets writing in German and have often been grouped together for their terse yet lucid style and wide range of subjects encompassing personal as well as political topics—often a unique combination thereof. Enzensberger, who is also a brilliant essayist, has published more than two dozen volumes, mostly of poetry and critical prose, many of which have been translated into other languages; he has also been a discerning editor

and successful publisher. Kunert has been even more prolific with numerous volumes of poetry and mainly narrative prose such as short stories and novels. Especially noteworthy is his 1974 travelogue *Der andere Planet* (*The Other Planet*) recording his experiences in this country where both he and Enzensberger have taught and lectured often. Both writers have received national and international prizes and awards. These Enzensberger poems were originally published in *Die Gedichte*, Frankfurt am Main, Suhrkamp Verlag, 1983. The Kunert poems were published in *Berlin beizeiten: Gedichte*, Munich: Carl Hanser Verlag, 1987.

Reinhold Grimm

Conversation of the Substances

But boron, but down in their wells
the aromatic oils: who interrogates zinc and cyanogen,
who takes care of the colloids, the hatred between
lime and arsenic, the love of the radical groups
for water, the transuranic elements' silent rage?
No one reads the manifestoes of the rare earths;
the secret of the salts, sealed up in druses
remains unsolved, the ancient feud between
levo- and dextrorotary aldehydes, unsung,
the hormones' gossip, untold. Haughtiness
drives the crystals, among the silicates
there's talk about shingle. The spars, the glances
whisper, the oxalic acids and the asbestos. Ether
in its ampules agitates against sulphur, iodine
and glycerine. Hostile, in their blue bottles, phosphorus,
sugar of lead and sublimate are waiting. You murderers!
You messengers! You helpless witnesses of the world!

Why can't I close the accounts and extinguish the fires,
cancel the guests, the milk and the newspaper, join
the lyes', the resins', the minerals' gentle
conversation, penetrate into the endless
brooding and moaning of the materials, stay
with the soundless soliloquies of the substances?

Hans Magnus Enzensberger

I, the President, and the Beavers

The wasp in amber quivers
from the whining of the devices.
The president's bowels are
regular again. The cherries
do not know his name.
In the kolkhozes the cattle
dream of the lush clover
and not of the expenses,
bloody and fat,
nor of the yield of the ashes.

Creation no longer takes note
of us. Silent forever
with loathing for us are
the dodo, the sable, the albatross.
Someday even the beavers'
patience will end. Only we,
soiled with telegrams
to the last, remain,
from kill to overkill
just changing the code word:
celt or cobalt.

We pretend to be harmless,
both of us: sleepless between
two injections the president,
and I, peeling my apple
in my peaceful fenced house,
as if there were no murder:
We're already forgotten.

Hans Magnus Enzensberger

Requiem

A path. Overgrown long since.
Tree stumps escort
the wanderer gone astray:
beheaded giants,
their bodies concealed by the soil,
their necks enveloped by moss; trenches
filled with bones of broken twigs and boughs.
Sinking light
that once had a different name.
Sounds
like masses of metal colliding.
Here were people,
the path says: Here they went along
never to return. Only the grass
has followed them
right to the rusty tracks. Is this
the way my native land looks
desolate with indifference?

A clatter of wings being flapped
in the shadowy brush. Then:
harsh shrieks of the one that escaped
above the treetops.

Günter Kunert

Education in the 1980s

*An Excerpt from **Humanities in America: A Report to the President, the Congress, and the American People**, by the chairman of the National Endowment for the Humanities, Washington, D.C., 1988*

Humanities in America

By Lynne V. Cheney

The Scholar and Society

The object of poetry, wrote William Wordsworth, "is truth, not individual and local, but general, and operative; not standing upon external testimony, but carried alive into the heart by passion." ("Preface to the Second Edition of *Lyrical Ballads*, 1800.) Literature, philosophy, and history have long appealed for the truths they offer, not truths about passing matters, but insights into what abides. The humanities move us with images, arguments, and stories about what it means to be human: to be mortal and to mourn mortality for ourselves and those we love; to know joy and find purpose, nonetheless; to be capable of good and evil, wisdom and folly.

In college and university classrooms across the nation, humanities scholars teach with thoughtful attention to enduring concerns. In libraries and archives, they work with care and precision to recover and interpret the past so as to enlarge general understanding. But in the academy, the humanities have also become arcane in ways that many find deeply troubling. "Our work is in danger of becoming completely esoteric," two historians noted recently. In the July 1988 *Harper's*, an English professor observed, "Perhaps the fear that buzzes most closely around every literary theorist is that he or she is a sort of self-deluding druid, absurdly deploying sequences of magic words that are both unilluminating and ineffectual."

Some scholars reduce the study of the humanities to the study of politics, arguing that truth—and beauty and excellence—are not timeless matters, but transitory notions, devices used by some groups to perpetuate "hegemony" over others. These scholars call into question all intellectual and aesthetic valuation, conceiving "the political perspective," in the words of one, "...as the absolute horizon of all reading and interpretation. (Fredric Jameson, *The Political Unconscious*, Ithaca, NY, 1981)

This approach, too, is isolating, setting scholars apart from men and women who find in the humanities what people have always found—a source of insight into all those questions to which the human condition perennially gives rise.

Politics and the curriculum

Describing a certain approach to the study of the past, G. M. Trevelyan once used the phrase "history . . . with the politics left out." (*English Social History*, London, 1944) Playing on that phrase, R.W.B. Lewis of Yale University expressed concern about what he sees as a troubling development in the academy: "politics with the history left out and, indeed, politics with the literature left out."

Viewing humanities texts as though they were primarily political documents is the most noticeable trend

These are, of course, legitimate questions, but focusing on political issues to the exclusion of all others does not bring students to an understanding of how Milton or Shakespeare speaks to the deepest concerns we all have as human beings. And the view that humanities texts are nothing more than elaborate political rationalizations has another consequence. It makes more difficult a task that is already hard: determining a substantive and coherent plan of study for undergraduates.

Debates about curriculum today often concentrate on the teaching of Western culture. Should students be required to know about the Old Testament and the New, about the classical works of Greece and Rome, about Shakespeare and Cervantes, about Hobbes and Locke and Freud and Darwin? Since Western civilization forms the basis for our society's laws and institutions, it might seem obvious that education should ground the upcoming generation in the Western tradition. It might seem obvious that all students should be knowledgeable about texts that have formed the foundations of the society in which they live. But opponents argue that those works, mostly written by a privileged group of white males, are elitist, racist, and sexist. If students are to be taught works by writers like Plato and Rousseau at all, it should be to expose and refute their biases. Teaching becomes a form of political activism, with texts used to encourage students, in the words of one professor, to "work against the political horrors of one's time." (Frank Lentricchia, *Criticism and Social Change*, Chicago, 1983)

The New York Times

Midwest: Great Lakes, mostly sunny, mild. Ohio Valley, mostly sunny with a warming trend beginning. Northern Plains, mostly sunny, clouds northwest. North Dakota. Weather map, page 8.

50 CENTS

Bennett Misreads Stanford'

Stephen R. Graubard, professor of history at Brown University, is editor of *Daedalus*, journal of the American Academy of Arts and Sciences.

**Rest assured,
the West is
not in decline.**

Yet in a televised debate Donald Kennedy, Stanford's president, Secretary Bennett created the illusion that conditions of a very different kind prevail. He made mu-

Gertrude Himmelfarb
history at the Graduate
City University of

Stanford And Duke Undercut Classical Values

immelfarb is professor of the Graduate School of the City of New York.

...to criticize the
what he described Socialist incumbent...

is no such thing as the best or the better, that what society considers the best or better is itself a function of race, gender, and class.

ditional idea of den
as should be judge
its rather than on t
persons propoundi
individuals should
individuals

...should
rather than
representatives of gro
perverted idea do
"women, minority
color" whose book
criticize

...worthy of whatever
...their way.
...Austen and Virgi
...in the curri

March 1989/Wisconsin Academy Review/31

Education in the 1980s

Several doubtful assumptions lie behind such an approach, the first having to do with the nature of Western civilization and the American society that has grown out of it. Are they productive mainly of "political horrors" or have they not also seen splendid achievements, persistent self-examination, and decided progress toward the goal of recognizing the dignity of every human being? To focus only on error, though surely that needs to be recognized, is to focus on partial truth, and not even the most important part. In what other civilization have women and ethnic minorities advanced farther? In what other society has social mobility so mitigated the effect of class? In what other culture has debate about these issues been so prolonged and intense?

Reading history and literature as primarily elitist, racist, sexist documents is the most noticeable trend in academic study of the humanities today.

The Western tradition *is* a debate, though those who oppose its teaching seem to assume that it imposes consensus. What is the nature of human beings? One finds very different answers in Plato and Hobbes, or Hume and Voltaire. What is the relation of human beings to God? Milton and Nietzsche certainly do not agree. "Far from leading to a glorification of the *status quo*," philosopher Sidney Hook has written,

... the knowledge imparted by [Western civilization] courses, properly taught, is essential to understanding the world of our own experience, whether one seeks to alter or preserve it. ... It would hardly be an exaggeration to say that of all cultures of which we have knowledge, Western culture has been the most critical of itself. ("The Color of Culture," *Chronicles* May 1988)

The Western tradition is a rich and creative one. From it have come principles that undergird our society and aspirations that uplift it. Nevertheless, the idea that the study of Western culture should be central to a college education is disputed in both word and deed:

- At Stanford University, the faculty senate recently voted to replace the required sequence in Western culture with courses in "Cultures, Ideas, and Values." A proposal that the new courses should aim "to deepen understanding of the ideas and historical forces that contributed to the development of Western civilization, American democracy, and scientific inquiry" was defeated by a wide margin.

- At Columbia University, the required undergraduate course in Western masterpieces, although highly valued by many faculty members, is under attack by others. Professor Edward Said recently told the *New York Times* that young faculty members "loathe [the course] with a passion beyond description." Assistant professor Susan Winnett told the *Times* reporter that the course is "a story of male entitlement."

- At Mount Holyoke College, students are now required to take a course in Third-World culture though there is no Western civilization requirement.

- The College of Letters and Sciences at the University of Wisconsin at Madison has adopted an ethnic studies requirement; there are no requirements mandating the study of American history or Western civilization.

- At the University of California at Berkeley, the faculty is debating a requirement in ethnic studies, a requisite that would, in effect, be the only undergraduate course work required university-wide.

Teaching becomes political activism to encourage students to work against the political horrors of their time.

To be sure, the study of Western civilization is being nurtured at many colleges and universities:

- At St. Anselm College in New Hampshire, all students take four courses in the humanities that range from ancient Greece, through the Middle Ages and Renaissance, to the twentieth century.

- At the University of Chicago, all students are required to take a sequence of three courses in the humanities in which Western texts are read. In addition, almost all students—94 percent of the June 1988 graduating class—take the university's renowned course in the history of Western civilization.

- From Brooklyn College of the City University of New York, to Whitney Young College of Kentucky State University, to Reed College in Oregon, there are substantial requirements in Western civilization.

The Western tradition is a continuing one, and students should understand this. Any course in the American experience should make clear how men and women of diverse origins have shaped and enriched this nation's Western inheritance. Students also gain from learning about other civilizations, about their values, their successes, their failures. Queens College of the City University of New York is developing a promising two-year world studies program that will give students both a firm grounding in Western history and knowledge of other cultures.

Deciding what it is that undergraduates should study is not only the most important task that a faculty undertakes as a group, it may also be the hardest; and the newly politicized nature of debate in the humanities has made it more difficult. At many colleges and universities, faculties never do agree; and broadly stated distribution requirements—or no requirements—are allowed to stand in the place of a core of common studies. As a result, many students graduate without any overarching view of how the separate courses they have taken relate to one another, without any sense of what Mark Van Doren once called “the connect-edness of things.” (*Liberal Education*, New York, 1943)

College should give undergraduates a sense of the interconnection of ideas and events—a framework into which they can fit the learning of a lifetime.

What shall be taught and learned is clearly a matter for college and university faculties and administrations—rather than outsiders—to decide. But it is also clearly a matter in which the society as a whole ought to have an interest. Students and their parents, for example, ought to look closely at curricula when choosing an institution of higher education. As it is now, “reputation,” “environment,” and “affordability” are the factors most people say they look for in choosing a college. What the college expects its students to learn is not a primary concern, though it should be. Has this institution wrestled with the question of what a graduate should know and has it arrived at an answer? And if it has, what is that answer? Do students learn how the ideals and practices of our civilization have evolved? Do they take away from their undergraduate years a sense of the interconnection of ideas

and events—a framework into which they can fit the learning of a lifetime? Do they encounter the humanities in ways that make their enduring human value apparent?

The humanities are about more than politics, about more than social power. What gives them their abiding worth are truths that pass beyond time and circumstance; truths that, transcending accidents of class, race, and gender, speak to us all.

Few have given this idea more eloquent voice than Maya Angelou. In Cedar Rapids, Iowa, in 1985, she told about growing up in Stamps, Arkansas, a poetry-loving child nourished by Shakespeare and Langston Hughes, Edgar Allan Poe and Paul Laurence Dunbar. One day when she was twelve, she determined that she would do what youngsters she admired greatly did: “render a rendition” of poetry before the congregation of the C.M.E. Church.

“I decided that I would render Portia’s speech from *The Merchant of Venice*,” Angelou said in Cedar Rapids:

I had it choreographed; it was going to be fantastic, but then, Momma (as I called my grandmother) asked me, “Sister, what are you planning to render?” So I told her, “A piece from Shakespeare, Momma.” Momma asked, “Now sister, who is this very Shakespeare?” I had to tell her that Shakespeare was white, and Momma felt the less we said about whites the better, and if we didn’t mention them at all, maybe they’d just get up and leave. I couldn’t lie to her, so I told her, “Momma, it’s a piece written by William Shakespeare who is white, but he’s dead and has been dead for centuries!” Now, I thought that she would forgive him that little idiosyncrasy. Momma said, “Sister, you will render a piece of Mister Langston Hughes, Mister Countee Cullen, Mister James Weldon Johnson, or Mister Paul Laurence Dunbar. Yes ma’am, little mistress, you will!”

Well I did, but years later, when I physically and psychologically left that country, that condition, which is Stamps, Arkansas . . . I found myself and still find myself, whenever I like, stepping back into Shakespeare. Whenever I like, I *pull* him to me. He wrote it for me. “When in disgrace with fortune and men’s eyes,/ I all alone beweepe my outcast state/ And trouble deaf heaven with my bootless cries/ And look upon myself and curse my fate,/ Wishing me like to one more rich in hope,/ Featured like him, like him with friends possess’d/ Desiring this man’s art and that man’s scope,/ With what I most enjoy contented least . . .” Of course he wrote it for me, that is a condition of the black woman. Of course, he was a black woman. I understand that. Nobody else understands it, but I *know* that William Shakespeare was a black woman. That is the role of art in life.

Education in the 1980s

American Memory

Excerpts from a American Memory: A Report on the Humanities in the Nation's Public Schools, by Lynne Cheney, Washington, D.C.: NEH, 1987

Teachers

In 1892, a school reform commission met that was distinguished in its membership and decided in its views. Known as the Committee of Ten, the panel called together scholars from universities—a young Princeton professor named Woodrow Wilson was among them—and representatives from the schools. As participants saw it, cultural content should be central to what was taught and learned. The committee emphasized the importance of literature (as well as “training in expression”) and recommended an eight-year course of history. This plan of study, the committee stressed, was for *all* students, not just for those who would be attending college.

For a time a curriculum of the kind the Committee of Ten endorsed prevailed. Gradually, however, an opposing view came to dominate: Schools should concern themselves not with intellectual life, but with practical life. As millions of children who would once have been outside the educational system enrolled in the schools, progressive educators argued that what most students needed was not study in history and literature, but preparation for homemaking and for work in trades.

“Skill” training began to drive more traditional offerings, like ancient history, out of the curriculum. Indeed, the very concept of history became submerged in “social studies,” a term that emphasizes the present rather than the past; English courses, transformed into “language arts,” stressed communication rather than literature, and as the schools adopted a fundamentally different orientation from colleges and universities, humanities scholars turned away from precollegiate education. Curricula, textbooks, and teacher training became the domain of professional educationists.

Under their guidance, schools began to emphasize the process of learning rather than its content. Both are important, extremely important in the teaching of history and literature. But so much emphasis has been placed on process that content has been seriously neglected. One can see the imbalance in the opening pages of a teacher's guide to a widely used textbook series. Scores of skills to be taught are set forth: everything from drawing conclusions and predicting outcomes to filling in forms and compiling recipes. The cultural content of learning, on the other hand, is given only brief mention. . . . Current reformers have emphasized the necessity of paying close attention to *what* our

Few teachers today see themselves as transmitters of culture.

children learn as well as to *how* they learn, but their message has proved difficult to translate into the classroom. . . .

The idea of being transmitters of culture is difficult for today's humanities teachers to hold in mind. They are besieged by educational theorists, administrators, and bureaucrats, all determined that daily classroom activity take another direction. They are beset by curriculum guides that set forth behavioral objectives; by required textbooks that follow the curriculum guides; by teachers' guides to the textbooks that tell them what questions to ask, what answers to give, what skills to emphasize. . . . Some teachers are glad to follow the guides and textbooks since their college years have left them unprepared to do otherwise. They have come through teacher preparation programs in which they have taken courses of dubious intellectual quality. Sometimes the subject matter is trivial . . . usually the approach is at fault: Courses treat teaching and learning in abstraction, elevating process to dogma and elaborating it in scientific-sounding language. Those future teachers who assume there is significance here go forth armed with jargon and convinced that what matters is what students can *do* after a lesson rather than what they know. . . . Time spent taking education courses is time that cannot be spent studying in content areas. . . . Teacher preparation requirements can leave teachers knowing less than they should about the subjects they teach. . . .

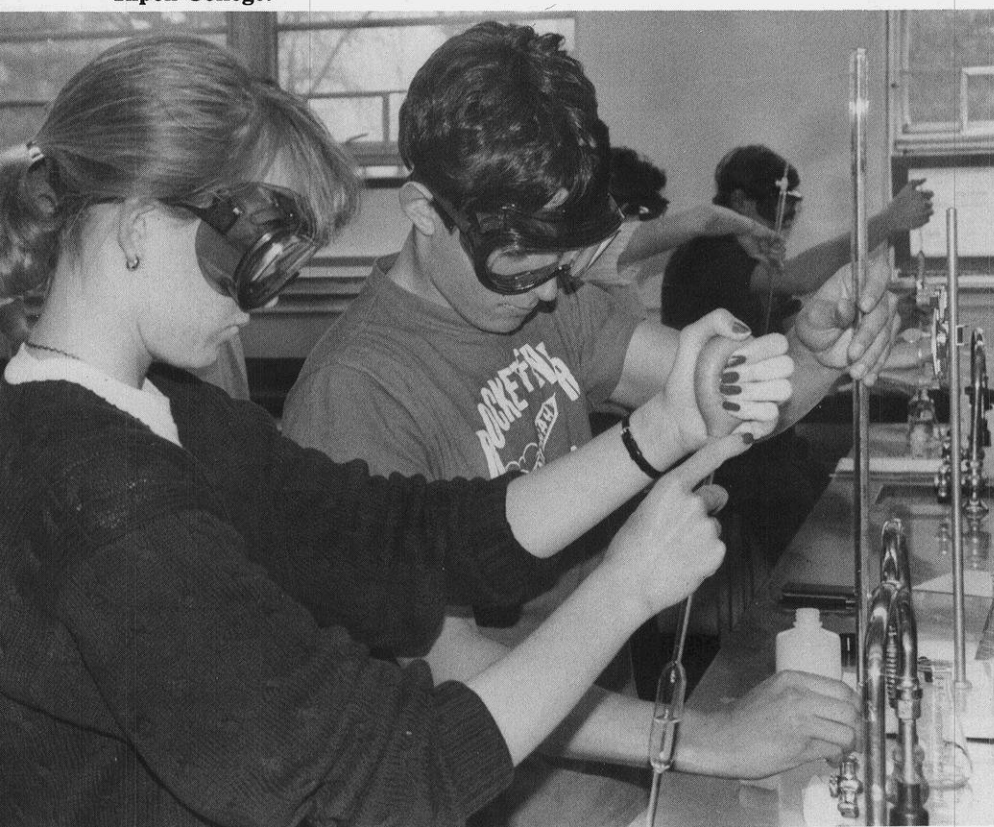
We should do more than find alternative ways to get bright and knowledgeable people into classrooms. We should be sure that regular paths to certification are fashioned with but a single interest in mind: securing good teachers. This cannot be accomplished until the process of certifying teachers becomes independent of the colleges that prepare them. . . . We would wish for our children that their decisions be informed not by the wisdom of the moment, but by the wisdom of the ages; and that is what we give them when we give them knowledge of culture. The story of past lives and triumphs and failures, the great texts with their enduring themes—these do not necessarily provide *the* answers, but they are a rich context out of which our children's answers can come.

Reprinted by permission of the National Endowment for the Humanities. Complete reports can be obtained from the National Endowment for the Humanities, Public Affairs Office, Washington, D.C. 20506.■

Improving Science, Math, and Technology Education

By David C. Boyer

Students engaged in Science Olympiad, a CASE program held annually at Ripon College.



CASE, The Center for the Advancement of Science [Math, and Technology] Education, has been a program of the Wisconsin Academy since 1982; Math and Technology were incorporated into the name in 1988, but the acronym remained the same. It had been established in the late 1960s by the Board of Regents at the University of Wisconsin-Superior to promote science, math, and technology education through partnerships of education, government, and business organizations. CASE has sponsored several National Science Foundation-funded programs, workshops for teachers, and conferences. In 1987 CASE organized a statewide "Conference of Partners to Plan Strategies for Science and Technology Education in Wisconsin" at Wingspread with the support of the Johnson Foundation, Cray Research, and others.

A staff member at the Wisconsin Academy phoned me two years ago, inviting me to speak at the Wingspread Conference on the actual and potential involvement of business in improving science, math, and technology education. With this invitation my own education on this subject had just begun. It seemed to me at the conference that these topics had often been discussed by these people in the past. They each wanted to im-

Education in the 1980s

prove science, math, and technology education, but because so many previous efforts had resulted in so few changes, I'm not sure they expected results from the conference. I was invited to join the CASE Board of Directors following that conference, and I intend here to share some thoughts and conclusions about the unique role of the Wisconsin Academy in this effort.

I have several questions about this area of education, kindergarten through twelfth grade. Volumes have been written on the subject. Experts agree that students' test scores are declining, which reflects the fact that children (and increasing numbers of adults) lack a basic understanding of science, math, and technology principles. They agree that thinking and reasoning skills are declining in an increasingly complex world where these abilities are required to operate at an appropriate level. That public educators have not been able to reverse this dismal trend has been lamented since the 1950s and even earlier. Who's supposed to be solving it? Are there any successes?

What could another conference accomplish when so many previous conferences had produced words without actions? Has the role of business been harmful or helpful? What can CASE do differently from other organizations with the same purpose?

Through my subsequent involvement with CASE, I've drawn some conclusions, but mostly I've raised more questions about what we as a nation should focus on in education. I am not going to concentrate on the actual evidence of the decline of education in this area; my review of it and the views of experts in the field have convinced me absolutely that current public education is inadequate for society's requirements. I've concluded that the

What are the goals of science education?

Policies aimed at improving science education must first define clear goals for that education: Who will be taught what. Should there be different goals—and therefore different curricula—for students of different interests and competencies? Which is of higher priority: the development of scientific talent and technical manpower, or achieving a basic level of scientific literacy for all students? Philosophical differences about what subject matter is most important must also be resolved. Should teaching of fundamental processes and concepts of say, biology, take precedence over an understanding of one's own body, good health practices, and preparation for sexually responsible conduct leading to good parent behavior, (i.e., intellectual development through study of the discipline versus development of the good citizen able to handle individual and family responsibilities)? What is the place of technology education in the curriculum? Rather than academic learning, should the main objective be for students to acquire the technical skills and ability for continued learning needed to contribute effectively to the U.S. economy (i.e., development of productive workers to compete in the world market)?

The only evidence that the science curriculum can be made more efficient is provided by the experience of other countries and by a select number of high schools that, year after, have produced high achievers in science. Neither of these provides convincing evidence for what can be done for the great majority of students in this country. Experimentation must take place to establish whether the suggested reforms actually increase student learning and enrollment in science. This is likely to require considerable investment to create not only the needed curriculum but also the flexible school environment that will permit a different instructional style and arrangement of content. Senta Raizen, "Increasing Educational Productivity through Improving the Curriculum," Center for Policy Research in Education, July 1988

real problem is that our expectations are too low: We have not improved education because we have not attacked the root of the problem, the educational system itself. We all influence the way that children today are educated: this system is molded by the expectations of the public. We need to discard the idea that the education system is the teachers or the administration. They're doing an excellent job, given the mixed expectations of the general population.

People commonly fail to understand how directly the educational system affects our economy and our wealth. We do not realize what a great opportunity we have to improve our economy and thus our quality of life by improving public education in science, math, and technology. Our government and business officials work daily to improve Wisconsin's economy, but they tend to go for short-term, high-impact solutions in order to show the quick results the rest of us de-

mand. For Wisconsin to become the leader in the teaching of science, math, and technology to our young people, it might take years and increased resources at all levels. But few business people and economists would argue against the fact that the long-term impact of improved education would be greater and longer lasting than all of the short-term programs combined. And the results would benefit everyone, not just the companies enticed to the state with tax incentives. The second opportunity is the chance to get more from our education dollars, by allocating resources to meet more specific objectives. Our expenditures for education have increased dramatically in real terms since the 1950s, but the results have been disappointing to most. The resources are there, but they are not being used effectively. The third opportunity may be more of a challenge. Improved science, math, and technology is absolutely important for the U.S. to retain world economic leadership, the basis of our standard of living.

So we have a great opportunity to improve society by improving basic education. I believe that we have failed to focus on the problem itself, the system of public education. People have been talking to one another, but they haven't been willing to challenge the very system of education, just as we in business have not been willing to challenge the way that we conduct business. If we're not willing to challenge the system and our efforts at modification don't produce adequate improvement, then we tend to begin pointing at one another. This only makes things worse and leads our energies down the wrong path.

People are reluctant to attack the *status quo* unless they expect to benefit from the change. Whatever system that we are involved with gives us our livelihood, our wealth, and in many respects, our identities. It's tough to challenge the sys-

tem on principle, if we think that we or those close to us may be losers in actuality. Even if things are not working very well, at least we know how the current system works, and that's very comforting to us. What we don't realize is that by subconsciously not allowing ourselves to measure whether real progress is being made on the problems before us, the problems will get worse until we are forced to act differently by something going very wrong.

Recently, both the Triangle Coalition for Science and Technology Education, which promotes alliances to improve education, and the National Science Teachers Association recommended initiatives to improve science education at the federal level. These recommendations would bring great progress if enacted, but I expect that they will be modified to "acceptable" solutions because the evaluators will feel threatened by the changes.

Our material success in this country has allowed us to forget that those who created the American Dream were willing to give up almost everything and start from

scratch in order to create something better. I believe, when it comes to improving science, math, and technology education, that we have become victims of that success and are no longer listening to the original logic that started it all. The very system itself no longer functions well for what we really want to achieve, and we seem to be afraid to challenge it together.

I'm not going to write here about specific tactics to improve science, math, and technology education. Volumes have been written by experts in education. There are two areas that deserve some thought, however, by those involved in any way in our education system. Those are how high our expectations are, and how we work together. Our expectations of what we need to achieve and what we're willing to accept are not high enough. They are not high enough for what we can accomplish working together, not high enough for what we're willing to accept for our children and future generations, and not high enough for what we can

Evidence for the failure of public education

Students are poorly prepared in the basic knowledge and skills of science and mathematics. The evidence is abundant: falling test scores, fewer students in high school science classes, fewer such classes available, fewer high-ability students choosing science and science education majors in college, and a growing shortage of qualified science and mathematics teachers in the schools. Less obvious, but no less important, is the limited knowledge of scientific and technological trends and issues among many of the nation's business, political, educational, and other leaders, and among the citizenry as a whole. And so, with fewer knowledgeable adults to lead the way and with limited resources for education in science and technology in the schools, our young people are being sent out into a technological society they do not understand and have diminishing chances of ever understanding.

American Association for the Advancement of Science:
A Developing Crisis, April 1982

Education in the 1980s

each learn for ourselves. No one can raise our own expectations but us, and high expectations are what permit us to challenge the system that gives us poor results in spite of tremendous efforts. I have been on the CASE Board of Directors for two years now, and my expectations and hopes for our education system have completely changed because of other people's expectations of me. We will not be able to legislate real education improvement. People have to want to improve education and be willing to challenge barriers as they occur.

We can solve the problems only by challenging the system and taking care of those who are displaced by the system changes. Without creatively evaluating how everyone's talents can best be used, we face continued resistance to change. Creativity is normal in human beings. We stifle creativity because we think it should be the domain of "experts." But when we turn these problems over to these experts, they can only work on a small percent of them. We need leaders to show us what education can achieve. CASE can provide the stage upon which various leaders demonstrate their visions.

“CASE was envisioned as not just another resource in education, but rather a unique, independent, neutral resource, unencumbered by the constraints of traditional enterprises and having the ability to communicate and cooperate with a wide array of audiences,” according to the published mission statement. CASE is necessary to the State of Wisconsin since real solutions depend on people working together to improve science, math, and technology education. CASE acts as a catalyst to bring people and groups together for the purpose of creatively applying their talents in a way that can only happen as they interact with other points of view.

There are several efforts taking place today, managed by the Wisconsin Academy staff, which reflect this unbiased approach to being a

What science do students need to know?

Educators are still trying to think through what it means to be scientifically literate. The National Science Foundation's . . . official description puts it: "Science can be thought of as a body of ideas, a way of thinking and investigating, a community of workers engaged in a complex social enterprise, and as a powerful force affecting how we live." . . . Columbia [University's] Dean Pollak stresses that science is not a series of conclusions but a way of thinking about the world. . . . "Every 5-year-old is a natural scientist because every 5-year-old is curious about the world. . . . For an individual, knowing how to ask the right questions is part of being educated. For a democratic society, empowering people to do this is a fundamental responsibility."

Edward B. Fiske, "Searching for the Key to Science Literacy,"
Education 1988

catalyst organization. CASE directs the Wisconsin Science Olympiad, where students increase their knowledge and interest in science, mathematics, and technology through team competition in hands-on tournament events. CASE has brought together a distinguished committee of government, business, and education leaders to consider thoughtfully how our state legislature can improve science, math, and technology education in this state. The FEST program, Field Education for Science Teachers, is a National Science Foundation-funded project that develops leadership skills and subject matter competence in field ecology and field earth science. Other programs are aimed at gathering a database about the status of science, math, and technology education in Wisconsin, so that CASE can act as a clearinghouse to those that need this information, and develop policy recommendations based on this data. For all current and future programs, CASE's activities will occur in five primary areas:

- 1) Identification and clarification of the science, math, and technology education needs of Wisconsin;
- 2) Fostering the use of improved curriculum and effective teaching practices;
- 3) Encouraging the development of state, area, and local alliances for improving science, math, and technology education;
- 4) Participation in the development and analysis of public policy relating to science, math, and technology education in Wisconsin;
- 5) Coordination of information relating to science, math, and technology education in Wisconsin for questions and referral.

CASE is a neutral center where people from government, education, and business sectors can come together and propose creative solutions to the everyday problems they encounter in improving education. Along with hard work, this may be the only way we can solve real problems. ■

The Marsh in Weather

Here it is raining
And the rain is real;
It means only to keep on
Running down the willows,
Reeds, our faces into the pool;
And the roof that could make it
Soft accompaniment—the roof is gone.

R. S. Chapman

The Marsh is Reprieved

Wind shifts quarter;
Duckweed blankets the water.
A little rain
And summer will return,
Small green frog singing.

R. S. Chapman

Poems by Loretta Strehlow

At the Cherry Hills Cooperative

She stands
third in a row of six
(never first, not quite last)
and waits
with the other women
for her allotted share.

Above them the sorter
(installed just a year ago
favorite of the boss)
with its magical electric eye
chooses or discards
by color and by weight.

"Cherry or girl,
that's life," she thinks,
the being picked or not.

Round as marbles
the cherries roll, drop
to the circling pitter
are pierced by the pitter rods.
Her hands stained
with the blood of cherries
hover over the gleaming fruit.
She, now, who makes the final choice.

Around her, the women are silent
listening to the music of machines
anticipating the percussion set to frighten birds
from nearby orchards.
She is caught in a summer dance.
Her clogged feet
awash in the pale pink wine of cherries
move on the concrete floor
to the rhythm of machines.

She senses the invitations
to be her partner . . .
the high school boys from southern Door
with their brassy voices
and visored hats worn backwards
(a way of fooling time?)
the new boy whose shyness reminds her of her own,
whose breasts beneath his green shirt
rise soft as any girl's,
the bold-eyed mechanic
whose oil-stained hands caress
cable and winch
conveyor and switch but . . .
it is with Willie she wants to dance.

Willie, driver of the yellow forklift
guardian of the golden cans of cherries
he hauls with pride to the cavelike cooling room.

Her fingers moving swiftly to discard
a pit, a stem
yearn, instead, to trace
the high lines of Willie's cheek
his narrow nose and square jaw,
to unwind the blue bandanna
that wraps his long light hair.

That night as she sleeps
he will drive into her dreams.
They will walk to the orchard
quiet then in the wine-dark night.
They will pluck fruit from slender trees
fill their mouths with sweetness
know that he has chosen her
that they have picked each other.

Someday, Son

you will be surprised
at how we are diminished,
your father and I.
It will be like looking
through the wrong end
of a telescope.
Our bones,
grown brittle in old age,
will shape faces
at once familiar
but strange.
Even the irises of our eyes
will fade.
We will be feather people
waiting for a wind
to blow us home.

Books That Make a Difference to Wisconsin Readers

By Faith B. Miracle

In his science fiction novel *Fahrenheit 451* (which is the temperature at which paper burns), Ray Bradbury wrote about a society where books were banned, reading forbidden, and where fire fighters became official firemakers. It's a chilling scenario, one which, fortunately, seems far from reality today. While the electronic media continues to gain in popularity, and while reports of attempted incidents of censorship increase, libraries and bookstores report a healthy interest in books, perpetuating a tradition which was brought to America by the early colonists. Seventeenth-century Boston, history tells us, boasted established bookstores before its streets had names!

The Wisconsin Center for the Book recently conducted a survey to see what books held particular meaning for Wisconsin readers. The questionnaire was distributed through libraries, schools, and bookstores, and approximately 3000 readers participated. The specific questions asked were: What book made a difference in your life? What difference did it make? The most unexpected answer was: "A checkbook. The difference it made was three years!" This response came from the Oakhill Correc-

tional Institution in Oregon, Wisconsin.

While the majority of those responding were adults, many named titles read during childhood as books which had a lasting effect on their lives. Remember those series we read as children? The Black Stallion series by Walter Farley and the Little House series by Laura Ingalls Wilder touched the imaginations of readers and turned them into habitual users of libraries. One reader recalled reading the Nancy Drew mystery series by Carolyn Keene: "I read these books during the war years of the 40s. This was a time of food rationing and we did not have enough meat and sugar . . . I escaped from my world of reality into one of chocolate cake (Nancy Drew had such delicious meals), a convertible car which Nancy used whenever the occasion arose (our Model T could barely make it to the next town), and fancy starched frocks (I had hand-me-downs). Nancy sustained me during those difficult years. . . ."

Sadako and the 1000 Paper Cranes by Eleanor Coerr helped some young readers deal with illness and death, as did *When the Phone Rang* by Harry Mager and *Where the Red Fern Grows* by Wilson Rawls. A teacher who read

Rawls's book to her class said the bonding it created between her and her students was powerful. Another reader, age thirty-seven, found Elizabeth Kubler-Ross's book *On Death and Dying* helpful in putting death into perspective. *About David* by Susan Beth Pfeiffer helped a fourteen-year-old reader "stop thinking about killing myself . . ."

Books which contributed to personal growth, values and ethics were cited by a number of participants. In naming *To Kill a Mockingbird* by Harper Lee, one reader said, "When I encounter a situation that challenges personal integrity, I think to myself, 'What would Atticus Finch do?'" A college-age participant read *Out of My Life and Thought* by Albert Schweitzer and "began to have a broader view of helpfulness and of improving people's lives." In a similar vein, *Slaughterhouse Five* by Kurt Vonnegut, Jr., made another reader "aware of the reality of other human lives beyond my own and of the moral responsibility we have to each other because of our individual aloneness."

Predictably, Wisconsin readers represent the entire spectrum of political beliefs. A reader who at age fifteen read *The Real War* by Rich-

ard Nixon said, "Before I read this book I was a very liberal person. After reading it, my views on politics and foreign policy took a complete turn and now I'm a very strong supporter of the Republican Party." A twenty-nine-year-old participant said of *The Handmaid's Tale* by Canadian author Margaret Atwood, "It frightened and horrified me and has been an impetus in my involvement in the fight against the 'New Right.' Eternal vigilance is the price of liberty."

The worlds of fiction, fantasy, and adventure have sprung to life from the printed page for many Wisconsin readers. A participant who at age ten enjoyed *Robinson Crusoe* by Daniel Defoe said, "It marked the first time I found adventure outside the movie theater and convinced me that reading was exciting." A reader who at age fifteen enjoyed *Jane Eyre* by Charlotte Brontë said, "It expressed my inarticulate longings and made of me a confirmed and probably hopeless romantic." Another romantic read *Women in Love* by D. H. Lawrence at age eighteen and found "the first passionate book I had ever read—truly and rightly passionate. It opened up a whole new and wonderful world . . ." *Gone with the Wind* by Margaret Mitchell was a favorite for many reasons. One reader used it "to pace myself in speed reading." Others took fantastic journeys through such books as *A Wrinkle in Time* by Madeleine L'Engle, *The Chronicles of Narnia* by C. S. Lewis, and *The Hobbit* by J.R.R. Tolkien. Of *The Adventures of Alice in Wonderland* by Lewis Carroll, one reader said, "It opened my eyes to the real world."

The topic of war, past and future, arose in many responses. A twelve-year-old reader said *Z for Zacharia* by Robert C. O'Brien "made me want to take an active part in making peace when I grow up . . . if I do." *All Quiet on the Western Front* by Erich Maria Remarque led another reader to an understanding of "the true horror of war . . ." Some young adults were distressed by graphic descriptions of war in

Johnny Got His Gun by Dalton Trumbo. On the other hand, *Battle Cry* by Leon Uris helped an eighteen-year-old reader decide to join the Marine Corps. Another young reader was inspired "to go through my local library alphabetically" after reading *The Red Badge of Courage* by Stephen Crane.

In *Travels with Charley* John Steinbeck documents his trip across the United States and tells us that of all the sights he saw, it was Wisconsin which surprised him. "Why was I unprepared for the beauty of this region, for its variety of field and hill, forest, lake?" he wrote. Why, indeed! Wisconsin is, after all, the state which nurtured environmental giants Aldo Leopold, John Muir, Sigurd Olson, and Jens Jensen. A survey participant who at age twenty-five read *Silent Spring* by Rachel Carson said, "When I first read it, I had just become aware of all the ways the environment was being ruined. . . . It wasn't until about six years ago that I could really do something about actively helping in environmental conservation." A participant who at age fifteen read *Walden* by Henry David Thoreau learned that "individuals who are receptive and in touch with nature can learn wisdom of a high sort."

A number of books brought about changed attitudes toward persons with disabilities. Among titles named were *Flowers for Algernon* by Daniel Keyes, *Of Mice and Men* by John Steinbeck, and *Helen Keller: The Story of My Life. One Flew Over the Cuckoo's Nest* by Ken Kesey inspired a twenty-one-year-old reader to become a social worker. Readers were helped through rough periods of growing up by such books as *Catcher in the Rye* by J. D. Salinger and *Go Ask Alice* by Beatrice Sparks. Responses from readers of Judy Blume's books were dubbed The Blumesbury Group! Many said her books helped them survive adolescence. Books which contributed to better understanding with regard to racial differences were *Souder* by William H. Armstrong, *Bury My Heart at Wounded Knee* by Dee Brown, *Roll of Thunder Hear My Cry* by Mildred Taylor, and *The Autobiography of Malcolm X* by Malcolm Little and Alex Haley.

As is true of people everywhere, Wisconsin readers seek a sense of self, an understanding of personal worth, and spiritual fulfillment. *I Dare You* by William Danforth made one young adult "stand

The Wisconsin Center for the Book was established in 1986 to emphasize to Wisconsin residents the importance of books, book arts, reading, and the written word as central to our understanding of our world and ourselves. The Center is affiliated with the Center for the Book in the Library of Congress in Washington and cooperates with seventeen similar centers in other states.

In addition to the Books That Make A Difference To Wisconsin Readers project, the Center has sponsored such programs as A Nation Of Readers photo exhibit and a read-in at the state capitol. In 1989 the Center is helping the state celebrate The Year Of The Young Reader, and it has commissioned author/illustrator Lois Ehlert of Milwaukee to create an art poster to highlight this year-long observance. In addition the Center has developed a brochure which covers young readers' responses to the Books That Make A Difference survey.

The Center is a program of the Wisconsin Library Association Foundation and is financially supported through private and corporate donations. For additional information, contact The Wisconsin Center for the Book, 1922 University Avenue, Madison, WI 53705 (608) 231-1513.

tall, sit tall, smile tall, and walk tall." *Big Beautiful Woman, Come Out, Come Out* by Carol Shaw helped a thirty-year-old reader "evaluate my life," and *Whoever Said Life is Fair* by Sarah Kay Cohen helped a twenty-year-old reader "take responsibility for my life." Many readers felt the need to relate the seemingly insignificant self to a greater dimension. *The Ascent of Man* by Jacob Bronowski revealed to one reader, age twenty-seven, "the interrelatedness of all things—and brought new meaning to ecology and ethics and the uniqueness of mankind." *Gift from the Sea* by Anne Morrow Lindbergh helped a thirty-seven-year-old reader "recognize the importance of quiet meditation." One reader who at age twenty discovered the book version of *The Family of Man* by Edward Steichen said, "This was my first understanding of the universality of all stages of human life in many world cultures. The concept completely changed the direction of my life and thought . . ."

A participant who named *The Once and Future King* by T. H. White said, "As a student of philosophy and theology, now a pastor in a parish, my search for truth often bounces back and forth between the doubts and despairs of existentialism and the faith and comforts of doctrine. This book, through a retelling of the legend of King Arthur, shows a balance between the two . . ."

A reader who read *Atlas Shrugged* by Ayn Rand at age twenty-six and again at age forty-six said, "It helped me to integrate my values and thus become a more morally consistent person. I had been an atheist all my life . . . and needed the assurance that a person could live a moral life without a faith."

The power of the written word to survive is exemplified by the significant number of readers who named the Bible as the most inspirational book in their lives. *Common Sense* by Thomas Paine is another example of literary survival. Published more than 200 years ago, it still had the relevance for one

reader to change his beliefs "from conservative Protestantism to secular humanism." *The Screwtape Letters* by C. S. Lewis "emphasized an individual's choice between good and evil" for a young adult reader. A participant who at age sixty-four read *One Day at a Time* by Christy Lane said, "It made me realize I should slow down and not plan too much on living always but to make each day count and live it to the fullest." Another reader was inspired at age forty-five by *The Quiet Answer* by Hugh Prather: "It has made me a more gentle person. When I read it, I feel peace flowing through my veins."

I once had the privilege of asking author Isaac Bashevis Singer what he read for pleasure. His response was immediate: "The works of Edgar Allan Poe," he said. Poe, an American author underappreciated by American readers, is still ringing true as a writer's writer. A century ago he inspired such great French writers as Marcel Proust, Stephane Mallarmé, and Paul Valéry. Wisconsin readers, in turn, have found inspiration in the literature of other countries. *The Little Prince* by Antoine de Saint-Exupéry was enjoyed by one reader at age fourteen and again at age thirty-five. A thirty-three-year-old reader said of *Madame Bovary* by Gustave Flaubert, "I picked it up one day . . . and discovered one of the most beautifully written novels of all time." A participant who at age thirteen read *Les Misérables* by Victor Hugo said, "It probably inspired me to continue my education, to have compassion for the unfortunate. I will always remember the deep stirring this book caused in me." Books by Virginia Woolf, Feodor Dostoevski, Charles Dickens, E. M. Forster, and Jane Austen also made a difference to Wisconsin readers.

Wisconsin authors, however, also scored with Wisconsin readers, and the range of interest was broad. *Rascal* by Sterling North (Edgerton) was an important book to a twelve-year-old reader. *The Westing Game* by Ellen Raskin (Milwaukee), a "complicated mystery

story," challenged a thirteen-year-old reader. *Justin Morgan Had a Horse* by Marguerite Henry (Milwaukee) became a "security blanket" to a young reader during a hospital stay which resulted in "a month of shots and loneliness." Today that reader, now an adult, still treasures the book. *The Land Remembers* by Ben Logan (Gays Mills) reminded a seventy-year-old reader of days spent with his grandparents. A sixteen-year-old reader was inspired by Green Bay Packer Jerry Kramer's autobiography, *Instant Replay*, and a fifty-year-old reader was moved by the eloquence found in *Queen Anne's Lace*, a collection of poems by Genevieve Smith Whitford (Madison). In addition to works previously mentioned by Edward Steichen (Milwaukee) and Laura Ingalls Wilder (Pepin), *Caddie Woodlawn* by Carol Ryrie Brink was named a favorite. While Brink is not a Wisconsin author, *Caddie Woodlawn* is set in Dunn County during pioneer days.

Wisconsin has produced many fine poets, and it is not surprising that poetry has made a difference in the lives of our state's readers. One reader, who at age seventeen read *The Portable Walt Whitman*, said, "I was coming of age during a time of violent Vietnam protest and rampant drug use and felt totally cynical and disillusioned about my country and everyone in it. Then there was Whitman, glorifying the gritty cities, common people, and everything they did. He was a beacon of light to me. I still have that book with me, always."

The ten books most mentioned by readers participating in the survey, in order of popularity, were: the Bible, *Little House on the Prairie* by Laura Ingalls Wilder, *To Kill a Mockingbird* by Harper Lee, *Where the Red Fern Grows* by Wilson Rawls, *Little Women* by Louisa May Alcott, *The Boxcar Children* by Gertrude Chandler Warner, *Gone with the Wind* by Margaret Mitchell, *The Diary of Anne Frank*, *All Quiet on the Western Front* by Erich Maria Remarque, and *Charlotte's Web* by E. B. White. ■



BOOK MARKS/WISCONSIN

REFLECTIONS ON HISTORY AND HISTORIANS by Theodore S. Hamerow. Madison: The University of Wisconsin Press, 1987. xiii + 267 pp. \$25.

By Gary Reger

For Louis Robert, the great French historian of ancient Greece, the duty of the historian was clear and simple: to discover the truth, and to prove that it was the truth. Robert died in 1985 after a professional life that spanned almost six decades. Those sixty years witnessed a great revolution in the character and practice of history. Narrative has almost completely disappeared, at least among academic historians; the so-called new history has brought methods and procedures from other disciplines to bear on historical problems; and deconstructionists have even rejected the existence of the "objective historical truth" on which Robert's dictum depends. Many observers have already commented on the "crisis in history," most notably perhaps Gertrude Himmelfarb.

Theodore Hamerow, a distinguished historian of modern Europe who has taught at the University of Wisconsin at Madison for thirty years, has now joined the discussion with *Reflections on History and Historians*, an extended essay on the current state of the field and

the implications it may have for the future of the profession.

Hamerow approaches his subject with a combination of survey research, historical analysis, and reflection on personal experience. His first chapter sketches the current outlook in the humanities in general and history in particular; the picture is grim. Symptoms of crisis march in review: the disappearance of academic jobs, entailing brutal disappointment for perfectly qualified young people after years of grueling training; the disenchantment of the reading public with arcane professional writing; the rise of social sciences like economics and sociology, which have usurped the seats that history used to occupy at the table where public policy is debated; a sense of uncertainty or lack of direction within the profession, which has caused some to seek purpose in the methodologies of the social sciences or the claims of the "new history"; and the declining enrollments in history courses, which are said to reflect students' new view of "learning [not] as a means of achieving personal cultural fulfillment but of pursuing collective social justice."

It is this malaise which Hamerow is out to explain. In his view the process began in the mid-nineteenth century when professionalism entered the field of history. From the days of Herodotos most

history had been written by men of affairs, but from the mid-1800s on professional academic historians emerged who gradually but inevitably displaced the Macaulays and the Gibbons. Right from the beginning, these professionals declared war on the amateurs, who were accused of sloppy scholarship and melodrama.

The struggle to displace the amateur belongs to a general nineteenth-century trend toward professionalism which issued in the founding of professional licensing organizations like the American Medical Association, which fought independent practitioners by lobbying for the founding of medical schools, the creation of state licensing boards, and the enactment of stiff laws against "quacks." The drive by historians to effect professionalism in their field and to create licensing schools—Ph.D. programs—fits nicely into the pattern of institutionalization of knowledge so widespread in late Victorian America.

For Hamerow the result has not been entirely happy. History captured by professionals and ensconced in the university has lost much of its human appeal. Hamerow's view is most vivid in his account of life as a graduate student and as a practicing academic historian. The indentured servitude of dissertators to their advisors, the

tedium of graduate instruction ("Nothing can make studying for the Ph.D. a consistently challenging or exciting experience"), and the disappointments of the professional world are evoked with the immediacy of personal experience. Readers may especially relish the ironic sketches of academic social life or of professional conventions, which for Hamerow have more in common with an invasion of Shriners than a gathering of minds. Those who have been there may quibble about details but will surely admit that there is truth in his accusations of empty "careerism" and insincerity.

The last ingredient in Hamerow's analysis is the so-called new history, which means for him preeminently cliometrics, or the use of quantification; social science history, which marries the methods of the social sciences to history; and psychohistory, which applies the techniques of psychoanalysis to figures from the past. Hamerow acknowledges the successes of these new histories, but his account clearly indicates a deep suspicion of their claims and a conviction that they have contributed to the problems that the discipline now faces.

In his final chapter on the uses of history Hamerow affirms the value Herodotus set on history over 2400 years ago: that history is written so the deeds of men shall not be blotted out by time. This view—that human beings have a deep and abiding need to know what happened in the past, and that therefore history needs no more justification than love—implies for Hamerow a primacy of narrative history. To know the deeds of men of the past is to know *what happened*. A brief but very interesting appendix recounts interviews with eight prominent writers of history outside the university. Every one writes traditional narrative, or something very like it; all live—indeed, live well—off the income they earn from writing history. The same can be said for only a handful of academic historians.

Yet in some respects Hamerow's

picture seems overdrawn. The survey data he cites to prove decline in the social class from which academic historians come are not convincing, and many of the surveys marshaled to demonstrate general dissatisfaction of historians with their field are outdated or asked such different questions that the results are not comparable. Moreover, academic history, including the "new history," is not dead. The new histories have greatly enriched the field, opening to historical study matters long considered outside the purview of historians. Nonstandard history continues to attract readers: Braudel, Le Roy Ladurie, and Peter Gay, to name but a few, sell books, and students continue to take history courses, albeit in fewer numbers. The desire to know what happened is indeed very powerful, but narrative is not the only medium that satisfies it.

There is as yet no consensus on what history should look like. One hundred years ago, as the earlier consensus around narrative was dissolving, historians reassured the reading public—and each other—that a new narrative would arise to incorporate the results of the specialized studies that were winning the day. Hamerow reminds us that this "new narrative" never emerged. There is perhaps a lesson in this. Warnings of crisis and collapse in the field of history are not new—Hamerow himself quotes many, to great effect. But just as the "new narrative" never arrived, so has the final disaster failed to materialize. After forty or more years of economic, social, feminist, cliometric, ethnic, and social scientific history, calls for a return to narrative sound unrealistic. If a new consensus does coalesce, it will have to incorporate and not just ignore the revolution in history that Hamerow's book documents.

Gary Reger, assistant professor at Trinity College in Hartford, Connecticut, teaches Greek and Roman history.

MELVILLE'S READING

revised and enlarged edition by Merton M. Sealts, Jr. Columbia: University of South Carolina Press, 1988. xviii, 296 pp. \$35.00.

By Donald D. Kummings

Herman Melville exemplified what Henry Thoreau calls "the alert and heroic reader." Thoreau proclaims in *Walden* that "to read well, that is, to read true books in a true spirit, is a noble exercise, and one that will task the reader more than any exercise which the customs of the day esteem. It requires a training such as the athletes underwent, the steady intention of the whole life to the object." Although Melville received scant formal education—he dropped out of school at the age of twelve—he nevertheless exhibited early and late a love of "true books," and he "read well." Among the writings that most affected him and most influenced the course of his career as a creative writer are the Bible (both the Old and the New Testaments); the plays of William Shakespeare, the tragedies in particular; the works of the major Greek and Roman historians, orators, epic poets, and dramatists: Thucydides, Cicero, Homer, Virgil, Sophocles, Aeschylus, etc.; the prose of Sir Thomas Browne, Robert Burton, Michel Montaigne, François Rabelais, Thomas Carlyle, Nathaniel Hawthorne, and Honoré de Balzac; the dialogues of Plato; the poetry of John Milton, Alfred Tennyson, and Matthew Arnold; the literature of travel and whaling, e.g., Richard Henry Dana's *Two Years Before the Mast*, Owen Chase's *Narrative of the . . . Shipwreck of the Whale-Ship Essex*, and Jeremiah N. Reynolds's *Mocha Dick; or the White Whale of the Pacific*. In *Melville's Reading*, Merton Sealts, emeritus professor of English from UW-Madison, recounts the self-education of the author of *Mardi*, *Moby-Dick*, *Pierre*, and *The Confidence Man*, providing in addition a valuable numbered checklist of books that this great writer owned and borrowed.

Sealts's book is divided into two parts. Part I discusses what Melville was reading during the years of his youth—at home, at school, at sea—and later, during those times when each of his major works was in progress. Melville seems to have been introduced to the world of books through the practice, established by his mother, of reading aloud within the family circle. He cultivated his taste for reading, developing especially a fondness for ancient history and literature, during his brief formal education, pursued at the New York Male High School, the Grammar School of Columbia College, and the Albany Academy. Even during his years at sea, 1839-44, he nurtured his reading habit, making do with what he could find in the small, patchwork libraries of the various ships on which he sailed. When, at twenty-five, Melville embarked on his career as a professional writer, the die had been cast. He would become an omnivorous reader, borrowing books from literary acquaintances such as Evert Duyckinck, ordering titles from his publishers, drawing upon the resources of public libraries, frequenting bookshops, turning up at auction sales. And much of what he read was put to inventive use, for as F. O. Matthiessen maintains in *American Renaissance*, "The books that really spoke to Melville became an immediate part of him to a degree hardly matched by any other of our great writers in their maturity."

Part II, which is eighty pages long, consists of an alphabetized and numbered "Check-List of Books Owned and Borrowed." Its entries, Sealts explains, "fall in three general classes: books owned that have survived, books owned that have apparently not survived, and books borrowed." At the present time, there is external evidence that Melville owned at least 350 titles. Of these, 269 are known to have survived and 232 have been located. Books are not included in the list unless there is a definite record of owning or borrowing. Omitted from the checklist as a result of this re-

striction are numerous books that Melville mentions in his writing or that are known to have been "sources" of his work. Following the listing is an analytical index of entries. Here one can learn, among other things, the current locations of surviving titles. Rounding out the volume are four appendices ("Other Books Advertised as Melville's," "Other Books Bought by Melville's Relatives," "The Ship's Library of the *Charles and Henry*," and "The Library Call Slips"), a bibliography of "Works Cited," and an extremely useful general index.

To study Melville's reading is to gain insights into the ways in which a literary master works. During the nineteenth century, when Melville's reputation was primarily that of "the man who lived among the cannibals," many readers, even including members of Melville's family, regarded such novels as *Typee* (1846), *Omoo* (1847), *Mardi* (1849), *Redburn* (1849), *White-Jacket* (1850), and *Moby-Dick* (1851) as largely factual and autobiographical. However, twentieth-century scholars have discovered that right from the start Herman Melville heightened and extended the facts of his personal experience with materials drawn from his imagination and, in particular, from his reading. Sealts's work is replete with penetrating looks at the author's artistry, as it shows time and again that Melville bequeathed to posterity far more than unvarnished accounts of personal adventures.

Merton Sealts began his investigations into Melville's intellectual development over four decades ago. From 1948 to 1952 he published serially in the *Harvard Library Bulletin* his initial cataloguing of books that Melville owned and borrowed. In 1966 he revised and expanded his original study, issuing it in book form—*Melville's Reading* (The University of Wisconsin Press). This version featured the addition of new titles and an informative, twenty-six page narrative: "The Records of Melville's Reading." Since 1966, as Sealts points out, "we have seen the emergence of more

books that once belonged to Melville—including his heavily annotated copies of Milton and Dante—and the startling discovery in 1983 of a veritable treasure trove of Melville family papers, which have since been added to the already rich Gansevoort-Lansing Collection in the Rare Books and Manuscripts Division of the New York Public Library. These papers afford new information concerning Melville himself and the books, magazines, and newspapers read by him or within his extensive family circle." Taking into account the newly emerged titles and recently discovered papers, Sealts provides in his latest volume a major revision and enlargement of the 1966 edition. Often called, even in its earliest incarnation, an indispensable work of reference, *Melville's Reading* is now better than ever. All serious students of Melville will want to consult it, and even nonscholarly readers may well find its expanded narrative, now 140 pages long, fascinating and instructive.

Donald D. Kummings, professor of English at UW-Parkside, is the author of Walt Whitman, 1940-1975: A Reference Guide (G.K. Hall, 1982) and Approaches to Teaching Whitman's Leaves of Grass (MLA, forthcoming).

A GUIDEBOOK TO THE GEOLOGY OF LAKE SUPERIOR'S APOSTLE ISLANDS NATIONAL LAKESHORE by Edward B. Nuhfer and Mary P. Dalles. Dubuque, IA: C. Brown Publishers, 1987. 74 pp. \$5.50. Available from the authors: 1554 County B., Platteville, WI 53818.

By Ken Uslabar

The Apostle Islands National Lakeshore, established in 1970 after years of controversy, consists of

twenty islands and an area along the shore of the Bayfield Peninsula, about 42,009 acres (17,000 ha.). Over the years the Apostle Islands area has withstood changing lake levels, Lake Superior storms which can change the map overnight, various glaciers, and politicians. James Watt, President Reagan's first Secretary of the Interior, proposed selling off part of the islands to the private sector. The proposal was defeated, but other attacks will be made on the lakeshore.

Edward Nuhfer and Mary Dalles have written and published an excellent guidebook to the islands and shore unit on the Bayfield Peninsula. The guidebook is detailed and technical enough to satisfy the requirements of a person interested in geology and geological processes. People with little or no interest in geology can still take advantage of this book since all terms are adequately explained and illustrated. Tourists interested only in scenery and not the explanations for the landscape, however, would probably not be interested in the guide book. This is not a coffee table edition to be admired from a distance, but rather, as the authors indicate, a working book to be used and abused in the exploration of the Apostle Islands.

Reading the guide book reminded me of the times I had seen the Apostle Islands rising out of a lake mist on a summer morning; it was like being transported back in time to an earlier age. The authors do an excellent job of helping the reader to imagine being present for the grand sweep of events that produced the present-day Apostle Islands.

The authors describe the sequence of events that culminates in the present Apostle Islands in the following way: in Precambrian times the continent began to pull apart. As the crust thinned, volcanic materials were deposited in the developing rift valley. These volcanics and the preexisting granite rock of the area were weathered and eroded by short streams that flowed through meandering chan-

nels choked with sediment. The sediments formed the Bayfield dirty sandstone deposits that in a much later age would be used as building stone. The authors hypothesize that these streams were braided streams because the rock preserved thin gravel beds, planar cross beds, convoluted bedding, and thin channel sands, sedimentary features seen in braided streams today. The Bayfield Group rocks were then covered by marine sediments that have been completely eroded, although they are present in other parts of Wisconsin. Pleistocene glaciation covered the area with a veneer of unconsolidated material that serves as the source of the beach forming sand in the islands today.

After introducing the geology of the area, the authors describe each island, including safe places to land and which islands to avoid because of dangerous conditions or the risk of disturbing nesting bird populations.

Time travel is possible: Go to the Apostle Islands; sit on a barren rock beach and stare out at the inland sea that is Lake Superior. Conditions, sights, and sounds will be just as they were in the Precambrian. Returning to the same location on a cold winter day would be a trip back to the Pleistocene.

In order to keep the price of the guidebook down, Nuhfer and Dalles have done the typesetting and photo layouts, leaving only the printing to a publishing house. Some effort might have been made, however, to improve the quality of the photographs which are low contrast and frequently overlain with poetry, which is not essential to the book's primary purpose. The authors hope that the romance and mystery of the Apostle Islands can be conveyed by poetry. However, the poetry did not work for me; I kept waiting to be moved, but nothing happened. One poem, "Hermit," aroused some excitement for a few lines and then lost my interest. The guidebook could have been reduced to a handbook size which would better fit in a pocket or camera bag.

Visiting the Apostle Islands is a valuable experience on many levels. Preserving the Apostle Islands as an outdoor laboratory where the effects of wind, waves, and time can be studied must be a national as well as a state and local priority.

Ken Uslabar is an earth science teacher in Neenah, Wisconsin.

100 YEARS OF WISCONSIN

ART. Milwaukee: Milwaukee Art Museum, 1988. 142 pp. \$15.95. Available from the Milwaukee Art Museum Shop, 750 North Lincoln Memorial Drive, Milwaukee, WI 53202. Add \$2.00 for shipping and handling.

By Peter C. Merrill

This handsomely produced and copiously illustrated volume is the catalogue for an exhibition held at the Milwaukee Art Museum in the fall of 1988. The exhibition concentrated on the work of fifty-two Wisconsin artists, presenting at least two works by each. The project was conceived to commemorate the founding, a century ago, of the Milwaukee Art Association, one of the precursors of the present Milwaukee Art Museum. As such, the project aimed to provide a retrospective view of art in Wisconsin during the last hundred years. Although painting necessarily occupies a pivotal place in the exhibition, one is gratified to find that fields such as sculpture, photography, and the crafts have not been overlooked.

Both the exhibition and catalogue reflect the efforts of curators Janet Treacy and Dean Sobel. The catalogue begins with two introductory essays, one by Treacy on early Wisconsin artists and one by Sobel on Wisconsin art since the Depression. As Treacy's essay observes, many of the leading Wisconsin artists of the nineteenth century were immigrants from Europe,

particularly from Germany. Artists such as Henry Vianden, Bernhard Schneider, and Richard Lorenz were products of the German art academies who brought their skills to Wisconsin and trained a generation of locally born artists such as Louis B. Mayer and Susan Frackelton. Until World War I even Wisconsin-born artists were rooted in the European tradition, and many went abroad to complete their training, but from around 1920 it became possible to get excellent training without leaving the state. In fact, several of the state's leading twentieth-century art teachers are themselves represented in this ex-

hibition, the list including Alfred Sessler, Gustave Moeller, Robert von Neumann, and Elsa Ulbricht.

The artists comprising the exhibition are presented in alphabetical order with one page allotted to the discussion of each artist and a facing full-page illustration to complement each entry. The text is well researched and always includes such essential information as each artist's exhibitions and a selective bibliography.

An exhibition such as this makes one realize just how great a contribution has been made by Wisconsin's artists, for though many are not well known outside the state,

others have established national or even international reputations. By focusing attention on just fifty-two artists, the curators inevitably excluded some important figures, for example, Georgia O'Keeffe, Carl Holty, and Karl Knaths. Nonetheless, the selection was good and succeeds in bringing together a sampling which is at once representative and balanced in its diversity.

Peter C. Merrill, associate professor of languages and linguistics at Florida Atlantic University, has published several articles on art in Wisconsin.

Poems by Bonnie Buhrow

Pretty

When Charlene, my homely friend,
was in an old car that stopped dead
on railroad tracks, she was able
to jump, roll down the embankment
and live on, with a long
facial scar and a limp.

I wonder if I would have taken
that leap like her, down
a slick, disfiguring slope,
stones scraping off makeup
and then skin. Or would
I have waited, stalled
in my prettiness, while the train
whistled and whistled and finally
gathered up enough courage
to meet me.

Monarch Butterflies

During the usual dinner table argument,
fidgeting on the edge
of adolescence, I look out
at the huge maple in the back yard, it is
covered with monarch butterflies, dozens
and dozens like unimaginable leaves,

and their flutter is suddenly everywhere,
even in my vegetable soup: the brown broth
with sluggish detestable carrots
grows quick patterns
and beautifies my spoon,

while my mother's face softens
into a sweet excited flush
with dark eyelashes, she whispers
"wonderful," and there is no more
loud hard talk during supper,
nothing to dislodge those fragile wings.

WISCONSIN ACADEMY REVIEW

1922 UNIVERSITY AVENUE
MADISON, WISCONSIN 53705

Address Correction Requested

Second-class Postage
Paid at Madison, WI