
RESOURCES & ENVIRONMENT

"human testing problem." The federal government has set maximum contaminant levels for a number of inorganic chemicals, including arsenic, lead, mercury, and nitrate. But concentrations of these chemicals in the water supply vary not only from place to place but also from season to season. It is difficult to determine the precise source of any one contaminant present in the human body. (The poisons may come from food or air as well as water.)

Our ignorance is compounded by the problems of conducting human tests. The primary threat posed by water pollutants lies in their long-term, low-dose cumulative effects. Because humans live about 35 times longer than mice and have a far more variable genetic composition, high-dose animal exposure tests are no good for determining maximum exposure concentrations in humans.

Despite the lack of adequate testing techniques, says Sterrett, scientists must keep plodding along, taking care to continuously "review, re-evaluate, and update" all standards—a process that will have to continue far into the future.

ARTS & LETTERS

Philadelphia's Third Dimension

"The Origins of Sculpture in America: Philadelphia, 1785-1830" by Wayne Craven, in *American Art Journal* (Nov. 1977), Kennedy Galleries, 40 W. 57th St., New York, N.Y. 10019.

In 1782, Benjamin Franklin, then ambassador to France, advised Italian sculptor Giuseppe Ceracchi not to pin his commercial hopes on the American market. Private persons, he wrote, were not rich enough to afford sculpture, while the public, "being burden'd by its War Debts, will certainly think of paying them before it goes to the Expence of Marble Monuments."

Yet three years later, Franklin returned to Philadelphia with French sculptor Jean Antoine Houdon in tow. According to Craven, an art historian at the University of Delaware, the Virginia legislature surprised Franklin by commissioning Houdon to execute a marble statue of George Washington. As time went on, however, Philadelphia, not Virginia, led the way in making sculpture an equal partner to painting in the American arts.

Before the Revolution, New York, Williamsburg, and Philadelphia boasted classical ornamental statuary. But only after Independence was sculpture perceived as an integral part of the cultural scene. The arrival of Houdon and, later, of Ceracchi in Philadelphia sparked great excitement—and numerous commissions. As these artists' work appeared throughout the city, Philadelphians demanded more and more—busts, figures, monuments, garden statuary. Then, local wood-

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carvers, long regarded as mere artisans, were encouraged to refine their work and to emulate the "high art" styles of Europe. Painter Charles Wilson Peale (1741-1827) and sculptor William Rush (1756-1833), both connected with the founding of the Pennsylvania Academy of Fine Arts in 1805, worked with American craftsmen and their Old World tutors to bring American sculpture up to the level of American painting. Their aims were advanced by the Philadelphia architect William Strickland, who routinely incorporated sculpture into the many new public buildings he designed for the city. By the time of Houdon's death in 1828, Philadelphia displayed a sculptural landscape unmatched elsewhere in the new nation.

Philadelphia's William Rush, who was once a carver of ship's figureheads, executed this statue of George Washington in 1814.



Independence National Historical Park.

*Robert Frost:
Fire and Ice*

"Vanity, Fame, Love and Robert Frost"
by Donald Hall, in *Commentary* (Dec.
1977), 165 E. 56th St., New York, N.Y.
10022.

During his lifetime, poet Robert Frost (1874-1963) enjoyed a popular image as the benign sage of New England. But after his death, a second Frost, revealed by biographers, rose up and destroyed the first—the conniving, self-absorbed abuser of his suffering wife and children. Hall, a noted poet who knew Frost for 20 years, contends that neither image is correct.

Young Frost suffered greatly for his art; so did his wife and children,