## An Intelligible Universe

A particle physicist and ordained Anglican priest, John Polkinghorne, president of Queens' College, University of Cambridge, writes in *Commonweal* (Aug. 16, 1996) about a very curious coincidence.

When we use mathematics as a key to unlock the secrets of the universe, something very peculiar is happening. Mathematics is the free exploration of the human mind. Our mathematical friends sit in their studies, and out of their heads they dream up the beautiful patterns of mathematics. Inexplicably, some of the most beautiful patterns thought up by the mathematicians are found actually to occur in the structure of the physical world. In other words, there is some deep-seated relationship between the reason within (the rationality of our minds—in this case mathematics) and the reason without (the rational order and structure of the physical world around us). The two fit together like a pair of gloves. That is a rather significant fact about the world, or so thought Einstein. Einstein once said, "The only incomprehensible thing about the universe is that it is comprehensible." Why, we should ask, are our minds so perfectly shaped to understand the deep patterns of the world around us? . . .

Why do the reason within and the reason without fit together at a deep level? Religious belief provides an entirely rational and entirely satisfying explanation of that fact. It says that the reason within and the reason without have a common origin in that deeper rationality which is the reason of the Creator, whose will is the ground of both my mental and my physical experience. Theology has the power to answer a question, namely the intelligibility of the world, that arises from science but goes beyond science's ability to answer. Remember, science simply assumes the intelligibility of the world. Theology can take that striking fact and make it profoundly comprehensible.

## Taking the Measure of Deep Ecology

"There's No Going Back to Nature" by Walter Truett Anderson, in *Mother Jones* (Sept.-Oct. 1996), 731 Market St., Ste. 600, San Francisco, Calif. 94103.

Deep ecology, bioregionalism, ecofeminism, neo-Luddism, and other forms of "back-to-nature" environmentalism are all the rage in some precincts of the Left today. Passionately opposed to "anthropocentric" (human-centered) thought and action, thinkers such as Kirkpatrick Sale hate technology, love the primitive, and dream of a world in which people stay put in their own bioregions, living and working alongside native plants and animals. A former editor of *Earth First! Journal* wrote that he would like "to see human beings live much more the way they did 15,000 years ago" (i.e. hunting and gathering).

Popular as such notions may be on college campuses, writes Anderson, author of Evolution Isn't What It Used to Be (1996), they are almost completely irrelevant to "most of the valuable environmental work that is being done now and will be done in

the future." The earth, he points out, "is becoming more densely populated, not less; more urbanized, not less; more technological, not less. Most important of all, human beings are exerting ever more—not less—power in nature, having a greater impact on ecosystems."

Even the most benign human interventions reshape nature, Anderson argues. "People are rebuilding rivers and streams and ponds and beaches, reconstructing forests and prairies and deserts, sometimes coaxing populations of near-extinct species back to a sustainable size." But restorations can never be perfect replicas of past ecosystems. Inevitably, the restored ecosystem lacks certain species that have become extinct and includes some bird, insect, or plant that has moved in and made itself at home.

Technology, the nemesis of radical envi-

ronmentalists, is vital to environmental protection, Anderson asserts. It takes sophisticated equipment, for instance, to detect and monitor a hole in the ozone layer. Even biotechnology—"the Great Satan for the back-to-nature ideologists"—can be used to

protect the environment, he points out. Its products include "bioremediation (microbes that take chemical pollutants out of water; plants that take up mercury from the soil), and new kinds of materials including genuinely biodegradable plastics."

## ARTS & LETTERS

## Monumental Time

"Maya Lin and the 1960s: Monuments, Time Lines, and Minimalism" by Daniel Abramson, in *Critical Inquiry* (Summer 1996), Univ. of Chicago, 202 Wieboldt Hall, 1050 E. 59th St., Chicago, Ill. 60637.

Maya Lin's Vietnam Veterans Memorial, in Washington, D.C., has captured America's heart with its two black granite walls rising from the earth and meeting at an obtuse angle, their surfaces etched with the names of the 58,156 American war dead. The early controversy over the minimalist, unheroic design soon subsided as "the wall" became a poignant shrine. But few realize the true nature of Lin's contribution to the memorial, or how revolutionary it really was, argues Abramson, a professor of art history and architecture at Connecticut College.

"The complete listing of names as well as the design's subdued horizontality, reflectivity and unheroic tone were all more or less mandated" by the memorial's sponsors, Abramson notes. Lin's one genuine innovation, he contends, was to put the names in chronological-rather than alphabetical - order, with the name of the first casualty (in 1959) on the right-hand wall next to the vertex, where it seems to follow the name of the final casualty (in 1975) at the bottom of the rightmost column on the left wall. This, Lin has explained, symbolizes the closure of the Vietnam War.

Abramson maintains that Lin's use of a time line "is altogether new in the history of monument design." Lin has since used it in two other works. The Civil Rights Memorial, in Montgomery, Alabama, lists 61 deaths and other events in chronological order along the circumference of a flat granite table. But there is a noticeable gap between the last and first events: the struggle is not yet over.

A third Lin monument, the 32-ton, granite Women's Table at Yale, marks that university's progress in coeducation. Women were first admitted as undergraduates in 1969. The granite "table" top, tilted at a 69° angle, lists the number of women enrolled (as undergraduates or graduate students) for each year from the school's founding in 1701 to 1993, when the sculpture was dedicated. Lin shaped this time line in an outward spiral, symbolizing, in



Maya Lin's Civil Rights Memorial in Montgomery, Alabama: monument to an unfinished story.

her words, "women emerging in society."

Though unconventional in form. Lin

Though unconventional in form, Lin's "simple and beautiful" works are very popular, Abramson notes. They represent "a fun-