RANDOM SAMPLES

edited by CONSTANCE HOLDEN

German Science Adviser Gets the Boot

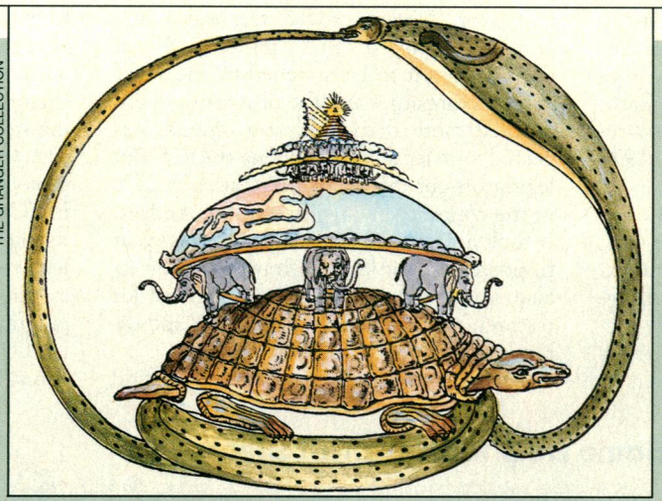
The January replacement of Germany's Science Council head, Gerhard Neuweiler, after just 1 year in the position, was simply a "matter of rotation," according to the official line. But privately, Neuweiler claims that there are political motives for his removal.

The council advises both state and federal governments on science policy. After gaining influence by helping to merge eastern and western Germany's research, it has gone on to make some radical recommendations. They include turning former East German labs into joint federal/state "blue list institutes," which compete with the independent Max Planck Institutes for funds; giving the council some control of peer-reviewed funding; and reorganization of environmental research, which would take money from the national labs.

These proposals have raised some alarm within Germany's science establishment, specifically the so-called grand alliance comprising the Max Planck Society, the national science foundation, the association of the national laboratories, and the assembly of university presidents. The alliance appoints 32 of the 54 members of the council, and its failure to renominate Neuweiler is seen as an attempt to bring the council back into line.

Certainly the establishment is no fan of Neuweiler. Two weeks after his removal, astrophysicist Reimar Lüst, an *eminence grise* in German science administration, wrote a newspaper article accusing him of poor management and of publicly snubbing the grand alliance. Neuweiler says that's "nonsense," adding that he was the one who was "persistently shunned."

While the grand alliance may have rid itself of a disliked figurehead, the new chairman, mathematician Karl-Heinz Hoffmann, may fare little better in the rapidly changing postunification political scene.



THE GRANGER COLLECTION

Turtle under pressure. Hindu cosmogram illustrates symbolic importance of the animals to India.

Indian Sea Turtles in Peril

For several weeks each spring, the Gahirmatha beach on the east coast of India swarms with turtles and nature photographers, as over half a million female Olive Ridley sea turtles scuttle onto the sand, lay about 100 eggs apiece, and then scuttle back to sea.

Now this spectacular turtle event is threatened by shrimp—or rather, shrimp trawlers. The Indian government is building a major shrimp fishing port within 10 kilometers of the beach, according to the *Marine Turtle Newsletter*. Conservationists fear an increase in trawling will devastate the turtle population. In the U.S., the accidental snaring of turtles in shrimp nets does in more turtles than all other human activities, according to a 1990 National Academy of Sciences report. Olive Ridleys are classified as endangered by the World Conservation Union, and there are only four mass nesting beaches left in the world (the others are in Central America). Gahirmatha is far and away the largest.

The Indian government says it will ban trawlers from fishing within 20 kilometers of the beach. But that won't solve the problem, says Nicholas Mrosovsky, a University of Toronto zoologist. The turtles come from far out in the sea to nest, and they "will still have to run the gauntlet" of trawlers. "You don't want shrimping anywhere near the beach," he says.

But all is not lost. Last fall the turtle newsletter started a letter-writing campaign to the Indian minister of the environment and forest that has already drawn responses from individuals and groups in more than two dozen countries, says editor Karen Eckert. And the Madras Crocodile Bank, a local group that champions both crocodiles and turtles, plans to sue the government in hopes of halting the opening of the port.

One Man's Poison—Another's Fertilizer

Cutting down on acid rain will benefit northern forests and lakes, but—ironically—cleaner air will create a nuisance for some midwestern farmers. Researchers have found dirty coal has been supplying farmers with free fertilizer: sulfur. This component of acid rain has been showering down on crops from power-plant smokestacks, saving growers as much as $10 per acre in fertilizer costs.

Now, however, "as we continue to clean up the stack gases, farmers are going to have a problem," says agronomist Robert Hoeft of the University of Illinois at Urbana-Champaign. The researchers discovered the fertilizer effect by looking for crop-growth responses to sulfur application at dozens of locations in Illinois, Wisconsin, and Minnesota. In greenhouse experiments, crops such as corn and alfalfa benefited from the addition of sulfur. But when soil in the field was treated with sulfur, the plants did no better than those in untreated soil. This suggested that the crops were getting sulfur from another source—rainfall.

There may yet be a silver lining to this rainy tale, for Hoeft says power plants could soon be going into the fertilizer business. A device now under development scrubs sulfur from stack gases by combining it with ammonia, forming ammonium sulfate—an ideal substance to spread on crops. But this time, the farmers will have to pay for it.

World Science

The growth in international scientific collaboration has created a "strong trend" in the direction of international coauthorship, says the National Science Foundation (NSF). In 1991, 11% of the world's scientific and technical articles bore the names of scientists from institutions in more than one country—double the proportion 10 years earlier. The chart below is in the 1993 *Science and Engineering Indicators*, a biennial NSF publication that has information about scientific education, manpower, and funding. To obtain a copy, call 703-306-1780.