RELIGION & PHILOSOPHY

Reviving American Philosophy

"On Goodman, Putnam, and Rorty: The Return to the 'Given'" by Mark Lilla, in *Partisan Review* (no. 2, 1984), 121 Bay State Rd., Boston, Mass. 02215.

Since the turn of the century, philosophers in the United States and Great Britain have been preoccupied with increasingly esoteric studies of language. In the process, they have become "peripheral to American intellectual life," writes Lilla, executive editor of the *Public Interest*. But he sees signs of a "postmodern" revival in American philosophy.

Anglo-American philosophers first focused their attention on language under the influence of logical positivists Bertrand Russell and Ludwig Wittgenstein. The two thinkers argued that there is a single reality; understanding it is largely a matter of devising accurate descriptions of it. Improving accuracy became philosophers' chief task—one that led them to concentrate on methodology and to write ever more arcane treatises, often in mathematical jargon.

Three American postmodern philosophers—Nelson Goodman and Hilary Putnam of Harvard, the University of Virginia's Richard Rorty—are leading the way back to consideration of such "eternal questions" as the meaning of art or human morality, writes Lilla.

Not that they are complete traditionalists. In his *Ways of Worldmaking* (1978), Goodman argues that there is not one reality; there are many. But they stop far short of the position staked out by Michel Foucault and others, who turn the Russell-Wittgenstein thesis on its head by arguing that language *creates* different realities. No, say the Americans, there may be different realities, but language unifies them. Language is needed to describe every reality; and, as Putnam writes, "Using any word . . . involves one in a history, a tradition."

What makes the trio distinctly American is their rejection of European hyperrationalism and nihilism, their pragmatic recognition of the importance of "the given." But Lilla believes that they have been too busy refuting the old philosophy to focus on the new. What they do next will determine whether American philosophy begins to matter again.

SCIENCE & TECHNOLOGY

The Pros and Cons Of Sex in Plants

"The Flowering of Sex" by G. Ledyard Stebbins, in *The Sciences* (May-June 1984), 2 East 63rd St., New York, N.Y. 10021.

Is Sex Necessary? asked humorists James Thurber and E. B. White in the title of their 1929 book. The question is not as silly as it seems, writes Stebbins, a University of California, Davis, geneticist.

Nature has gone to remarkable lengths to "make sex work," he observes. In northern Africa, an orchid of the genus *Ophrys* "looks and

smells remarkably like a female bee"—an elaborate stratagem that ensures that male bees will be dusted with pollen and carry it to other orchids. But the tenacious dandelion is another story. Though the dandelion grows bright flowers inviting to bees and produces pollen, these are sterile vestiges of an earlier time when the weed reproduced sexually. Today's dandelions reproduce by asexual parthenogenesis: Each seed will grow, without being fertilized, into an exact genetic copy of its parent plant.

Sex has some obvious advantages. For a species adapting to a changing environment, "the myriad natural variations that sex produces can spell the difference between success and failure, survival and extinction." The chief disadvantage of sex is uncertainty. Because male and female each contribute half of their offspring's genes, the result can be the worst of both worlds—an individual inferior to both of its parents.

A few plant and animal species have resolved the dilemma by relying on two means of reproduction. A single strawberry plant, for example, can take over an entire meadow by reproducing asexually—the plant sends out runners (called "stolons") that put down roots and then send out more runners. And yet, strawberries also flower and form seeds that are spread much farther afield than runners.

Aphids, coral polyps (whose shells form coral reefs in the tropics), and rust fungi are among the many organisms that fluctuate between sexual and asexual reproduction. And in general, there is a pattern to the changes, notes Stebbins. "As long as the environment is favorable, they reproduce asexually, multiplying greatly those genetic plans that have already proved themselves fit." But once they saturate their habitats or if their environment changes radically, they reproduce sexually, assuring that the next generation will be different and, thus, will have a better chance of survival.

For thousands of plant species, then, sex is only necessary *sometimes*. Most animals, however, cannot escape it. The reasons are unclear. More complex than plants, animals may be more susceptible to harmful mutations, Stebbins speculates. Sex may be the device by which mistakes are erased, since, in most cases, both parents must possess a genetic blemish to pass it on to their offspring.

Where Computers Fear To Tread

"Synthesizing Chemicals by Computer" by James B. Hendrickson, in *Technology Review* (Apr. 1984), Room 10-140, Massachusetts Institute of Technology, Cambridge, Mass. 02139.

It is easy for laymen to imagine that scientists everywhere are rushing headlong to computerize their laboratories. A few scientists, however, are still unenthusiastic about computers.

The holdouts are organic chemists, writes Hendrickson, himself a chemist at Brandeis. Since the mid-19th century, they have created some eight million compounds, of which perhaps 500,000 have found practical uses—all without the aid of computers. The chemists have