

Hertzberg, "was thus to grow stronger not as a religion but as the binding force of an ethnic community." But ethnicity alone will not suffice, Hertzberg insists.

Rates of intermarriage are rising. In Rhode Island, for example, the rate was 14 percent during the 1960s, 27 percent during the 1970s, and 38 percent during the 1980s. The commitment of American Jews to Israel, meanwhile, has weakened, especially since the 1982 invasion of Lebanon. They still send money to Israel, but they

are less likely to visit, just as they observe Yom Kippur without any real commitment to its ritual fasting.

There is still a sense that Jews are more than an ethnic group, that they remain God's "chosen people." But the fact is that Jewish spirituality does not have very deep roots in the New World, says Hertzberg. Most Jews came here to get ahead, not to propagate a rebirth of Judaism. Unless American Jews begin to "hear voices," he warns, their history "will soon end."

The Poet and The Philosopher

"Wordsworth and the Culture of Science" by Fred Wilson, in *The Centennial Review* (Fall 1989), 110 Morrill Hall, Michigan State Univ., East Lansing, Mich. 48824-1036.

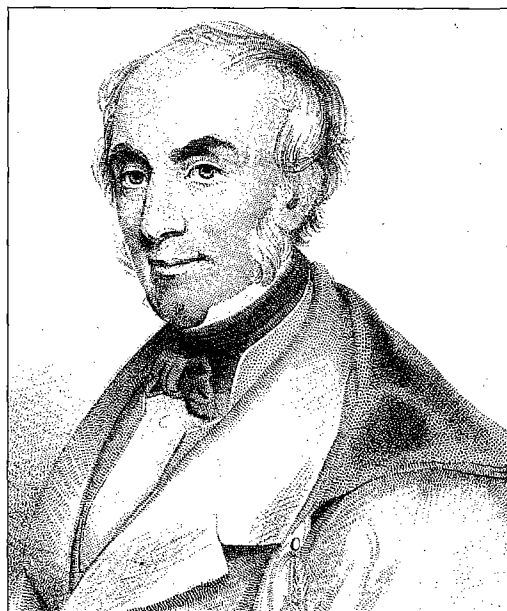
In 1826, John Stuart Mill was gripped by what can only be called one of the most famous bouts of depression in the intellectual history of the West. At 20, he later wrote, his "love of mankind . . . had worn itself out." His despair was deepened by the oppressive influence both of his philosopher-father, James, and of Jeremy Bentham. They advocated a view of psychology, "associationism," which seemed to leave no room for pure emotion.

To revive his spirits, the young Mill read romantic poetry: Goethe, Coleridge, Shelley. But it was in the poetry of William Wordsworth (1770-1850) that he finally found comfort, and ultimately an answer to the philosophical challenge posed by his father and Bentham. And thus indirectly, writes Wilson, who teaches philosophy at the University of Toronto, "Wordsworth effected the assimilation of romanticism into the culture of science."

The dominion of science and of the scientific method was something that English thinkers had been forced to grapple with since Isaac Newton (1642-1727). The "associationists," including Bentham and the elder Mill, followed Newtonian logic in arguing that all higher cognitive processes—indeed human nature itself—could be analyzed as the product of associations between various sensory and bodily pleasures.

Wordsworth himself had once fallen under the influence of this impoverished psy-

chology as it was expounded by William Godwin. It left him "... now believing/ Now disbelieving; endlessly perplexed." Much like Mill, he experienced a spiritual crisis (which he described in *The Prelude*). Rejecting "associationism" without—unlike many of his fellow romantics—throwing out all of Newtonian science as well, Wordsworth came to believe in the "irreducibility" of the moral and religious senses. It was a line of argument that had



William Wordsworth wrote: "it is shaken off/ That burden of my own unnatural self."

been laid out earlier by two 18th-century thinkers, the Earl of Shaftesbury and Lord Kames: Moral and religious sentiments are not the product of associations that need to be analyzed; they come directly from experience.

That perspective, says Wilson, is one of the things that gave Wordsworth's poetry its beauty. But it was beauty and philosophy both that revived the young John Stu-

art Mill and inspired him to reconcile "associationism" with Wordsworth's "irreducibility." In the theory of psychology he developed, moral and religious sentiments were irreducible, but gained value and character by "association" with more basic sensations of pleasure. The romantics would have been pleased by this chain of events: The poet taught the philosopher, who instructed the scientist.

SCIENCE & TECHNOLOGY

Primate Politics

"Political Animal" by Meredith F. Small, in *The Sciences* (March–April 1990), 2 E. 63rd St., New York, N.Y. 10021.

Scientific opinion about human evolution is undergoing, well, evolution.

The basic facts are not in doubt, notes Small, a Cornell anthropologist. The first human species, *Homo habilis* (literally, handy man) appeared about two million years ago in Africa. He was succeeded 1.5 million years ago by *Homo erectus*, who retained many simian features but boasted a relatively well developed brain. Then, a mere 100,000 years ago, *Homo sapiens* debuted, with a brain nearly twice as large.

The obvious question for scientists: What accounts for this phenomenal brain growth? They thought they had an answer during the early 1960s, when Louis and Mary Leakey unearthed tools made by *Homo habilis*. Creatures with the mental capacity to make tools (i.e. big brains) would be highly favored by evolution. But Jane Goodall's discovery that chimpanzees also use tools, albeit primitive ones, shot that theory down. A consensus later emerged, at least among anthropologists, that a combination of tool-use, the rise of group hunting, and the development of language spurred rapid human "encephalization."

But now some anthropologists are beginning to wonder whether they have been asking the right question. Without challenging the new consensus about humans, they suggest that the real puzzle is how to account for the impressive brain development of the entire primate order over the

past 60 million years. And they think they have an answer. "In contrast with the vast mammalian majority," Small observes, "most primates live in some kind of group. In contrast with schools of fishes or herds of ungulates, the primate groups are not mere aggregations but true social organizations."

Primatologist Alison Jolly first made the case for the importance of "social intelligence" in 1966. Since then, scientists have discerned many ways in which primates recognize and catalogue social relationships. For example, when Dorothy Cheney and Robert Seyfarth of the University of Pennsylvania played recordings of an imperiled young vervet's cries, the mother immediately turned toward the loudspeaker. But her two female companions turned toward her. Apparently, they recognized the young vervet's shrieks and associated them with the mother—a relatively complex act of social cognition. Lately, many researchers have begun to focus on the importance of what might be called primate politics: the ability to manipulate others for individual gain.

Small cautions that it is too soon to draw any conclusions. While the social intelligence of primates is now well documented, nobody has yet been able to prove that a mastery of primate politics and social graces leads to "reproductive success," and thus to an evolutionary advantage—or even to larger brains.