in that it has no women and has renounced all sexual desire, has no money, and has only palm trees for company." In the Dead Sea Scrolls, however, the Essenes come to life, although it is a life that no one could have imagined for them. They staged sacred meals with eschatological significance, complete with the blessing of bread and wine, and they performed baptisms by immersion. Moreover, both the early Christians and the Essenes expected the Messiah to appear imminently. One scroll, "The Messiah of Heaven and Earth," clearly alludes to the idea of bodily resurrection.

So much from the scrolls seems clear, but a number of questions they raise have no ready answers: Was John the Baptist a member of the community that wrote the scrolls? Was Jesus, in fact, an Essene? Is the "Temple Scroll" the lost sixth book of the Torah? Taken together, however, these essays establish that early Christianity is grounded more completely in Jewish thought than any authority before 1947 had proposed.

If the scholarly team controlling the scrolls was worried about their falling into the wrong hands, *Jesus and the Riddle of the Dead Sea Scrolls* illustrates what happens when they do. There is no direct mention of Jesus in the scrolls, but such a small detail hardly deters Australian biblical scholar Barbara Thiering. She uses them to argue that Jesus was born to an unwed (hence, officially "virgin") woman, that he married twice and fathered three children, and that he did not die on the cross but was drugged and later revived in a cave. What Thiering has done, in fact, is substitute for the *texts* of the scrolls—which are fragmentary, sometimes contradictory, and in archaic script—the idea of a *subtext*, a hidden code, which she then "decodes" into a narrative that is fluent, coherent, and, of course, unverifiable.

There will likely be no such bold and final "solving" of the Dead Sea Scrolls. But a wide range of scholars, such as those represented in the *BAR* reader, are now providing reliable information and possible interpretations of these manuscripts that, as Shanks notes, "ignited the imagination of nonscholar and scholar alike."

THE ULTIMATE ART: Essays Around and About Opera. *By David Littlejohn. Univ. of Calif. 303 pp. $25*

Samuel Johnson characterized opera as "an exotick and irrational entertainment"; two centuries later, the French composer Pierre Boulez proposed blowing up the world's opera houses on the grounds that they were devoted to an absurdly costly and indefensible art form. If opera is a bastard art—the "illegitimate" offspring of music, libretto, dance, historical costume, and theatrical production—then novelist-critic Littlejohn (like Edmund in *King Lear*) argues that bastard is best. For all its hybrid qualities, he insists, opera produces effects, such as "the human voice at its most powerful and expressive," found nowhere else. Littlejohn pursues his argument in essays ranging from "Why We Put Up with Dumb Opera Plots" to the changing public tastes of "The Janáček Boom." Everywhere, Littlejohn opposes popular excesses, such as Peter Sellars's stagings of Mozart, in which the "directorial conceit [is] alien to the score," as well as academic excesses, such as Cornell University's "new opera studies," which treat librettos as autonomous works and subject them to advanced literary theory. Littlejohn may fail to convert the skeptic or to interest the academic specialist: Eschewing theory and what Shaw called the "Mesopotamian words" of technical musical analysis, he writes not to preach to the converts but to delight them.

Science & Technology

THE CREATIVE MOMENT: How Science Made Itself Alien to Modern Culture. *By Joseph Schwartz. HarperCollins. 252 pp. $25*

Joseph Schwartz has an unusual complaint: "Our poets do not tell of the intricacies of microminiature electronic circuitry." For that matter, he continues, "the mere mention of relativity makes every intellectual in Europe and the United States start to stammer." To believe the former physics professor, little has changed during the 35 years since C. P. Snow identified the gulf between sciences and the humanities as perhaps *the* problem for modern society.

Schwartz, moreover, maintains that this division is unnecessary, indeed little more than a historical accident. To locate the origins of the accident, he returns to Renaissance Italy, when Galileo's study of the heavenly bodies landed him in trouble with the pope. Galileo's solution was to convert his arguments into the rarefied language of mathematics, which mollified the church by being inaccessi-

ble to the laity. A trend, a long trend, began. Schwartz's book is an examination of those scientific breakthroughs—from Sadi Carnot's heat engine to the creation of nuclear physics and the "genetic revolution"—that were couched in unnecessarily complex terminologies baffling to the layperson. "The form in which understanding in physics [and other contemporary sciences] is expressed," he writes, "has been mistaken for the understanding itself." Schwartz himself wrote *Einstein for Beginners* (1979) to demonstrate how technical scientific theories can be made comprehensible to the general reader.

Is there a solution to the "two-cultures" problem? Is it even possible for science again to learn the language of daily speech? Schwartz's proposals for achieving popular scientific literacy—supporting a Green-movement awareness of the environment and adding a new undergraduate-level science course on technology—seem feeble. What Schwartz has to offer is less a program than a different perspective. Science writers today tend to fall into two opposing camps: the supporters who view science as the most legitimate method of acquiring knowledge and the detractors who take stock of ever more deadly engines and destructive technologies. To his credit, Schwartz avoids the stock jargon of either group. He wants to promote science but at the same time to shame it into abandoning its claim to an "occult" or privileged status. His outlook, at least, is refreshing.

THE ANT AND THE PEACOCK: Altruism and Sexual Selection from Darwin to Today. *By Helena Cronin. Cambridge. 490 pp. $39.95*

Despite its imposing simplicity and awesome explanatory power, the theory of natural selection has never achieved the status of a universally accepted scientific law. As recent surveys reveal, an astonishingly large proportion of people in the otherwise rational West do not believe in evolution. Belief, however, is not the only issue: The idea of design-without-a-designer has had to struggle for survival against not only those who dislike its implications but also those who just misunderstand it—including many eminent scientists. Cronin, an infectiously enthusiastic classical Darwinist at Oxford, begins her book with a handy if unsympathetic survey of rival views such as creationism, idealism, and Lamarckism, all of which she dismisses as "follies" and "hopelessly off-target."

Cronin is not, however, attempting to argue the perfection of Darwin's original ideas. Rather she confronts two crucial weaknesses that even many Darwinians have skimmed over. These problems are "beauty" and "altruism." The peacock's beautiful tail, for example, requires enormous energy to grow, even while it hampers the bird's ability to fly—hardly a solid support for Darwin's theory that only traits useful for survival survive. And neuter ants, with what Cronin calls "saintly self-abnegation," work dutifully for the community, seemingly in denial of natural selection's famous self-interested, utilitarian imperative. Beauty and altruism were telling arguments against Darwin a century ago and caused him immense difficulty. To explain beauty, Darwin resorted to the argument of sexual selection—that peahens, for example, preferred mates with gaudier tails—an idea that other 19th-century male scientists mocked. They maintained that females could never choose anything consistently enough to have a lasting evolutionary effect. To explain altruistic behavior, Darwin was driven even further afield: He posited a rudimentary moral sense in animals.

Cronin proves a stricter Darwinian than Darwin himself. The problem of altruism, she writes, "dissolves, gratifyingly, before our eyes" when we take a "gene-centered view" of evolution. Since the 1960s the idea of selfish genes has become increasingly accepted. According to this view, animals, once considered the basic evolutionary unit, are nothing more than vehicles for the transmission of genes between generations. The problem of beauty is more intractable, and Cronin (and others) are reviving Darwin's once-ridiculed idea of sexual selection. Sensible peahens could well prefer menfolk with sexy tails, she argues, because such plumage might indicate beneficial genetic characteristics. Darwinism is now in the midst of a revival, and perhaps not since the master himself has it found a more eloquent exponent than Cronin.