

Science boldly popularized

Grace A. Wolf-Chase and
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Gene Roddenberry: The Last Conversation — A Dialogue with the Creator of Star Trek. By Yvonne Fern, with a foreword by Arthur C. Clarke. University of California Press: 1994. Pp. 228. \$20.

GENE Roddenberry, the creator of the television series *Star Trek*, wanted his epitaph to be "he loved humanity", according to Yvonne Fern. His vision of the future of humanity continues to shine forth from millions of television screens daily, and it is the source of this vision that Fern explores through an extended series of conversations with Roddenberry, interspersed with quotations from his friends. Although Fern often alludes to *Star Trek* characters and episodes, her book is not another piece of fan literature. She asks probing questions, such as "What do you most fear?" or "What would you not want to lose?", to examine the thoughts, feelings and hopes of the man to whom *Star Trek* was real, and who had the rare ability to personalize his vision for millions of people. In the course of her conversations, we gain almost as many insights into the author's mind and character as we do into Roddenberry's. The reader may find this somewhat distracting, but Roddenberry himself requested that the book should be written as a dialogue. He remarks: "You can learn a lot about a person by the questions he asks of others. It shows what is in his own mind, what kind of quest he is on."

The people who will most enjoy Fern's book are those to whom *Star Trek* is more than mere entertainment; they will find her conversations with Roddenberry an exploration of themselves. On the other hand, it is difficult to see how anyone who is not a *Star Trek* fan could enjoy it. Those few who are simply unaware of *Star Trek* will find the allusions mysterious, although Fern attempts to address this by providing a basic introduction to *Star Trek* at the end of the book. People who are aware of *Star Trek* but are either indifferent to it or actively dislike it may find that they have little in common with the ideals portrayed, as Roddenberry put so much of himself into his creation.

Roddenberry repeatedly identifies himself in Fern's book with the character of Spock. Critical thinking and diversity were

central to his vision of the future. He tells us: "If there was one theme in all of *Star Trek*, it was that the glory of our universe is its infinite combinations of diversity". Wisdom is not only to appreciate another point of view, but to "take a positive delight when someone says 'I disagree with you because...'", This is the essence of science.

Scientific illiteracy is prevalent among the general public in the United States and other countries because, sadly, many students are taught what to think rather than how to think. The spirit of exploration, which is the inspiration of science, is too often absent. This illiteracy extends to our educators and therefore the next generation of students. If that tide has been stemmed somewhat by *Star Trek*, then Roddenberry deserves his epitaph. That *Star Trek* has become part of the vocabulary of almost every country in the

about the future, but his knowledge of physics was incomplete, and his assumptions were clearly wrong. Roddenberry's legacy is to ensure that even if a warp drive engine is impossible, there will still be people trying to build one. That is what it means to be human, and science is an intensely human activity. □

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Birdman

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Dean of the Birdwatchers. By William E. Davis. Smithsonian Institution Press: 1994. Pp. 234. \$29.95.

LUDLOW Griscom (1890–1959) was an American ornithologist whose name is known on both sides of the Atlantic. Interested in birds from a very early age, he came from a wealthy family who did not really approve of his going into ornithology and who seem to have cut him off financially. Although he held a plethora of 'jobs' with ornithological and conservation organizations, his professional life centred on just two institutions, the American Museum of Natural History, from 1916 to 1927, and then the Museum of Comparative Zoology at Harvard, where he was based for the rest of his working life. While at Harvard, he played a key part in setting up the Boston Museum of Science, a task that sapped a great deal of his energy for many years, even when his health was failing (a plaque there reads "Ludlow Griscom, who almost gave his life for the Museum"). Apart from work in the New England area, his principal contribution to science was his studies of the avifauna of Central America, a region he visited on several occasions.

During Griscom's early years, collecting birds was still much in vogue. Field identification of birds was considered to be wholly unreliable, so records were substantiated only by collecting specimens. Field guides were unheard of. Perhaps Griscom's greatest achievement was to be the prime-mover in changing that. By careful field observation he was able to show that one could identify birds in the field and that shooting them was unnecessary. His field trips spawned a great interest in birds, in particular contributing to an increased popularity in bird-watching that has lasted to this day. The first volume of Roger Tory Peterson's field guides appeared in 1934, in which its author pays fulsome tribute to Griscom for teaching him the concept of field marks. The part Griscom played in mak-

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Ground control — Roddenberry (rear) oversees the direction of *Star Trek: The Motion Picture* (1979).

world proves that Roddenberry succeeded where many educators have not.

The role of science fiction in popularizing science should not be underrated, as it often is. Roddenberry was one of the most successful popularizers of the twentieth century; as children of the 1960, our own fascination with science was partly shaped by *Star Trek*. Scientific élitism has no place in a community that depends on the public for financial support. Too often scientists fail to see science popularization as an important endeavour. They oppose science fiction because some aspect (for example, a warp drive engine) is physically impossible. In reality, they are eroding the base of their own support.

Sceptics should be reminded that "conclusive proof" that heavier-than-air flight was physically impossible was published in the late 1800s by Simon Newcomb. He was right, given the assumptions he made

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