Unweaving the Rainbow, by Richard Dawkins

reviewed by Greg Peterson in the March 10, 1999 issue

By Richard Dawkins, Unweaving the Rainbow: Science, Delusion and the Appetite for Wonder. *(Houghton Mifflin, 337 pp.)*

The famous observation by C.P. Snow that science and the humanities form two separate, often antagonistic cultures is still largely true. At one extreme are number-crunching scientists, adverse to poetry or anything not easily quantifiable. At the other are poets, artists and writers who disdain science even while they benefit from its technologies. Richard Dawkins's book seeks to bridge this divide. His first major work, *The Selfish Gene*, had a wide and controversial impact on several disciplines. The holder of a chair endowed by Microsoft's Charles Simonyi and dedicated to furthering the public understanding of science, Dawkins has for two decades tenaciously and tendentiously defended evolutionary biology and genetics and used his understanding of them to promulgate an atheistic worldview.

This book represents a broadening of Dawkins's work as he shifts to defending science in general from its cultural detractors--a motley assortment of creationists, psychics, the academic left, and scientifically ill-informed literati who claim that science robs life of its mystery and poetry. The book's title is taken from a poem by John Keats. In the first section, Dawkins argues that the scientific process of unweaving the rainbow is filled with wonder and beauty. Discerning the physical laws that govern the propagation of light--a process begun by Newton's use of the prism--has led to some of the most fascinating and stunning discoveries about the nature of the universe. Dawkins uses the seemingly commonplace grocery store bar code to explain everything from the make-up of stars to the mechanics of sound and even the patterns of DNA. He emphasizes both the poetic and practical value of scientific discoveries.

In the second part, Dawkins defends science against those who misuse, abuse or criticize it. He is particularly withering in his attack on astrologers and psychics, but feminists, theologians, and TV programs like The X Files also receive their share of criticism. Dawkins regards interpretations of science by people in these fields as "bad poetry"--a label he gives to any opinion with which he disagrees. For example,

he presents feminists who criticize the practice of science as uniformly wrong, and dismisses their real insights into how gender affects theorizing and practice.

Dawkins concludes with a loose assortment of essays that address the question of human nature and meaning, often relying on themes and ideas he has presented in previous books. He discusses a range of topics--from visual perception to the biology of cooperation--to show how the human mind reweaves the rainbow. His point, again, is the poetic grandeur of science. "Einstein's noble spacetime curve upstages the curve of Yahweh's covenantal bow and cuts it down to size," Dawkins claims. His statement that Keats and Newton together could hear the galaxy sing ignores the possibility that they might hear it in a different key.

Though this book is readable, informative and insightful, it is marred by a rigid, mechanistic conception of science that brooks no external criticism and that claims to be the sole criterion of truth. Dawkins's promotion of science as a hegemonic worldview that allows for little plurality and only scientifically correct poetry is the kind of thing that leads many to be suspicious of science in the first place.