senses—gave way to the rigorous creativity of modern physics.

Boltzmann wasn't content with his accomplishment. Plagued by depression and still surrounded by doubters, he hanged himself at age 62. Though his fate may sound romantically tragic, his dyspeptic, neurotic manner keeps him from being a very sympathetic character. But the unfolding of his ideas, rendered so well by Lindley, makes for a very absorbing story.

-George Johnson

THE BOTANY OF DESIRE: A Plant's Eye View of the World. By Michael Pollan. Random House. 304 pp. \$24.95

In a common schoolbook image of evolution, all forms of life are represented by the forking branches of a vast tree. This scheme positions man and his fellow mammals far from their green cousins, the elms, algaes, and artichokes. Pollan, a contributor to the New York Times Magazine and the author of Second Nature (1991), shows how the evolutionary branches of man and plant have come to be intertwined, with complicated consequences for each. In a meditation by turns poetic, historical, and scientific, he traces the reciprocal strategies of the cultivator and the cultivated. If man has moved nature by domesticating certain plants, so nature has moved man, first by stimulating his desires, and then by evolving to gratify them.

Pollan takes four plants that he himself has grown—the apple, the tulip, marijuana, and the potato—and relates their social histories to the human desire each has been bred to satisfy: sweetness, beauty, intoxication, and, through manipulation of the potato's genetic code, control. He travels to central Ohio on a search for

traces of John Chapman, known to schoolchildren as Johnny Appleseed; to Amsterdam, the center of the 17th-century Dutch tulip craze and, more recently, the city where pothead botanists have developed highly fortified marijuana; and to the St. Louis headquarters of Monsanto, where the potato's genes have been redesigned and licensed as intellectual property.

In Second Nature, Pollan used Thoreau to illuminate the tension between wildness and cultivation. Here he summons Nietzsche, particularly the philosopher's idea of the dual tendencies of the Greek spirit: the apollonian will toward form, restraint, and balance, and the dionysian will toward dissolution and ecstasy. Pollan describes both gardening and hybridization as contests between these forces.

Although their cultivation may be apollonian, the recombinant potato, supercannabis, applejack, and the rare tulip are intended to satisfy the dionysian appetite for pleasure. The suggestion of sensual excess naturally galvanizes an opposition. Against these hybrids has stood a mixed group of moralists, Calvinists, organic farmers, temperance groups, antidrug forces, the cautious, and the just plain frightened. The author treats this response with a light touch, as a form of evolution in its own right.

Pollan writes crystalline prose. He brings a generous curiosity to the scientists and plantsmen he interviews, some of them odd specimens themselves. In the end, though, the main character in his meditation may be the human imagination, which is capable of regarding the apple (to choose but one example) as cash crop, childhood memory, Eve's undoing, national emblem, gene bank, and consummate companion to cheddar.

—CHRISTOPHER HEWAT

## Religion & Philosophy

JOHN UPDIKE AND RELIGION: The Sense of the Sacred and the Motions of Grace. Edited by James Yerkes. Eerdmans. 290 pp. \$24

Preachers tend to read narrative (if at all) as fable or allegory. The intricate tissue of experiential detail vital to fiction is apt to be set aside as extrinsic to meaning and treated as an attractive but disposable container for the hard nugget of moral instruction within. Happily, no such tendency mars this collection of 15 essays by religious and literary scholars. The contributors all take fiction seriously enough to engage it on its own terms. They are able to confront irresolvable tensions without forcing res-