



Fighting oryx. © 1982 by
Oxford University Press.
Reprinted by permission.

**NATURE'S SECOND
KINGDOM**

by Francois Delaporte
translated by Arthur
Goldhammer
MIT, 1982
266 pp. \$20

ticularly successful during the past four decades. McFarland, an ethologist at Oxford University, has assembled more than 200 articles on topics ranging from aggression to wildlife management, from Darwinism to mating systems (over 90 percent of the birds in the world are monogamous). The *Companion's* 69 specialist-contributors do not ignore rival theories and point out, wherever relevant, significant parallels or differences between animal and human behavior.

“That plants and animals are analogous we may be convinced if we only consider the manner whereby they receive their nourishment,” wrote Antoine de Jussieu in 1721. In an age before biology was a clearly defined scientific pursuit, explains Delaporte, a historian of science at the Universidad Nacional Autónoma de México, 18th-century natural philosophers remained within the intellectual framework of their time; they took animal physiology as the starting point for the study of the plant kingdom. In defining what was essential to plants (their “vegetality”), investigators first examined *functions* they found to be common to both animals and plants: nutrition, reproduction, and movement. Delaporte works in the tradition of Michel Foucault, a modern French historian who traces the organization of man’s knowledge at different periods. He shows how natural philosophers, following frequently erroneous rules and assumptions, often arrived at essentially correct conclusions about the nature of plants (describing pollination, for example). Only at the end of the 18th century did naturalists begin to think about plants in terms of structure rather than function. The discovery of the plant cell by Konrad Sprengel and others in turn led to a reversal of the earlier animal studies, as the focus shifted to physiology and the animal cell.