

EVOLUTION

Snakes, Sunrises, and Shakespeare: How Evolution Shapes Our Loves and Fears. By Gordon H. Orians. 2014. University of Chicago Press. (ISBN-13: 978-0226003238, cloth; ISBN-13: 978-0226003375, e-book). 221 pp. Cloth. \$30.00.

“Snakes and Sunrises and Shakespeare,” oh my!! Even more intriguing is the subtitle: “How Evolution Shapes Our Loves and Fears.” How are these related? Professor Orians links behavioral ecology with evolutionary psychology to focus on the evolutionary advantages of “basic human emotions of pleasure, anger, fear, pain, surprise, and disgust.” To do this, he asks the reader to reflect on the idea that “until thirty-five thousand years ago, we lived in small, hunter-gather groups”; change has occurred, but humans continue to hold on to useful behaviors, emotions, and responses from prehistoric times. He develops the evolution of the changes in human societies and behavior to support his “savanna hypothesis,” drawing on the work of a variety of specialists – including psychologists, landscape artists and planners, geographers, and animal behaviorists – to espouse his thinking.

The eleven chapters, linked through the savanna hypothesis, provide diverse examples of how current human behavior reflects natural selection. The first chapter sets the stage by describing the honey hunters in Africa – humans cooperating with bees. The second chapter describes Darwin’s interest in the expression of emotions, including photographs of facial expressions presented in one of Darwin’s books. This chapter also relates an interesting idea about fear. In the savanna, female primates sleep in trees, males on the ground. With this in mind, Orians relates how three- and four-year-old children are frightened in the night. Girls are frightened by what might be below the bed (think “below the tree”), and boys are frightened by what might be in the closet (think “side attacks on the ground”).

“Learning is expensive, and not just in the sense of college tuition.” This statement begins the third chapter, “The High Cost of Learning,” which argues that the sources of many of our behaviors are in our genes. He uses the disgust response to pus and rotten flesh as an example. Humans did not know about microorganisms and the potential danger before we had this response. Those who responded in aversion lived another day; those who did not took “themselves out of the gene pool.” The various examples that Orians uses to support his hypothesis could be used to enrich any lesson on evolution, especially for students who are fascinated by human behaviors though not the science of biology.

The chapters “Musical Ape” and “The First Sniff” are filled with interesting examples to share with students. However, I found that the chapter “Reading the Landscape” was difficult to complete, though the photographs were helpful in understanding the ideas of savanna-shaped trees and why landscapes are important. Not that there aren’t interesting sections. For example, I now cannot look at a Japanese garden without thinking of acacias.

There are many useful examples to share with students, and the author offers challenges for further study. One example is the challenge to expand the study population for emotional-response studies, most of which use “WEIRD (Western, Educated, Industrialized, Rich, Democratic) college students,” who represent a small part of the overall world population.

The author supports his hypothesis with multiple references throughout the text, which sometimes take away from the interesting examples. The images, primarily photographs, are in black and white. Some, like much of the text, are not easy to read and would be difficult to share with students – like the images on page 35, which show a map on a rock, with detail of the actual mountain. Still, high school and college faculty can use this book for interesting ideas, and graduate students in both

evolutionary and behavioral sciences will find ample ideas to think about and study further. As for this reviewer: I found the snake, the sunrise, but no Shakespeare in the book.



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TEACHING & EDUCATION

Soul of a Teacher. By Whitey Hitchcock. 2012. Sapyent Publications, Oak Ridge, TN. (ISBN 978-0988289802). 197 pp. Paperback. \$21.95.

Teaching is one of the most difficult professions. We struggle to help students of varied abilities and to satisfy administrators, parents, and the general public. We often ignore our own personal and spiritual growth while coping with unrelenting demands on our energy and time.

Whitey Hitchcock has documented his personal journey in *Soul of a Teacher*, from the college lecture hall to the high school classroom. His reflections are interspersed with student letters, giving his treatise a broad perspective. The second chapter, “Books,” discusses a topic near and dear to my heart – one can never read enough books. Books provide us with new perspectives and help us reconsider old ones. The other chapters, ranging from “Touching Souls” to “Cadavers and Carcasses” to “Myths and Reality,” add insight into his views on teaching. I can imagine the author saying, “Just because I have always done it this way is not an excuse for complacency.” Old dogs and all educators can learn new tricks!

What were the “take-home lessons” from *Soul of a Teacher*? First, roadblocks should not impede personal growth; find ways to go over or around them. Do not give up, and be creative. Secondly, respect your students and foster their learning; be creative in your approaches and