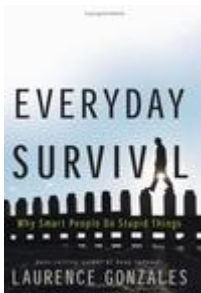


The Unintended Consequences of Civilization

A review of



Everyday Survival: Why Smart People Do Stupid Things

by Laurence Gonzales

New York: Norton, 2008. 288 pp. ISBN 978-0-393-05838-3. \$25.95



Reviewed by

[Gordon Pitz](#)

Why Smart People Do Stupid Things has become a popular title for books published during the last decade. Some deal with financial decisions, some with online behavior, and some with the self-destructive behavior of public figures. In *Everyday Survival: Why Smart People Do Stupid Things*, Laurence Gonzales addresses the behavior of intelligent people whose choices have potentially fatal consequences, for themselves or for others. His search for answers to the question leads him eventually to evolution theory and to the fundamental principles of physics.

Gonzales's thesis is that inappropriate choices arise from “a disorder brought on by not being broad enough in our interests, by not being curious enough about our world” (p. 14). To support the thesis he explores the unintended consequences of “the interplay between human behavior and natural law” (p. 16). After providing examples of some misguided behavior, he looks for an explanation in the evolutionary origins of the human

species. This search then leads him to the origins of life and the universe, and the constraints imposed by the second law of thermodynamics.

Gonzales is a storyteller, not a scientist; he makes no pretense at serious scholarship. While he quotes a number of scientists, he does not back up the quotations with footnotes or citations. He includes a list of recommended readings, which have presumably informed his ideas, but most of his argument is based on anecdotes, many of them derived from his own life.

Gonzales writes well. The book is engaging and thought provoking. He displays a breadth of knowledge and a curiosity that belie his earlier assertion that people are too narrow in their interests and insufficiently curious. The problem with his approach, though, is that it can sometimes misrepresent the findings of careful scientists.

For example, one of his first cases of “stupid” behavior is an error of judgment that Gonzales himself made while flying a small plane into bad weather. His explanation for this and other examples uses the concepts of *mental model* and *script*. The terms may be appropriate, but he seems to be unaware of their use in a technical sense in a number of psychological theories (see Johnson-Laird & Byrne, 1991, and Schank & Abelson, 1977). He notes correctly that mental models and scripts are valuable because they make information processing more efficient. However, he treats them as essentially synonymous, which they are not. Later, he equates them with *procedural memory*, *parallel processing*, and *cognitive maps*, terms that have different and specialized meanings in psychological theory.

In another chapter, he describes at length a fatal error made by a commercial airline pilot, which probably illustrates the disorganized behavior that arises in a state of panic rather than the operation of mental models or scripts. He does not recognize that this is a different kind of problem. In fact, he relates the operation of mental models and scripts generally to the emotional centers of the brain, the limbic system—which is rather misleading.

Gonzales's assumptions are consistent with current psychological theories of automatic, mindless behavior. Humans are able to respond rapidly and efficiently to familiar stimuli, but this efficiency comes at the cost of errors in responding to novel events. He is undoubtedly correct in suggesting that the automatic response system is built into us as the result of millions of years of evolution, reinforced by thousands of years of cultural development.

The thesis is well illustrated by the tsunami of 2004, which offers many examples of people trapped by inappropriate reactions to an unexpected event. He describes the successful response to the tsunami of a small tribe of Andaman Islanders, whose folklore provided adequate warnings of what to do when the ocean starts to recede. However, his conclusion that “we have evolved a vacation state of mind, a culture that teaches us to drop our guard” (p. 47) is probably unwarranted. There is no reason to assume that primitive

cultures or prehistoric humans were any less prone to mindless responding. The most likely difference lies in the kind of situation that might be familiar or novel for different cultures.

An exploration of mindless thinking observed in large corporations leads Gonzales to another important principle, with which there can be no argument: Choices of any sort, mindless or thoughtful, come at a cost. If the book serves no other purpose, the reminder that no solution to a problem is without problems of its own is worthwhile.

And so a consideration of mindless behavior, the advances of modern society, and the costs that accompany these advances leads Gonzales to an extended discussion of humanity's propensity for destroying its own environment. Here he makes what is surely a unique contribution to an issue that is arguably the most important of our time. He sees our current problems as deriving from a fundamental principle of the universe, the second law of thermodynamics—entropy will always increase. Entropy is essentially disorder. In any small corner of the universe, a more orderly arrangement of molecules might arise, but this decrease in entropy always comes at a cost—increased entropy elsewhere. “For every... beautiful and useful invention we create, we also create toxic waste dumps” (p. 175).

Gonzales begins his discussion of the second law by asserting, “We can change... . We must change” (p. 146). But later he concludes that what makes humans unique as a species is our ability to produce entropy so efficiently. After discussing the implications of the law, Gonzales quotes the physicist Murray Gell-Mann, “The earth is rotting, and life is the waste” (p. 180). Gell-Mann's aphorism implies that whether or not we would like to change, the fundamental laws of physics cannot be repealed. Gonzales suggests that through the exercise of free will it might be possible to suspend the law for a few generations. But will we?

Conclusion

Smart people do stupid things because they behave mindlessly. The automatic response system that produces mindless behavior evolved because it was adaptive, but it comes at a cost. That everything beneficial comes at a cost is a special case of the principle of maximum entropy. It is hard to imagine a broader leap of ideas, and Gonzales does not spend much time justifying the leap. Instead, he moves from one anecdote to the next, assuming that the stories he tells will support his argument.

Other authors have addressed similar issues, offered similar analyses, and provided more substantial scholarly support for their positions. For example, Sternberg (2002) edited a collection of essays by psychologists devoted to explaining why smart people do stupid things (prompted by the behavior of the 42nd president of the United States). Jared Diamond (2005) discussed factors that promote the collapse of societies, and Nassim Taleb (2007) provided a thoughtful analysis of the impact of the unexpected. But no other author has tried

to draw connections among such disparate issues as mindless behavior, the problems of modern civilization, evolution, and fundamental principles of physics.

References

Diamond, J. (2005). *Collapse: How societies choose to fail or succeed*. New York: Viking.

Johnson-Laird, P. N., & Byrne, R. M. J. (1991). *Deduction*. Hillsdale, NJ: Erlbaum.

PsycINFO

Schank, R. C., & Abelson, R. P. (1977). *Scripts, plans, goals, and understanding*. Hillsdale, NJ: Erlbaum.

Sternberg, R. J. (Ed.). (2002). *Why smart people can be so stupid*. New Haven, CT: Yale

University Press. PsycINFO

Taleb, N. N. (2007). *The black swan: The impact of the highly improbable*. New York: Random House.
