



Science

The Aha! Moment: A Scientist's Take on Creativity

David Jones

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Archimedes experienced it when he jumped from his bath to exclaim “Eureka!” at the realization that he could determine the density of an object by the amount of water it displaces. Charles Darwin experienced it when the idea of evolution suddenly occurred to him while he was riding in his carriage. And David Jones has experienced it many times in his career as a chemist and inventor.

A moment of insight can happen at any time and to anyone, but in *The Aha! Moment*, David Jones discusses ways in which a scientist or artist can create the optimal environment for having that “Eureka!” moment. Creativity, a combination of curiosity, intuition, and deduction, is essential to numerous career paths. As a chemist, Jones looks at creativity from a scientific angle, dividing the act of developing an idea into three parts, which he calls the Random-Ideas Generator, the Censor, and the Observer-Reasoner. In this book, part guide to honing the skills of innovation, part memoir of both failed and successful experiments, Jones provides a description of his scientific theory of creativity and backs it up with several examples of his own engineering developments.

From age to IQ, from sense of humor and curiosity to social skills and content of dreams, Jones analyzes all aspects of human life and discerns how they each contribute to creative ability. *The Aha! Moment* is not bogged down with scientific detail and tech talk; in fact, it asks a multitude of absurd questions meant to promote innovative and logical brainstorming. Jones gives dozens of examples from his own body of work, including his experimental study on the stability of the bicycle, his “Hypochondria Notebook,” and his ideas for clean energy, as well as suggesting new inventions he has not yet tried. While his examples dominate more than half of the book, they are intriguing and stimulating, acting as a means to promote creativity in fellow scientists and artists.

Now a retired chemist, David Jones continues to write a weekly column called *Daedalus*,

which appears in the *New Scientist*, *Nature*, and *The Guardian*. He has previously written two books about “Daedalian” science, which Jones describes as “starting with something everyone believes and finishing with something nobody can believe.” His humorous approach to science and creativity in *The Aha! Moment* is bound to bring the Archimedes out of anyone.

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