

Book Review

Images of a Complex World: The Art and Poetry of Chaos, by Robin Chapman and Julien Clinton Sprott. Singapore: World Scientific, 2005, pp. xiv + 175 + CD-ROM.

Over the past two decades, a number of social scientists and humanists have striven to integrate scientific models derived from nonlinear thought into interpretive approaches within their disciplines. Helen Longino extended these methods to the social sciences in her book *Science as Social Knowledge: Values and Objectivity in Scientific Inquiry*. N. Katherine Hayles' *Chaos Bound: Orderly Disorder in Contemporary Literature and Science* offered a masterful assessment of what can be accomplished by applying the concepts of 20th century science to understanding the literature of the period. And Harriet Hawkins' *Strange Attractors: Literature, Culture and Chaos Theory* demonstrated that these approaches work equally well when applied to Renaissance literature.

Hayles, Hawkins, Longino and other scholars working outside the hard sciences proved so successful in their efforts at integration that they provoked the vitriolic assault of Paul Gross and Norman Levitt in their book *Higher Superstition: The Academic Left and Its Quarrel with Science*. Admittedly, the actions of a few irresponsible individuals provoked deserved censure. Andrew Ross is the author of the flippantly irrelevant *Strange Weather: Culture, Science, and Technology in the Age of Limits*, and more significantly he was the editor of *Social Text* when that journal published Alan Sokal's parodic article "Transgressing the Boundaries: Toward a Transformative Hermeneutics of Quantum Gravity." Sokal's revelation that his essay was a hoax that no responsible scientist could have countenanced and the uproar that resulted as literary critics like Stanley Fish tried to defend Ross' inexcusable carelessness blurred a key issue. No matter how foolish individuals might prove to be, the wide ranging achievements of humanists and social scientists who had made credible applications of chaos/complexity theories and other scientific methods opened very exciting areas of intellectual development. The misapplication of this

material by a few and the turf-guarding outrage of others notwithstanding, this represented a very important stage in contemporary thought.

Over a decade has past since Gross and Levitt staged their assault on contemporary thought. In that time, due in no small part to groups like the Society for Chaos Theory in Psychology and Life Sciences, practitioners in diverse disciplines have come together to foster wide-ranging developments. While differences still obtain in diverse fields, this spirit of intellectual cooperation has produced important insights across the board.

Images of a Complex World: The Art and Poetry of Chaos presents a marvelous reflection of this sense of compatibility. The book, unabashedly calling itself a coffee table work, is co-authored by Robin Chapman and Julien Clinton Sprott, colleagues at the University of Wisconsin and participants in the ongoing interdisciplinary Chaos and Complex Systems seminar. While this book is not meant as an introduction to scientific thinking or as an example of its application in the humanities, it offers a platform for meditating upon what these disciplines have to offer one another.

Images of a Complex World show cases Chapman's considerable skills as a poet and Sprott's polished ability as a pedagogue. Their book alternates selections of Chapman's verse with pithy descriptions by Sprott of key scientific concepts. Their efforts are punctuated by computer generated images derived from equations for strange attractors, Julia sets, and iterated function systems. A CD-ROM of Chapman reading thirteen poems and of 1,000 images of chaos art suitable for posters or slide presentations.

Chapman and Sprott's avowed aim is to explore multiple ways of knowing, and their book succeeds wonderfully at this. Poems throughout the text chart the vagaries of ordinary life and suggest strategies for understanding based on chaos and complexity. Brief descriptions of scientific concerns illuminate the book's verse and draw attention to new ways of understanding common events. The illustrations offer subtle but effective conjunctions between art and science, reiterating the beauty of physics and the rigor of prosody.

Images of a Complex World is a book that can be enjoyed by any reader. It does not demand a rigorous background in science or literature, but at the same time it does not assume that readers will not be able to comprehend anything more than rudimentary concerns. This book stands as a wonderful reminder of the joy we all get from our own discipline and from its conjunction with others. Though Chapman and

Sprott make modest claims for their work, it is truly a stunning achievement.

– *Michael Patrick Gillespie*
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