

# COLLIDING WORLDS

HOW CUTTING-EDGE SCIENCE IS REDEFINING CONTEMPORARY ART

ARTHUR I. MILLER

*"Arthur I. Miller understands the intersection of art and science better than anyone writing today."*—Walter Isaacson, Author of *Steve Jobs*

*"Arthur Miller's Colliding Worlds answers the age-old question of whether art and science can find common ground with a resounding 'yes!'"*—Mark Pagel, author of *Wired for Culture: Origins of the Human Social Mind*

*"This is a story of wonders, from the revolutionary ideas of Einstein and Picasso to nanoart and fluorescent rabbits."*—Roger Highfield, Director of External Affairs, Science Museum, London

*"Arthur I. Miller has the rare intellectual range to address the ways modern scientific discoveries have nourished the creativity of artists – and that's what he's done in this fine book."*—Martin Rees, Astronomer Royal and author of *From Here to Infinity*



COLLIDING  
WORLDS

HOW CUTTING-EDGE SCIENCE  
IS REDEFINING CONTEMPORARY ART

ARTHUR I. MILLER

July 2014 • £20.00 • ISBN 9780393083361

In 1959, British scientist and novelist C. P. Snow delivered his famous "Two Cultures" lecture in which he described Western culture as dangerously divided between the sciences, whose innovations increasingly gave shape to modern life, and the humanities, which informed the attitudes of the broader culture and were ignorant, if not openly hostile, to science. In his new book, *Colliding Worlds: How Cutting-Edge Science Is Redefining Contemporary Art*, professor and popular science writer Arthur I. Miller introduces readers to the wild new frontier of the Third Culture: where Snow's two cultures fuse together and scientists and artists work together to create works that explore the promises and perils of our modern, high-tech world. From designer butterflies to suicidal robots, from plastic surgery as performance-theater to rabbits that can glow in the dark, the artists and researchers working in this exciting and rapidly evolving area push the limits of our scientific knowledge (and, sometimes, ethical beliefs) to create pieces that explode traditional definitions of art and understandings of the world.

Since Renaissance painters began perfecting the geometry of classical perspective, science has had an influence on art. But Miller looks beyond artists who use science as muse or metaphor, focusing on works where technology and science are an essential and integral part of the work itself: what Miller calls "artsci." Miller begins his tour with a series of breakthrough U.S. and European performances and exhibits in the 1960s, starting with an innovative program that brought together technologists from Bell Labs with an elite collection of avant-garde artists and musicians. From there Miller weaves together entertaining personal profiles, illustrative case studies, and pointed personal reportage to map out the broad and diverse world of artsci. Some of the works Miller introduces sit recognisably in the classic realm of art, such as a beautiful glass and chrome sculpture that incorporates the latest cosmological research and theory to visualise the initial moments of the Big Bang. Others, such as a self-made cyborg that uses technology to turn its entire life into a computer-mediated work of art or various bio-artists who make DNA, the fundamental building blocks of life, their canvas, exist in realms of art previously unthinkable.

Miller's survey celebrates this new spirit of fusion and innovation, but he is not an uncritical cheerleader. Throughout his fast-paced tour, Miller takes time to look at the ethical implications of some of the most extreme forms of artsci, most notably the works of bio-artists. In 2000, an American artist created Alba, a rabbit that glowed green when exposed to blue light. Though created as an artistic work, the scientists involved refused to let Alba leave the lab for fear that the mutation might spread unchecked. The powerful forces artsci harnesses bring with them new dangers and responsibilities artists never before needed to consider. Miller also takes a hard look at the realities of artist/scientist collaborations, discussing pitfalls and the possibly one-sided nature of the benefits of the relationship.

Written in a clear, jargon-free voice that is equally at home in the gallery or the laboratory, Miller's *Colliding Worlds* is the essential guide to the exciting and often surreal borderland between cutting-edge science and groundbreaking art. With insightful analysis of the landmark works of artsci as well as the processes and personalities behind them, Miller makes it clear that the story of artsci is the story of the creation of human meaning in the face of rapid technological innovation and scientific discovery, the modern technological world—the quintessential story of the twenty-first century.

**ARTHUR I. MILLER WILL BE IN THE UK FOR THE PUBLICATION OF THE BOOK AND WILL BE AVAILABLE FOR INTERVIEW**

## ABOUT THE AUTHOR

ARTHUR I. MILLER, has published many critically acclaimed books, including *Einstein*, *Picasso*, *Empire of the Stars* and *137*, and writes for the *Guardian* and *The New York Times*. An experienced broadcaster and lecturer, he has curated exhibitions on art/science and writes engagingly about complex social and intellectual dramas, weaving the personal with the scientific to produce thoroughly-researched works that read like novels. He is professor emeritus of history and philosophy of science at University College London.

FOR FURTHER INFORMATION, PLEASE CONTACT EMILY CARY-ELWES OR JEMMA CROCKER:

ecary-elwes@wnnorton.co.uk / 020 7462 4983  
jcrocker@wnnorton.co.uk / 020 7462 4988



W.W. NORTON & COMPANY LTD, CASTLE HOUSE, 75-76 WELLS STREET, LONDON W1T 3QT • www.wnnorton.co.uk