

The Weekly Newsmagazine of Science

SCIENCE NEWS

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The Yuck Factor

Mars
Up Close

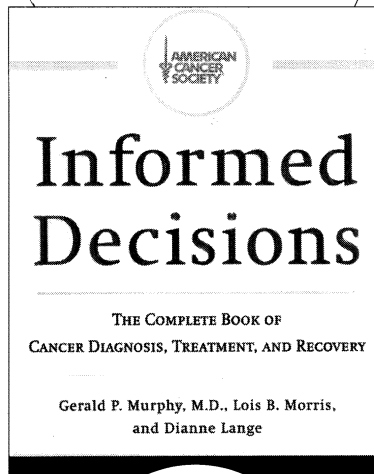
Viking, 1997, 689 pages

8" x 10 1/4", hardcover, \$39.95

Fully half of the men and one-third of the women in the United States are at risk of cancer in their lifetime. This means that virtually every family in the United States is affected. As knowledge accumulates, treatments proliferate, and the health care system changes, cancer patients and their loved ones will face more decisions and dilemmas about cancer care than ever before.

Here is all the state-of-the-art information readers need to make individual choices for care and well-being at every stage of illness. From diagnosis to recovery, *Informed Decisions* covers everything from cancer causes and risks, screening and diagnostic tests, and treatment strategies to coping tips and quality-of-life issues. It provides questions to ask health care providers and information on dealing with the system and getting the most advanced care in the U.S. It has chapters on alternative and mind-body therapies, pain relief, stress reduction, emotional factors, support systems, diet, exercise,

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sexuality, body image, self-esteem, managing disabilities, issues for family and friends, cancer in children, AIDS-related cancers, and more. Also included is an encyclopedia of common and uncommon cancers (pinpointing all treatment options, including the newest techniques). Finally, it has an extensive resource section that includes information on how to use online services. —from Viking

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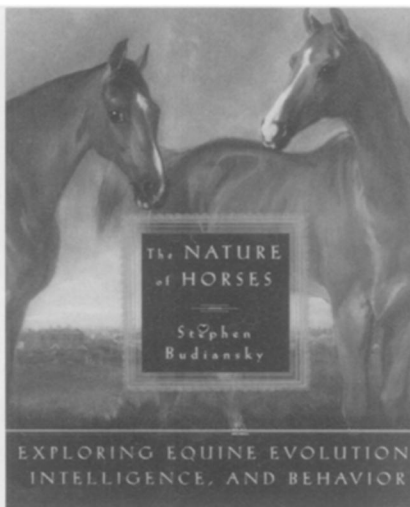
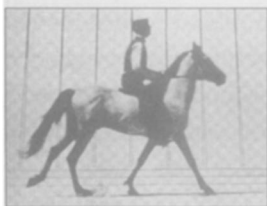
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Free Press
1997
290 pages
7 1/2" x 9 1/2"
hardcover
\$30.00



Humans and horses have a shared history going back to their domestication around 4000 B.C. Yet only in very recent years have scientists begun to use science to illuminate this remarkable animal, long a staple of human dreams and legends. Now, modern scientific research is beginning to explain long-standing mysteries about the true nature of the horse.

How well can horses see? What causes breakdowns in racehorses? How intelligent are these magnificent creatures, compared to other animals, and are some breeds smarter than others? Does nature or nurture matter more in creating a great sport horse? What causes cribbing and other vices? In this beautifully illustrated, compelling narrative, Budiansky tells the story of the origins, behavior, intelligence, and language of the horse.

Introducing the latest archaeological findings, Budiansky presents a fascinating discussion of how the horse evolved. He debunks the commonly held belief that horses are not terribly sharp. And, finally, he draws together the latest research on horse physiology, genetics, and biomechanics to pose the million dollar question in all its complexity—what makes for a winning racehorse? —The Free Press



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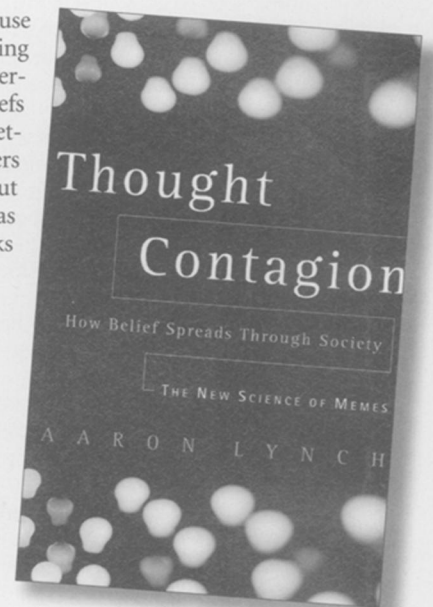
Fans of Douglas Hofstadter, Daniel Dennett, and Richard Dawkins will revel in Aaron Lynch's groundbreaking examination of memetics—the new study of how ideas and beliefs spread. A meme is characterized by its capacity for displacing rival ideas and beliefs in an evolutionary drama that changes the way people think. Why do some beliefs spread throughout society while others dwindle to extinction? What drives those intensely held beliefs that spawn ideological and political debates on such issues as abortion?

Basic Books
1996
192 pages
6 1/4" x 9 1/2"
hardcover
\$24.00

By drawing on examples from everyday life, Lynch develops a conceptual basis for understanding memetics. Memes evolve by natural selection in a process similar to that of genes in evolutionary biology. What makes an idea a potent meme is how effectively it outpropagates other ideas. In memetic evolution, the "fittest ideas" are not always the truest or the most helpful, just the ones best at self-replication.

Thus, crash diets spread not because they confer lasting benefit, but because they cause alternating episodes of dramatic weight loss and slow regain. Each sudden thinning provokes onlookers to ask, "How did you do it?" thereby manipulating them to experiment with the diet and, in turn, spread it again. Lynch argues that certain beliefs spread like viruses and evolve like microbes. In its most revolutionary aspect, memetics asks not how people accumulate ideas, but how ideas accumulate people. Readers of this intriguing theory will be amazed to discover that many popular beliefs about family, sex, politics, religion, health, and war have succeeded by their "fitness" as thought contagions.

—from Basic Books



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Avon, 1997, 242 pages
7 1/4" x 9 1/4", paperback, \$13.00

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Sizesaurus

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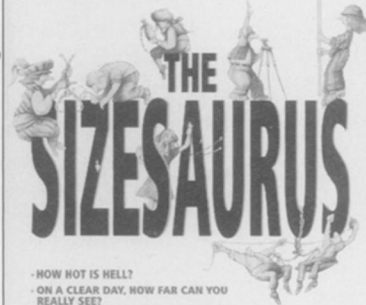
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FUN FACTS, FIGURES AND CALCULATIONS FROM
THE REMARKABLE WORLD OF MEASUREMENT



• HOW HOT IS HELL?
• ON A CLEAR DAY, HOW FAR CAN YOU
REALLY SEE?
• JUST HOW BIG WAS THE BIG BANG?
• WHAT IS A BRESCHIA? A HOUPEE? A SMOOTT?

STEPHEN STRAUSS

The *Sizesaurus* is a book for every bewildered baker who's puzzled over how skimpy a "scant" teaspoon of cinnamon should be, for every rock 'N' roll fan who's wondered about the potential hearing damage from amplified music, and for every armchair scientist who'd like to know how big the Big Bang really was. Stephen Strauss considers the entire world of measuring and discovers that every method of measurement—from biblical times to the present—speaks volumes about the cultural assumptions of the society in which each originates.



Strauss' essays on assaying cover such topics as earthquake measurement, the role of the French Revolution in the creation of the metric

system, the importance of measurement in the kitchen, and how bureaucratic inefficiency may be measured by his unique "Porkometric" system.

In later sections, Strauss moves on to the *Wordsaurus*—a complete glossary of measurement terms—and finally to the *Sizesaurus* itself, in which detailed conversion tables provide common equivalents of scientific measurements. These handy conversion tables compare ounces against centigrams, inches against centimeters, Celsius against Fahrenheit, and so on.

The Sizesaurus is truly a thesaurus of measurement that allows readers to understand how measurement affects everything in our world, from sound to heat to food to computers to electricity to outer space. This engaging book will be fun to browse, even for the science-averse, and it's an absolutely essential reference for everyone using science and measurement in their everyday lives. —from Avon

