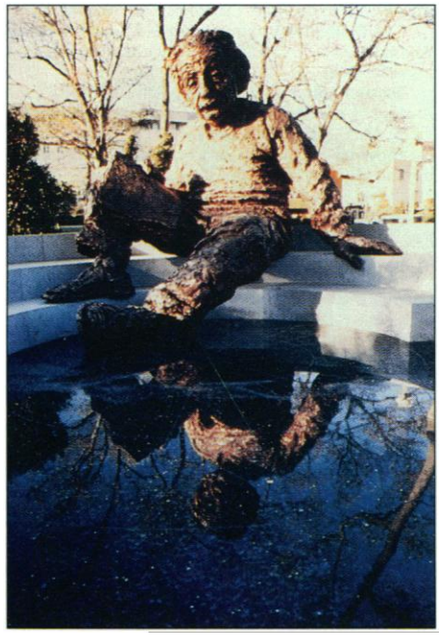
BOOK REVIEWS

Scientist Fiction

Summer is traditionally a time for reading works that are either particularly heavy or particularly light. Followers of *Science*'s Books Received column can hardly want for suggestions regarding the former and will have found no dearth of popular expositions of scientific ideas and discovery. But the mix that reaches the editors' desks also includes an occasional novel. Here, for the benefit of summer readers interested in trying this third genre, are described several whose bestowal on *Science* seems to have some rationale.

Probably the quintessential science novel of the past year is ***The Bourbaki Gambit*** (University of Georgia Press, $19.95) by chemist and "father of the Pill" Carl Djerassi, which follows a previous novel, ***Cantor's Dilemma*** (Viking-Penguin paperback, $9), by the same author. Like its predecessor (see *Science* **246**, 829 [1989]), the book takes up themes of particular currency in the science world. Here the necessity of early retirement is a motivating factor, leading Max Weiss, a Princeton biochemist, backed by Diana Doyle-Ditmus (D_3), a sexy 70ish historian of French erotica made wealthy by the MacArthur Foundation, to set out to prove the creative powers of emeriti. The mechanism is a pseudonymous consortium inspired by the Nicholas Bourbaki of mathematics, and for it an appropriately multicultural assemblage of senior scientists—including an Austrian, a Japanese, and a lesbian—is recruited, with a graduate student (Diana's granddaughter) to help out in practical ways. Suffice it to say that complications arise and the polymerase chain reaction is discovered. Along the way are to be found excursions on such topics as meetings of science academies, the Japanese system of academic preferment, the sociobiology controversy, and DNA sequencing. Science watchers will find much that is familiar (though will wonder why the Cold Spring Harbor symposia are located in Woods Hole), and it has to be said that, even more than with *Cantor's Dilemma*, the science lore is the main attraction of this book. With the sometimes didactic manner of its predecessor and less plausible plot it wouldn't likely be reading of choice for a seasoned fiction reader without a special interest in scientists and their ways.

A briefer novel in quite a different style is ***The Good Benito*** (Pantheon, $21) by physicist and popularizer Alan Lightman, also the author of an earlier novel, ***Einstein's Dreams*** (Pantheon, $17; Warner paperback, $7.99). An episodic *Bildungsroman*, Lightman's new novel has as its protagonist a young physicist, Bennett Lang, who early on recognizes himself as "a ponderer" and for whom "the world buckled at its knees" when he first discovered algebra, where "there was always an answer, clear as a new Franklin half-dollar." We initially see Bennett at the beginning of his academic career, where his dean's ambitions for their institution push Bennett into an effort to induce a brilliant but reticent professor to put his work into publishable form; from this ill-fated venture emerges the theme of the importance of the well-posed problem that will eventually offer Bennett a way of dealing with a torturous marriage to a psychologically incapacitated painter. But the largest part of the book deals with Bennett's earlier years. His growing up in a materially comfortable southern household includes closeness with a family maid who stands in for his idiosyncratic mother and remote father, experiments with electric gadgetry and rocketry, an exploration of moral dilemmas with a learned rabbi, and a romantic relationship with a high school drama teacher who tries to unburden him of his penchant for precision. Having as an undergraduate found himself "gradually . . . confirming his suspicion that the world was described by equations," Bennett proceeds to graduate school, where he chooses as an apprentice problem one that "he soon realized . . . was not of fundamental importance. And the basic attack had already been mapped by another scientist before. But he was confronting a problem that had never been solved . . . Every unverified fact extracted a small price. Little by little, he had been paying away his independence and self-confidence. Now he had a chance to discover something true about the world . . . taking nobody's word for it." After some difficulties the problem is mastered—"The equations, which over the last months had grown tired and suspicious, came to life, and they were right and they were graceful and they glistened like a moon over trees"—and Bennett proceeds to his independent life. Although the story of *The Good Benito* will have many resonances for those acquainted with the traditional lore of physics, it is essentially one of an inward journey rather than of mores, and as family ties reassert themselves the book ends with an indication that the time when Bennett "lived his whole life in science" has passed.



The National Academy of Sciences' statue of Albert Einstein. "Conway sat herself by Einstein's right foot and reached over to stroke his bronze shin. That's when I noticed that her slip was showing. The stretch of white slip shone brightly in the sunshine, so brightly it seemed she'd pulled it down below the hem of her dark green skirt as a deliberate challenge: to show that dress or appearance simply didn't matter. She wore absolutely no makeup; her hair seemed to have been cut by a man's barber. What a contrast to D_3! But despite the contrast they both seemed to know what they wanted, and neither wasted any time getting to the point. Charlea Cherith Conway, I found myself musing: C_3. I could just see myself introducing my two chemical formulas to each other: 'May I present the three deuteriums to the three carbons?' " [From Carl Djerassi's *The Bourbaki Gambit*]

In mystery novels scientists are not uncommon as characters, and anthropologists and archaeologists are especially likely to figure because of the forensic potential of their discipline. In Gordon Randolph Willey's ***Selena*** (Walker, $19.95) we have a mystery that was in fact written by an archaeologist. Its protagonist, Colin R. Edwards, like its author a retired archaeologist based in Cambridge, Massachusetts, is moved to revisit the town of his upbringing on the Florida coast by a call for help from a cousin. Colin's return to the world of his past, "or at least a shell of that world," places him as a now-distanced outsider in the position of mediator among uneasy, seemingly paranoid relatives. The family tensions turn out to revolve around the

upcoming sale of a family property that contains a partly unexcavated Indian mound, and eventually Colin's professional expertise is brought into play. In the course of the story old memories rise to the surface, an unsettling early love is briefly rekindled, and dark family secrets are newly revealed, leaving Colin as narrator to reflect that "I hope now only to return" to the "contented and prosaic" condition of his life in Cambridge. Notwithstanding the use made of archaeology in uncovering the remains of an old crime, the author wears his learning lightly, and this is not really a "sciency" book; it also transcends the norm for the mystery genre, and no allowances need be made for the author's novice status as a non-academic writer.

Social scientists with interests in issues beyond bones and burials are seldom main characters in mysteries, and aficionados (if any there be) of works featuring such thinkers will be glad of the appearance this month of a third novel by Marshall Jevons, entitled ***A Deadly Indifference*** (Carroll and Graf, New York, $18.95). This doubly composite author (really the economists William Breit of Trinity University and Kenneth G. Elzinga of the University of Virginia) has produced two earlier works, ***Murder at the Margin*** (Princeton University Press, $34.95 or, in paper, $10.95) and ***The Fatal Equilibrium*** (Ballantine paperback, $4.95) featuring economics professor Henry Spearman of Harvard, whose grasp of such concepts as utility maximization puts him at an advantage in identifying perpetrators of crime. The new work is set in the "Marxo-Keynesian" Cambridge, England, of the 1960s, where Spearman and his wife Pidge have traveled to assist in the purchase by an American foundation of Balliol Croft, a home once occupied by the great economist Alfred Marshall. Spearman, "an academic hot property," is quickly engaged in the fierce debates being waged by the Cambridge economists, he confidently predicting the collapse of communism as they loftily present their case for the inviability of capitalism. Much economic theory and Cambridge lore are expounded as murder erupts to affect the fate of Balliol Croft and Spearman involves himself in the investigation of the case. As in Jevons's earlier books, Spearman's rationality prevails in matters large and small, but this potentially maddening quality is tempered by his pixieish good humor and the exposition of other points of view on matters at issue (see Vignettes, p. 111).

The range of ways in which scientists are being represented in fiction is only barely indicated in this account. Among recent works that readers interested in foraging further on their own might like to include on their browsing lists are Erich Segal's ***Prizes*** (Ballantine, $23.95), and, set in earlier eras, Nicholas Mosley's ***Hopeful Monsters*** (Dalkey Archive Press, $21.95; Vintage paperback, $13) and A. S. Byatt's ***Angels and Insects*** (Random House, $21; Vintage paperback, $12).

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Books Received

Advances in Environmental Remote Sensing. F. Mark Danson and Stephen E. Plummer, Eds. Wiley, New York, 1995. xiv, 184 pp., illus., + plates. $49.95. Based on a conference, Nottingham, UK, 1994.

Agents Unleashed. A Public Domain Look at Agent Technology. Peter Wayner. AP Professional (Academic), Cambridge, MA, 1995. xii, 358 pp., illus. Paper, $39.95.

Agriculture and the Environment. Bridging Food Production and Environmental Protection in Developing Countries. Anthony S. R. Juo and Russell D. Freed, Eds. American Society of Agronomy, Madison, WI, 1995. xviii, 275 pp., illus. Paper, $25. ASA Special Publication no. 60. From a symposium, Cincinnati, OH, Nov. 1993.

Biodegradation of Nitroaromatic Compounds. Jim C. Spain, Ed. Plenum, New York, 1995. viii, 232 pp., illus. $79.50. Environmental Science Research, vol. 49. Based on a symposium, Las Vegas, NV, May 1994.

The Biological Rhythms and Clocks of Intertidal Animals. John D. Palmer. Oxford University Press, New York, 1995. xiv, 217 pp., illus. $65.

Biotechnology Guide U.S.A. Companies, Data and Analysis. Mark D. Dibner. 3rd ed. Oryx, Phoenix, AZ, 1995. xii, 692 pp. Paper, $249.

Blow-up in Quasilinear Parabolic Equations. Alexander A. Samarskii *et al.* De Gruyter, Hawthorne, NY, 1995. xxii, 535 pp., illus. $198.95 or DM 328 or ÖS 2.559 or SFr 312. De Gruyter Expositions in Mathematics, vol. 19. Translated from the Russian edition (Moscow, 1987) by Michael Grinfield.

Bodies of Evidence. Reconstructing History through Skeletal Analysis. Anne L. Grauer, Ed. Wiley-Liss, New York, 1995. xii, 247 pp., illus. $39.95.

Brain and Memory. Modulation and Mediation of Neuroplasticity. James L. McGaugh, Norman M. Weinberger, and Gary Lynch, Eds. Oxford University Press, New York, 1995. xiv, 350 pp., illus. $75. Based on a conference, Irvine, CA, Oct. 1992.

Cohomological Induction and Unitary Representations. Anthony Knapp and David A. Vogan, Jr. Princeton University Press, Princeton, NJ, 1995. xviii, 948 pp. $69.50 or £55. Princeton Mathematical Series, 45.

Computational Approaches to Novel Condensed Matter Systems. Applications to Classical and Quantum Systems. D. Neilson and M. P. Das, Eds. Plenum, New York, 1995. viii, 280 pp., illus. $89.50. From a workshop, Sydney, Australia, July 1993.

Computational Geomechanics. Arnold Verruijt. Kluwer, Norwell, MA, 1995. viii, 383 pp., illus., + diskette. $147 or £95 or Dfl. 225. Theory and Applications of Transport in Porous Media, vol. 7.

Confined Electrons and Photons. New Physics and Applications. Elias Burstein and Claude Weisbuch, Eds. Plenum, New York, 1995. x, 907 pp., illus. $195. NATO ASI Series B, vol. 340. From an institute, Erice, Italy, July 1993.

Conservation Biology in Australia and Oceania. Craig Moritz and Jiro Kikkawa, Eds. Surrey Beatty, Chipping Norton, NSW, Australia, 1994. xii, 404 pp., illus. $A93. Based on a conference, Brisbane, Queensland, Australia, Oct. 1991.

Constructing the Self, Constructing America. A Cultural History of Psychotherapy. Philip Cushman. Addison-Wesley, Reading, MA, 1995. xviii, 430 pp. $27.50.

Conversation Repair. Case Studies in Doctor-Patient Communication. Frederic W. Platt. Little Brown, New York, 1995. xiv, 194 pp. Paper, $24.95.

Darwin's Laboratory. Evolutionary Theory and Natural History in the Pacific. Roy MacLeod and Philip F. Rehbock, Ed. University of Hawaii Press, Honolulu, 1995. x, 540 pp., illus. $45. Based on a symposium, Hamburg, Germany, 1989.

Development of Ideas in Physics. Nils Ryde. Almqvist and Wiksell, Stockholm, Sweden, 1994. iv, 196 pp., illus. SEK 207.

Diagnostic Bacteriology Protocols. Jenny Howard and David M. Whitcombe, Eds. Humana, Totowa, NJ, 1995. x, 283 pp., illus. Spiralbound, $69.50. Methods in Molecular Biology, vol. 46.

The Duckfoot Site. Vol. 2. Archaeology of the House and Household. Ricky R. Lightfoot. Crow Canyon Archaeological Center, Cortez, CO, 1994 (distributor, University of Arizona Press, Tucson, AZ). xx, 171 pp., illus. Paper, $19.95. Occasional Paper no. 4.

Elements of Petroleum Processing. D. S. J. Jones. Wiley, New York, 1995. x, 408 pp., illus. $74.95.

ELISA. Theory and Practice. John R. Crowther. Humana, Totowa, NJ, 1995. xiv, 223 pp., illus. Spiralbound, $59.50. Methods in Molecular Biology, vol. 42.

The Encyclopedia of Integer Sequences. N. J. A. Sloane and Simon Plouffe. Academic Press, San Diego, CA, 1995. xiv, 587 pp., illus. $44.95.

The Engine of Reason, the Seat of the Soul. A Philosophical Journey into the Brain. Paul M. Churchland. MIT Press, Cambridge, MA, 1995. xii, 329 pp., illus. $29.95.

Environmental Organic Chemistry. Illustrative Examples, Problems, and Case Studies. René P. Schwarzenbach, Philip M. Gschwend, and Dieter M. Imboden. Wiley, New York, 1995. Variously paged, illus. Paper, $29.95.

Experimental Use and Patents. David Gilat. VCH, New York, 1995. xii, 141 pp. Paper, $80. IIC Studies, vol. 16.

Extraterrestrial Dust. Laboratory Studies of Interplanetary Dust. Kazuo Yamakoshi. Terra Scientific, Tokyo, and Kluwer, Norwell, MA, 1994. xvi, 213 pp., illus. $156 or £99 or Dfl. 230. Astrophysics and Space Science Library, vol. 181.

Eye, Brain, and Vision. David H. Hubel. Scientific American Library (HPHLP), New York, 1995 (distributor, Freeman, New York). x, 242 pp., illus. Paper, $19.95. Scientific American Library, no. 22. Reprint, 1988 ed.

Geometric Measure Theory. A Beginner's Guide. Frank Morgan. 2nd ed. Academic Press, San Diego, CA, 1995. x, 175 pp., illus. $34.95.

The Geometry of Kerr Black Holes. Barrett O'Neill. Peters, Wellesley, MA, 1995. xviii, 381 pp., illus. $79.95.

Introduction to Logic and to the Methodology of Deductive Sciences. Alfred Tarski. Dover, New York, 1995. xvi, 239 pp. Paper, $8.95. Reprint, 1946 ed. Translated by Olaf Helmer.

An Introduction to Molecular Electronics. Michael C. Petty, Martin R. Bryce, and David Bloor, Eds. Oxford University Press, New York, 1995. xiv, 387 pp., illus. Paper, $42.50.

Laparoscopic Hernia Repair. A New Standard? M. W. Bücher *et al.*, Eds. Karger, Farmington, CT, 1995. viii, 194 pp., illus. $139.25 or SFr. 160 or DM 192. Progress in Surgery, vol. 21. From a meeting, Bern, Switzerland, May, 1994.

The Last Harvest. The Genetic Gamble That Threatens to Destroy American Agriculture. Paul Raeburn. Simon and Schuster, New York, 1995. 269 pp. $24.

Lectins. Biomedical Perspectives. Arpad Pusztai and Susan Bardocz, Eds. Taylor and Francis, Philadelphia, 1995. xiv, 331 pp., illus. $99.50.

Lemurs of Madagascar. Russell A. Mittermeier *et al.* Conservation International, Washington, DC, 1994. 358 pp., illus. Paper, $37. Tropical Field Guide Series, 1.

Lesbian, Gay, and Bisexual Identities Over the Lifespan. Psychological Perspectives. Anthony R. D'Augelli and Charlotte J. Patterson, Eds. Oxford University Press, New York, 1995. x, 457 pp. $39.95.

Light Detectors, Photoreceptors, and Imaging Systems in Nature. Jerome J. Wolken. Oxford University Press, New York, 1995. xiv, 259 pp., illus. $65.

Linear Algebra and Matrix Theory. Jimmie Gilbert and Linda Gilbert. Academic Press, San Diego, CA, 1995. x, 394 pp. $39.95.

The Machine in America. A Social History of Technology. Carroll Pursell. Johns Hopkins University Press,