## **Behavior**

## Creativity's melancholy canvas

Artists suffer more than their share of depression, a tendency that may fuel their creativity while it shatters their personal lives, according to a report in the April American Journal of Psychiatry.

Joseph J. Schildkraut, a psychiatrist at Harvard Medical School in Boston, and his colleagues charted the turbulent psychological histories of 15 mid-20th-century abstract expressionists of the New York School, only one of whom is still alive. The researchers made psychiatric diagnoses based primarily on the artists' medical records, known suicide attempts, and evidence of periodic inability to work or function socially.

Four artists — Jackson Pollock, Mark Rothko, Philip Guston, and William Baziotes — suffered recurring bouts of severe depression. Two others — Arshile Gorky and David Motherwell — suffered milder forms of depression and mania. Similar conditions probably also afflicted Franz Kline and David Smith, notes Schildkraut's group.

Pollock, Rothko, Kline, Guston, and Willem de Kooning abused alcohol, and Motherwell and Smith apparently also imbibed to excess, the scientists assert. Gorky and Rothko committed suicide; Pollock and Smith died in car crashes while driving, both under circumstances that may reflect suicidal intent.

Prior research has probed the link between creativity and mood disorders such as depression (SN: 9/3/88, p.151).

Art may have evolved as a way of accentuating the emotional significance of communal rituals, Schildkraut proposes. It can still express shared spiritual and sacred meanings, although few exist in modern "secular" societies, he contends.

The depressed artist examines painfully the purpose of

living and the possibility of dying in this spiritual vacuum, often at great personal cost, according to Schildkraut. "Yet depression in the artist may be of adaptive value to society at large," he maintains.

## Dementia's ascent in the elderly

A rare prospective study of the elderly reveals that the rate of first-time dementias rises dramatically with age. Brain changes that cause various types of cognitive decline may often accompany advancing age, assert Eugene S. Paykel, a psychiatrist at the University of Cambridge in England, and his coworkers.

The scientists employed interviews and cognitive tests to identify dementia in 1,778 adults age 75 or over. An average of 2.4 years later, Paykel's group interviewed and tested 1,195 persons in the original sample.

Annual rates of new dementia cases were 2.3 percent for those initially age 75 to 79, 4.6 percent for those age 80 to 84, and 8.5 percent for those age 85 to 89. Most of these dementias caused mild impairment; the remainder produced moderate or severe symptoms. About two-thirds of those with at least mild dementia received a diagnosis of Alzheimer's disease.

Incidence held steady after controlling for the volunteers' sex, education, and social class, the researchers assert in the April Archives of General Psychiatry.

Minimal dementia, in which symptoms fall short of those exhibited in mild dementia, showed the same incidence as mild or more severe dementia, they add. The former condition includes limited learning and memory problems, increasing misplacement and loss of possessions, and a rising frequency of errors in daily tasks. These symptoms may often worsen over time, the investigators contend.

## **Books**

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Black Holes and Time Warps: Einstein's Outrageous Legacy - Kip S. Thorne. Einstein's Theory of Relativity begat quantum physics, which has led to revelations about curved spacetime that Einstein would never have thought possible. Thorne, who is the Feynman Professor of Theoretical Physics at the California Institute of Technology, introduces the history and intricacies of quantum physics and these unimagined revelations by focusing on how physicists have proved the existence of black holes without encountering one. He elaborates on the possibility of wormholes, white dwarfs, gravitational waves, and even time machines with his eloquent text and informative diagrams. Norton, 1994, 619 p., b&w illus. and photos, hardcover, \$30.00.

Helaman Ferguson: Mathematics in Stone and Bronze — Claire Ferguson. Not only a sculptor but also a mathematician, Ferguson blends both of these abilities in his art. Möbius strips, tori and double tori, trefoil knots, and wild and tame spheres serve as the basis for most of his sculpture, and all are based on mathematical theorems. Extraordinary color photographs of the sculptures accompany detailed descriptions of the mathematical significance of each in this retrospective of the artist's work. Meridian, 1994, 79 p., color plates, hardcover, \$39.95.

Planetary Overload: Global Environment Change and the Health of the Human Species — A. J. McMichael. This alarming overview places in a biological, historical, and social context the stresses that the burgeoning human population places upon Earth's life-support systems. Of greatest concern to the author are the negative effects that failing ecosystems exert on human health. For this reason, he urges both wealthy and poor societies to reverse current destructive trends. He also provides in this thoroughly researched and thought-provoking book an itemized account of the impact of specific global environmental changes upon human health. Cambridge U Pr, 1994, 352 p., paperback, \$16.95.

The Portable Pediatrician for Parents: A Month-by-Month Guide to Your Child's Physical and Behavioral Development from Birth to Age Five — Laura Walther Nathanson. Written by a pediatrician, this guidebook confronts virtually every possible scenario a parent will encounter in caring for a small child. Early chapters describe progress at 2-week to 6-month intervals and address many of the same issues in later chapters — for example, illness, injury, travel with a child, day care, nurturing. The author shows how these things change with the maturing child and advises parents about how to respond. Harper-Perennial, 1994, 502 p., b&w illus., paperback, \$20.00.

To order by Visa or MasterCard, call 1-800-544-4565 In D.C. Area: 202-331-9653 Sastun: My Apprenticeship with a Maya Healer - Rosita Arvigo with Nadine Epstein. Only0.5 percent of the 250,000 species of higher plants on the planet have been tested for chemical composition and medicinal properties. From these few plants, we obtain nearly 25 percent of our prescription pharmaceuticals, reports Arvigo, a doctor of naprapathy, or healing by physical manipulation and diet. After living for some time in Belize and witnessing the reliance of the natives on plants from the rain forest for their medicinal needs, Arvigo became intrigued. This is the story of her time with Elijio Panti, a Maya healer who taught her how to diagnose and treat physical ailments and instilled in her an appreciation for native plants and the importance of the rain forest. Arvigo conveys all of this to the reader in her intriguing tale. HarperCollins, 1994, 190 p., hardcover, \$22.00.

The Urban/Suburban Composter: The Complete Guide to Backyard, Balcony, and Apartment Composting — Mark Cullen and Lorraine Johnson. Garbage is good and useful declares this manual for do-it-yourself composting. The authors report that yard trimmings and table scraps make up 25 percent of the garbage taken to landfills, all of which can be recycled into the soil. Introductory chapters detail the fundamentals of the composting process. Later ones present tips for selecting the proper bin and constructing one, restricting animals, and keeping smells to a minimum. A glossary and source list conclude the book. St Martin, 1994, 172 p., b&w illus., paperback, \$13.95.

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