

A Science Service Publication Volume 130, No. 23, December 6, 1986

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Subscription Department 231 West Center Street, Marion, Ohio 43305

Subscription rate: 1 yr., \$29.50; 2 yrs., \$50.00. (Foreign postage \$5.00 additional per year.) Change of address: Four to six weeks' notice is required. Please state exactly how magazine is to be addressed. Include zip code. For new subscriptions only call (1) 800-247-2160. Printed in U.S.A. Second class postage paid at Washington, D.C., and additional mailing offices. Title registered as trademark U.S. and Canadian Patent Offices. Published every Saturday by SCIENCE SERVICE, Inc., 1719 N. St., N.W., Washington, D.C. 20036. (202-785-2255) ISSN 0036-8423

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Cover: Areas of bright, ultraviolet emissions in the night-side atmosphere of Venus may be an aurora, as shown in this image produced from data recorded by the Pioneer Venus Orbiter. Yet scientists have been working for four years to explain how an aurora is even possible around a planet with such a weak magnetic field. (Image: J. L. Phillips et al.)



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Letters

Long live the feeble fruit fly

Let's hope the folks in Florida don't rush out and kill off all the fruit fly larvae with no affinity for tough-skinned citrus ("Helping citrus tough it out," SN: 10/25/86, p.265). The strategy of assuring that larvae enfeebled to the tough-skinned immature fruit can reproduce seems to be an elegant approach to survival. In the spirit of the rodent analogy, a better mousetrap is unnecessary if the population of mice stays sufficiently stupid. It may become the sport of fruit flies to see these engineers "hoisted with their own petard."

Fred T. Padgett Edgewood, Ky.

The brain as hologram

"Million-Cell Memories" (SN: 11/15/86, p.313) disputes the notion that memory is

stored in specific areas of the brain as an "engram" for any particular event. This is quite consistent with the holographic theory of brain function supported by Pribram and Bohm.

In a hologram, every element of the subject is distributed throughout the photographic plate, making it possible to reconstruct the entire original image from any portion of the picture. In this paradigm, the brain stores memory and deals with interactions by interpreting and integrating frequencies, retaining the data not in a localized area but dispersed throughout its substance.

As Adey notes, this may be accomplished by the transmission and amplification of weak amounts of electrical energies at cell membrane surfaces, as suggested by the accompanying color-coded brain images. Recent research reveals that external application of similar low levels of electromagnetic

energy may also have important therapeutic applications in the treatment of insomnia, anxiety and other stress-related problems. These effects also invoke a cascade of interactive influences that extend throughout the central nervous system, involving other homeostatic agencies such as the immune system, which, like the brain, also remembers.

Paul J. Rosch President American Institute of Stress Yonkers, N.Y.

Address communications to Editor, Science News, 17 19 N Street, N.W. Washington, D.C. 20036 Please limit letters to 250 words.

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