

SCIENCE NEWS®

The Weekly Newsmagazine of Science

A Science Service Publication
Volume 136, No. 5, July 29, 1989

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Subscription Department
231 West Center Street, Marion, Ohio 43305

Subscription rate: 1 yr., \$34.50; 2 yrs., \$58.00.
(Foreign postage \$6.00 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. POSTMASTER:
Send address changes to Science News, 231 West
Center Street, Marion, OH 43305. 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

Letters

Bird brains

"Avian Altruism" (SN: 6/10/89, p.364) contains a mistaken presumption. Altruism is a philosophical term, not behavioral or biological. It was coined by philosopher Auguste Comte (1789-1857), as pointed out by Leonard Peikoff in his book *The Ominous Parallels* (1987, New American Library). Dr. Peikoff also noted that "the term means 'otherism' [Latin *alter*, other]; it means that the welfare of others must become the highest value and ruling purpose of . . . man's existence." Basically, it's the *philosophical* view that self-sacrifice is a virtue. Likewise, to even act or behave in an altruistic nature requires some comprehension of "self" and "sacrifice."

Furthermore, Richard Restak points out in *The Mind* (1988, Bantam) that the "[trait] that distinguishes us from all other species . . . is the growth of a sense of self, self-consciousness, self-awareness . . ." and thus anything

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Cover: Bubbles blown through a soda straw into a glass-covered tray of dishwashing liquid show the intricate geometric pattern of an evolving froth. Scientists study flattened froths to glean the rules and relationships dictating how bubbles shift in size and shape. Such froths serve as models for a variety of physical systems, including metal crystals. (Photo by Susan Schwartzberg/© The Exploratorium)

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self-oriented.

To apply the term altruism to any species other than humans is inappropriate due to other species' complete inability to comprehend the concepts of "self" and "sacrifice."

Allen Forkum
Nashville, Tenn.

The behavior of African bee eaters helps to clarify two concepts central to the evolution of behavior: kin selection/inclusive fitness and the interrelationship of heredity and environment. As has been demonstrated many times, the key factor in the helping behavior of young animals is by whom and with whom they were raised, *not* the degree of gene similarity with those being helped. Both mammals and birds reared accidentally or experimentally by nonconsanguineous parents identify with and support their stepparents and stepchildren. Note that this "inclusive fitness" pattern is the reciprocal of incest avoidance; one eschews mating with those

one grew up with, usually siblings. Kin selection appears to be a special case of reciprocal altruism; the magic is gone!

All of which makes clear that the behavior being examined is determined in part by genetic predispositions but the manner of its expression is established by environmental factors. Will we ever be free of that ridiculous tendency to pose heredity and environment as alternatives? I am afraid not.

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JULY 29, 1989

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