

science news[®] to the editor

A Science Service Publication
Vol. 104/July 14, 1973/No. 2
Incorporating Science News Letter

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COVER: NASA and the comet community are gearing up for the Comet of the Century, Kohoutek, which should make a spectacular appearance in the late December and early January skies. See p. 24. (Drawing adapted by NASA artist from sketch by William Liller)

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Subscription Department
231 West Center Street
Marion, Ohio 43302

Subscription rate: 1 yr., \$10; 2 yrs., \$18; 3 yrs., \$25. (Add \$2 a year for Canada and Mexico, \$3 for all other countries.) Change of address: Four to six weeks' notice is required. Please state exactly how magazine is to be addressed. Include zip code.

Printed in U.S.A. Second class postage paid at Washington, D.C. Established as Science News Letter in mimeograph form March 13, 1922. 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). Cable SCIENSERV.

July 14, 1973

Big-bang theory?

Your June 16 issue carries the news about the discovery of quasar OQ 172 and that its estimated distance is about 10 billion light-years, and the age of the universe about 11.4 billion.

I am writing as a layman, but there is something about some of these distances that has long puzzled me and perhaps you or one of your staff could enlighten me. If the universe began per the "big-bang" theory from an inconceivably dense mass and has been expanding ever since then some distance and time has elapsed for our local galaxy to have "arrived" where it is from that original place in time and space locating this primeval mass.

The radiation from that time, since it is traveling at a speed which no material matter can equal, would, it seems to me, have long since passed the region of space now occupied by earth. How then can we see anything that far distant in time? Even if you would assume that the average speed of matter moving away from the original position was half the speed of light, we would be limited to observing no more than half the distance to the original position.

I suspect that this is a moot question that is immaterial due to theoretical matters that I don't understand, but I've never read anything explaining this apparent objection and hope you can perhaps refer me to some published literature.

Sidney Freidin
Laredo, Tex.

(Radiation from distant objects has undoubtedly gone by us. That does not prevent us from receiving radiation later emitted. If the universe is finite, radiation will follow the curvature of space and eventually return to its starting point.—Ed.)

Conditioned language

The following is a response in support of the comments about human chauvinists, in the article "I talk to the animals" (SN: 6/2/73, p. 360).

To be quite simple, if we can account for language in chimps by saying that they are "just" conditioned, are we then to imply that man is not, that the laws of verbal behavior for men are of a sort other than nature's? Really, there

is nothing necessarily degrading about man's language behavior also being a function of environmental conditioning as opposed to stemming from some "thing" innate. This viewpoint is not only in full agreement with the Canon of Parsimony (from among adequate explanations, work with the least complicated). The only thing "innate" about man's language is, from the evidence, his greater susceptibility to those environmental factors which govern the generation and maintenance of verbal behavior.

Stephen LeDoux,
Sacramento, Calif.

Licensing parents

I notice that the responses (letters SN: 6/2/73, p. 351) to Roger McIntire's "Proposal for licensing parenthood" (SN: 5/12/73, p. 305) are all negative. The questions these people bring up are of interest, but before we start raising objections, we should first agree on the fact that parenthood should be licensed.

McIntire said it correctly—you have to have a license to drive a car, a license to fish—even a license to own a dog. But any kind of a mental, moral or physical degenerate can propagate a child and then make the life of that little one a hell where there is no mercy and no help.

It seems indisputable to me that it would be ideal if all males and females could be tied off at puberty, and when both parents decide that they want a child, they go through the formality of applying for permission, passing a course in child care, child nutrition and how to love and cherish the child. Having gone through that formality, they would stand miles apart from the thoughtless and drunken conceptions that now bring rejected children into the world to be persecuted or at least neglected. It is the major, number one disgrace of the earth.

Jessie Chasko
Fair Oaks, Calif.

Anti-hunting

In a letter to the editor (SN: 4/7/73, p. 219) Lawrence W. Jackson seems to equate being "anti-hunting" with the feeling that it is immoral for man to kill an animal. Being "anti-hunting" in the usual sense implies only the feeling that it is immoral for man to take pleasure in killing an animal.

Marjorie Anchel
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