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COVER: On a photographic plate made with a telescope, SS433 does not look markedly different from the stars that surround it, but close spectrographic and radio study are revealing behavior never before recorded. See p. 140. (Photo: Univ. of Calif. at Los Angeles)

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LETTERS

Talking to the animals

The reply of Dr. Rumbaugh to the paper by Skinner and his colleagues (SN: 2/9/80, p. 87) is surprising. As he has studied discrimination procedures in a wide variety of animals, Dr. Rumbaugh should know that it is quite easy to train pigeons to respond to the colors of the keys rather than their location. In fact, to suggest that the correct keys were pecked only because of their fixed locations is itself "misleading" and "not responsible."

One additional note: Skinner and his colleagues attribute the behavior they observed to "operant" not "classical" conditioning.

Jonathan L. Katz, Ph.D.
Boston, Mass.

I think Skinner is just a little shy of the mark in his conclusion that "this all suggests that any ape 'learning' may be nothing more than a result of classical conditioning response that is achievable even in the lowly bird brain." He would have been better advised to have concluded that "any 'people' learning may be nothing more than a result of classical conditioning..."

Suzanne B. Smith
New Milford, N.J.

Block that kick

Regarding your delightful article titled: "Sardinia: Opening a new can" (SN: 11/12/80, p. 27).

The reviewer, who did a very excellent job, perhaps got a little bit carried away with his sport enthusiasm. To describe Sardinia as "a football off Italy's toe" is perhaps describing the football at a further stage than it has already been kicked and is now floating toward an undetermined destination. According to the maps available to me, the "football off Italy's toe" is Sicily. Since football coaches never make a mistake, it is possible that the cartographers mixed up the names. If so, I think an urgent appeal should be made to the appropriate world agencies to move Sardinia into the place recommended by Mr. Greenberg.

John J. Alpar, M.D.
Amarillo, Tex.

Which system?

Why is it necessary to assume that it must be a 17th century attitude which wishes to disallow the presentation of evolution as the only explanation of man's existence (SN: 1/26/80, p. 56)? Let us not forget that "evolution" is not a science that can be tested objectively, but a philosophy held to by those who deem it intellectually irresponsible to believe in supernaturalism (perish the thought!). The "scientific

method" depends on being able to repeat experiments in order to compare and affirm the results. I have not seen or heard of anyone who could reproduce what progressive evolutionists claim to have happened. The difference is that at least religion (that dirty word) admits to faith in their view of the origin of the world, whereas the evolutionist denies the faith that he has in his system. After all, not only is there no concrete proof for evolution but many of the early "evidences" have since proved to be hoaxes. We all know of the politics in "pure" science. What I want to know is that if many of the early evidences for evolution have shown to be false, why must they be continued to be taught as truth?

It does not seem unreasonable to allow the creationists their long overdue chance to present the biblical side of the story. After all, the question is not whether or not one has faith, but which system will he or she choose to have faith in. The comparison between this situation and the 17th century oppression by the Catholic church of learning is extremely invalid. The men who pioneered in Western science and technology did so because they believed in God and the order of the universe. It would be best in the interest of good journalism and above all scientific objectivity to either present both sides of an argument in an article or restrict the emotional bias that enters in from time to time.

Gary Kitchen
Brookport, Ill.

(The issue between Copernicus and the inquisitors seems to have been the relative reliability of information. In the inquisitors' view the most certain information comes by divine revelation. Nature being a secondary source, scientific conclusions, no matter how strong the evidence, are always a little tentative and subject to correction.)

The modern "creationists" use a similar attitude toward revelation when they take an extremely literal reading of a few passages in Genesis and argue for the old biological doctrine of fixity of species. [Incidentally, divine creation is not the issue. Many people who accept the mutability of species also believe God created the universe.] Some of the inquisitors may have had emotional investments in the geocentric model of the solar system, but they refrained from condemning the heliocentric model as such. They were content to extract an admission that human judgment is fallible. Modern creationists seem to have a strong emotional interest in the subject. Putting this with other activities of many of the same people would lead one to believe that they are trying to make a universe for themselves that will be ultrastable and ultrarigid. All change banned.

If so, the procedure is both bad theology and execrable exegesis. We are not allowed to second-guess God. If God chose to create a universe of change and flux — and the evidence of our eyes is overwhelming that he did — no amount of whimpering by us can alter His will. As Galileo said, "Eppur si muove." — D.E.T.)

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