

# Science News

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**COVER:** Biological research relies heavily on the fact that animals mirror humans in many ways. Behavioral research has no exact parallel, and psychiatrists must ask how far they can go with animal models. See p. 274. (Art: Ann Lunsford)

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April 27, 1974

# To the Editor

## Sagan and Velikovsky

The letters in the April 6 issue on the Velikovsky symposium are object lessons in the damned-if-you-do-and-damned-if-you-don't experience with pseudoscience.

Admittedly Sagan might find better ways to spend his time, but it is usually necessary to write an encyclopedia in rebuttal to a Velikovsky. When you don't, the points you make are submerged in the flack of challenges that you didn't anticipate. In the heat of the argument there is usually little opportunity to make an effective comeback.

The point to be kept in mind is that worlds in collision and ancient astronauts are not necessarily *theori non grata*, but that the authors of these themes persist in marketing their work as progressive and scientific without once following the rules of proper data handling. The crime, of course, is that misuse of the evidence, or lack of it, deludes the uninformed reader to believe the pseudoscience is the true science.

E. C. Krupp, Ph.D.  
Observatory Curator  
Griffith Observatory  
Los Angeles, Calif.

William D. Conner's attack on Sagan's alleged misdeeds re Velikovsky provides a perfect last straw for illustrating how difficult is the position of the nonfringe, productive scientist, when dealing with those enamored of pseudoscience's baseless speculations.

If one simply ignores the crank, this is "closed-mindedness" or "arrogance." If one then instead agrees to meet him in debate, this is billed as showing that he is a serious scholar. (For why else would the lordly establishment agree even to discuss him?) Irksome either way.

And, finally, when the crank's views are demolished in the showdown, the patient (if understandably sardonic) victorious scientist is then abused by a Conner for wasting his talents!—not to mention snobbery (with a hint of sadism and cowardice).

The boycott actions of some prominent astronomers against Velikovsky are well known and have rightly been condemned. But the discreditable actions have not all been on one side. Let those who attack

orthodoxy keep in mind that misbehavior which irritates and frays the establishment's trust in independent thinkers' reasonableness will only make a fair hearing more difficult for the next challenger championing "an intriguing idea which could ultimately prove to be correct."

Dennis Rawlins, F.R.A.S.  
Baltimore, Md.

The letter by science columnist William D. Conner on Carl Sagan vs. Velikovsky claims Sagan used "overkill" in presenting 56 pages of criticism on Velikovsky's ideas. Perhaps this is so, but it is also possible that the 56 pages are needed in Sagan's presentation. If one has the evidence to fill this amount of space in a scientific debate, it seems that one has the right to use it, since evidence is needed for a scientific position.

I have not seen Sagan's views on UFO's, but I was very surprised to see the claim that Sagan "summarily rejects" the idea that the earth has been visited by extraterrestrial spaceships during its history of 4 to 5 billion years. In the book *Intelligent Life in the Universe*, co-authored with the Soviet scientist Shklovskii, Sagan speculates on both the possible ways of achieving interstellar travel, and the possibility that earth has been visited on the order of once every 100,000 years or so (Ch. 33, "Possible Consequences of Direct Contact"). Although these ideas are admitted to be speculations, Sagan does not seem to be as myopic as claimed, and I find his writing which I mentioned much more plausible and interesting than that of Von Daniken.

Patric Morrison  
Lexington, Mass.

(For interested readers, here is what Sagan himself said at the conclusion of his paper about the time devoted to the effort: "To the extent that scientists have not given Velikovsky the reasoned response his work calls for, we have ourselves been responsible for the propagation of Velikovskian confusion. But scientists cannot attempt to deal with all areas of borderline science—of which the number is legion in America today. The thinking, calculation and preparation of this article, for example, took badly needed time away from my own research. But it was certainly not boring, and at the very least, I had a brush with many an enjoyable legend. I hope that in the future Velikovsky's views and the views of other popular proponents of borderline science will receive a reasoned, if hopefully briefer, scientific response."—Ed.)

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