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COVER: An old battle continues on new fields. Twenty years after the first appearance of C.P. Snow's essay on *The Two Cultures*, the sciences and the humanities are still scrapping, but the battle lines have changed. A SCIENCE NEWS survey of leaders in both camps reveals their latest defenses and attempts to bridge the gap. See p. 122. (Illustration: Annie Lunsford)

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FEBRUARY 19, 1977

LETTERS

Saturn's disputed moons

In spite of claims to the contrary (SN: 1/29/77, p. 69), we are firmly convinced that the observations compiled by Larson and Fountain should not be interpreted as confirming the alleged Saturnian satellite Janus and as proof of the reality of the "11th satellite."

As soon as one admits that the 1966 observations refer to more than one object, the analysis leads to an extremely ambiguous situation. Larson and Fountain allow the possibility that there are *two* solutions to the problem, satisfying 18 and all 21 observations, respectively, although it is misleading to say that the second solution (which, incidentally, was first pointed out to them by the first author of this letter) is merely a "preliminary indication." The point is that there are dozens of possible orbits that satisfy various combinations of the observations. The observations are confined to very narrow regions in time and space, and it is also possible to calculate a variety of convincing orbits from a completely *random* selection of points in those regions.

We feel that it is entirely possible that the region just outside the rings of Saturn contains a large number of bodies. On the other hand, some of the observations might refer merely to transient "knots" that could become visible when Saturn's rings are seen exactly edge-on. We also hope that the whole business can be resolved by the forthcoming space missions or during the next edge-on appearance in 1979-80. But until and unless there is much more convincing evidence for the existence of Janus and the Larson-Fountain object they should not be listed in the reference books.

*Kaare Aksnes
Allan F. Cook
Fred A. Franklin
Brian G. Marsden
Harvard-Smithsonian
Center for Astrophysics
Cambridge, Mass.*

Don't compromise on caries

In a letter entitled "Immunity in Tooth Decay" (Dec. 11), Brent Lathrop suggests that the restoration of carious primary teeth may delay the development of immunity to caries-causing bacteria and therefore result in the increased decay of secondary teeth. It should be brought to the attention of your readers that Mr. Lathrop's observations are apparently anecdotal and not supported by

scientific study. In fact, there is information contrary to the point of view expressed by Mr. Lathrop ("Deciduous Teeth and Future Caries Experience." Hill, I.N. and others, *JOURNAL OF THE AMERICAN DENTAL ASSOCIATION*, 74:430-438, Feb. 1967).

Professional dental care of primary teeth provides a child with healthy teeth for mastication, speech and a more pleasing appearance. Dental neglect invites painful, advanced carious lesions and premature loss of the primary teeth. In addition, such premature loss can result in malocclusion and impaction of secondary teeth.

The health benefits derived from the care of children's teeth are well known and should not be compromised by unsupportable contentions.

*Roger H. Scholle, D.D.S., M.S.
Assistant Secretary
Council on Dental Therapeutics
American Dental Association
Chicago, Ill.*

The shift of dissent

In regard to the "Cooling Campus" (SN: 1/22/77, p. 58), the observation that faculty members are becoming more militant seems quite logical. The dissenters of the 1960s are now becoming the faculty members of today. In later years a similar survey would probably reveal political and industry leaders as becoming more militant. One day a former dissenter may even be President. The Revolution may still live!

*Pasquale F. Scopelliti
Saint Bonaventure University
Saint Bonaventure, N.Y.*

Cryptology

In the Sept. 18, 1976, issue of SCIENCE NEWS there was a well-written article by Michael Guillen, entitled "Automated Cryptography." I want to commend you on publishing an article in a field which needs more exposure.

The notions of random sequences occur throughout cryptology. We have recognized that fact in the first issue of CRYPTOLOGIA, a scholarly journal devoted to all aspects of cryptology, whose first issue is out in January 1977. Professor James Reeds, UC at Berkeley, has an article entitled "Cracking a Random Number Generator" in which it is shown that the usual congruential generator is very vulnerable as a key generator for cryptology.

Should readers desire more information about the journal, they can write to: CRYPTOLOGIA, Albion College, Albion, Mich. 49224.

*Brian J. Winkel, Editor
Assistant Professor of Mathematics
Albion College
Albion, Mich.*

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