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**COVER:** One frame from a time-lapse study of sleep in a normal elderly man. These studies by photographer Theodore Spagna and Harvard neurophysiologist Allan Hobson have shown that posture shifts in sleep are controlled by the same brain mechanisms that program the regular recurrence of REM sleep and dreams. The normal and pathological deterioration of such mechanisms with age is among the newest and most challenging areas of sleep research. See story page 10. (Photo courtesy of Theodore Spagna and Allan Hobson, Department of Psychiatry, Harvard Medical School)

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# LETTERS

**A circuitous credit**

I wish to correct a misinterpretation in your report on my article in the May 11 NATURE regarding an atmospheric electrical sun-weather mechanism (SN: 5/27/78, p. 340). While the proposed mechanism depends on the existence of a global atmospheric electrical circuit as described in the article, I did not propose this circuit as stated in your review. Credit goes to the prominent English physicist C. T. R. Wilson half a century ago. Apparently he made the first suggestion for the existence of a global circuit (NATURE 68, 102-104). In this paper he recognized that the upper atmosphere would be highly conductive (and thus by inference an equipotential surface), and he further brought up the problem of the need for identification of some continuously operating electrical generator required to maintain the fair-weather electric field. At that time he thought the generator might be "electrical phenomena accompanying precipitation." Subsequently, Wilson recognized that global thunderstorm activity was probably the only natural phenomenon that could charge the upper atmosphere and maintain the earth's overall fair-weather electric field.

Ralph Markson  
Cambridge, Mass.

**The abrupt quake**

Like John H. Douglas (SN: 4/29/78, p. 282), I was a Tokyo newspaperman during an earthquake but mine was the 1923 whopper. Let me advise that any time a quake merely stops lunchtime conversation, you're already subject to congratulation. As news editor of the Japan Times I was just starting my lunch while at work. Lunch, typewriter and the plaster ceiling were suddenly all on the floor with no preliminaries. I spent several minutes on the floor myself, under a desk. Of about 500 after-quake I recall no warning about any though of course they diminished in intensity. The following January 15 or thereabouts we were just as surprised by a heavy quake around daybreak.

Of course there was much talk about portents, ranging from allegedly restless animals to the feel of the atmosphere. I weighed a lot of such theory before moving on to Peking the next May, but my conclusion is that none of these things have significance at our present stage. I feel much more inclination to believe something can be learned from "plate shifts." But you'll notice I still live only a long spit away from the San Andreas Fault which has been showing disturbing symptoms. We're on a stony ridge-top which I consider relatively safe.

Randall Gould  
Mill Valley, Calif.

**Running happy**

I was happy to read your article "Running away from depression" (SN: 5/20/78, p. 329). Maybe we are beginning to learn that many "mental" problems are actually symptoms of physical problems — namely, not using our bodies as they were designed to be used.

For more on this subject I refer interested readers (and runners) to the January and February 1978 issues of RUNNER'S WORLD magazine. The articles describe several "running therapists" and also studies done at the University of Virginia and the University of Missouri.

Robert W. Ward  
Lakewood, Ohio

**Such venal monsters**

You'll never know how hard I've tried to resist saying this about Ms. Tennov's lead letter (SN: 6/10/78, p. 371).

I am a doctor who has, as she puts it, a "vested interest in disease" — just as funeral directors must have a vested interest in death, just as cobblers must have a vested interest in shoes and plumbers in clogged toilets.

Such venal monsters we are.

Martin W. Schaefer, M.D.  
Colorado Springs, Colo.

I fail to understand how SCIENCE NEWS is the proper forum for a discussion of this type. However, as you have chosen to print this material, I would like to make the following reply to Ms. Tennov's remarks. (1) She apparently does not realize that there are about four million people in the health care field, with about 200,000 of them being physicians. It is difficult to accept that "medical practice" is a monopoly when only one-twentieth of the people providing care are doctors. (2) If you will check current trends in medical specialization, you will find that about 60 percent of current medical school graduates are entering family practice. The "primary care" term also includes pediatrics, as well as obstetrics and gynecology and internal medicine. When these fields are added, you will find that probably 70 to 80 percent of current medical school graduates are already entering "primary care."

It would behoove Ms. Tennov to have her facts correct prior to addressing such a letter to a "scientific journal." I think it equally incumbent upon you, your magazine, to check for accuracy prior to printing such misinformation.

R. E. Branch, M.D.  
Fort Worth, Tex.

**Correction:**

The photo used in the introduction to the solar energy issue (SN: 4/22/78, p. 248) should have been credited to the National Oceanic and Atmospheric Administration's Space Environment Laboratory.

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