# Science

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#### Of the Week

Three-million-year-old skeleton
A possible male contraceptive
The features of Ganymede
Sex pheromones in women
Debate over a science council
Ford, NAS and food research
Magnetism and symmetry violation
Antarctica volcano

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COVER: Enlarged view of the spore-producing structure of an Aspergillus mold. Several species of this mold can produce toxins (while growing on food) that can cause cancer and liver diseases in livestock and humans, and can decrease food production. See p. 12. (Drawing from Modern Plant Biology, H. J. Dittmer)

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### To the Editor

Humanity's potential

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René Dubos (SN: 11/30/74, p. 364) has eloquently expressed both the past achievements and future potential of mankind. In so doing he has answered two current beliefs.

One belief is that if man has innate aggressive drives we are destined to wipe ourselves out in a holocaust. This belief leads to such a hopeless position that those who hold it will not acknowledge the evidence that mankind has evolved from apemen who at times killed each other. But if we are ever to put an end to war we must recognize that part of man's nature is aggressive. We cannot deal with something we refuse to see. As human beings we have the choice of heeding our aggressive instincts or building on our equally innate altruistic tendencies.

Another, more lunatic belief currently held is that ancient man was incapable of such astounding achievements as Stonehenge, the Pyramids, etc. Therefore, some other worldly beings must have dropped down unannounced, planted the seeds of civilization and God knows what else, then taken off leaving us a few enigmatic souvenirs of their visit. What a condescending view of our ancestors! If 50,000 years ago cavemen were surrounding their dead with flowers and caring for their maimed, why does it seem so surprising that eventually they should build cities, invent an alphabet and leave imposing monuments?

What both groups of believers have in common is an inability to appreciate the enormous range of potential of humanity -past, present and future. One group wants to forget our capacity for evil, the other seems to be waiting for a second coming that will solve our problems. Only by a realization of our potential for good and bad, construction and destruction, love and hate, brilliance and stupidity will we ever make inroads into our present problems. And if we wait for another visitation, it will be a long, hard wait.

Shirley Deeter Scottsdale, Ariz.

A strange charm

Dietrick Thomsen's "Physics at Fermi-Lab" (SN: 12/7/74, p. 364) was an excellent review of the state of high-energy physics. As a teacher of literature, I am impressed by the flowering of the language of physicists, the very poetry of it. True, they borrowed the quark from James Joyce, but now they outdo Joyce himself! I am delighted by the charmed quark, but a bit suspicious of this strange quark (though I'm glad it has some opposition: the strange antiquark).

I must point out (as I will to a physicist friend who will soon go to work at Fermi-Lab) that the indications are (at least in the language) that high-energy physics may well be a large-scale Mad Hatter's Tea Party. Thomsen suggests this with his telling reference to Alice in Wonderland.

I can imagine a conversation at the tea party going something like this:

Quark 1: How do you do? I'm Quark 1. Quark 2: Charmed, I'm sure. Quark 3 to Quark 1: Watch out for 2. Underneath he's one strange quark. His charm

wears badly.

Quark 1: What kind of tea would you

Quark 3: I'd sooner Lepton.

Quark 1: Or would you rather have a

Quark 3: No, thanks. I hadron earlier. So how are the kids?

Quark 1: Didn't you hear? We had multiplets

Quark 3: No kidding! That must be expensive. Just remember that you can have a job with me anytime.

Quark 1: Oh, yes. In the neutrino business.

I've also been approached by Photon.

Quark 3: Is he here?

Quark 1: Yes. He's the one over there with mu mu on.

Quark 3: Did you accept the job with him? Quark 1: No. I have my own bag. . . .

Edmund J. McDevitt Andover, Mass.

#### Biodegradable oil

In your Nov. 23 issue you report on a study which indicates that extensive biological damage is done by the small amount of hydrocarbons leaked by outboard motors.

Since June 1973, Switzerland has outlawed the use of ordinary motor oil in boat engines, requiring instead the use of a special oil which emulsifies with water and is biodegradable. It also imparts a characteristic brown color to the gasoline with which it is mixed in order to permit instant identification by inspecting authorities. This new oil has made a dramatic impact on water quality during the first season of its use.

It is deplorable that such a simple and effective measure has gone completely unnoticed in the United States.

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