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This Week

- 180 Bone Fractures: Treatment and Risks
- 180 Mars meteorite poses puzzling questions
- 181 Brain changes may foretell Alzheimer's
- 181 Schizophrenia drugs: A case for tapering
- 182 Breathing time for liquid crystal states
- 182 Slipping in new cells tricks Sly syndrome
- 183 Climate summit: Slippery slopes ahead
- 183 One roof for much of federal science?

Research Notes

- 191 Astronomy
- 191 Technology

Articles

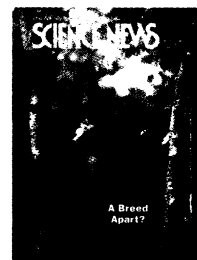
184 Caste-Off Orangs

Cover: Baby orangutan piggybacks a ride through Borneo's forests on its mother's shoulders. Native to just two islands, orangutans have been treated until recently as a population divided. Now, geneticists are arguing whether Bornean and Sumatran orangutans even belong to the same species. And that is having reproductive consequences for nearly 200 captive orangutans of mixed ancestry. (Photo: Anne Russon, York University)

186 Viral Shell Game

Departments

- 178 Books
- 179 Letters



Science Service, which publishes SCIENCE NEWS, is a nonprofit corporation founded in 1921. It gratefully accepts tax-deductible contributions and bequests to assist its efforts to increase the public understanding of science, with special emphasis on young people. More recently, it has included in its mission increasing scientific literacy among members of underrepresented groups. Through its Youth Programs it administers the International Science and Engineering Fair, the Science Talent Search for the Westinghouse Science Scholarships, and publishes and distributes the *Directory of Student Science Training Programs for Precollege Students*.

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Letters

Math, music, and the jazzman's mind

I wonder if reversing Diana Dabby's way of generating variations on a Bach prelude would reveal underlying principles governing existing, traditionally composed musical variations ("Bach to Chaos," SN: 12/24 & 31/94, p.428)?

For instance, would something comparable to a Lorenz attractor emerge to describe Rachmaninoff's *Rhapsody on a Theme of Paganini*? Are math and the computer able to find anything like an attractor governing the way various jazz musicians improvise?

Although the prospect of using math and the computer to generate new phenomena is exciting, I am curious about the more traditional activity of describing existing phenomena.

Bruce Henricksen
New Orleans, La.

Has Diana Dabby discovered something

that has gone on in the minds of jazz performers for many years — namely, improvisation? Indeed, Bach himself was no stranger to variation on a theme.

As a programmer I see a type of beauty in mating Lorenz attractors to classical music, although as a musician it doesn't seem so novel.

Mike Karns
Jemez Springs, N.M.

Venus' 'man-made' CFCs

"NASA identifies cause of ozone depletion" (SN: 12/24&31/94, p.422) states that "hydrogen fluoride — a CFC by-product that has no natural sources" is the "definitive" evidence long sought by advocates of the theory that man-made CFCs are responsible for the depletion of atmospheric ozone.

Hydrogen fluoride was long ago identified as a minor constituent, along with hydrogen chloride, of volcanic emissions. In fact, NASA's own Mariner 10 space probe detected hydro-

gen fluoride and hydrogen chloride in the atmosphere of Venus in 1979. Contemporary journals cited the presence of these very reactive compounds as evidence of active volcanism on Venus, a speculation verified by the recent Magellan space probe.

If NASA's recent pronouncements are to be believed, we have compelling evidence of CFC use (or, more properly, misuse) by heretofore unsuspected inhabitants of Venus, a planet with surface temperatures hot enough to melt lead!

Thomas A. Dobbins
Coshocton, Ohio

CORRECTION

"Cleansing water with natural slimes..." (SN: 3/4/95, p.138) was accompanied by a photograph of a microbial mat floating on the surface of water and sending down a tendril of slime. Pictured here is a tendril lifting a pebble.

