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## **This Week**

Dim Galaxies Shed Light on Early Cosmos
 Dyslexia: New twist on 'word blindness'
 Pinatubo and El Niño fight tug of war
 Hydrogen can peel atoms off layer by layer
 Clues to the origins of flowering plants
 Wet neural nets in lamprey locomotion
 Cooperation evolves in computer tourney

### **Research Notes**

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#### **Articles**

40 Deciphering the Maya

Cover: Some investigators of the Classic-era Maya civilization, which extended from A.D. 200 to 900, argue that deciphered hieroglyphics document ancient Maya history; others see little or no historic value in the complex writing system. Hieroglyphics running along the bottom of this reconstruction of a roof frieze, discovered at the Classic site of Caracol, record three wars in A.D. 626 and 627, the death of one of Caracol's kings in 658 and the seating of his successor. Three ancestor figures sit on "earthmonster" masks above the hieroglyphics. (Reconstruction painting by Jagdish J. Chavda; line drawing by Diane Z. Chase/Caracol Archaeological Project, University of Central Florida)

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# STEKE NEWS

# **Departments**

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# Letters

#### 'Mad slasher' myth

Your report on our recent work ("Mental disorders more likely in jail," SN: 10/26/91, p.268) was very well done. We do, however, want to respond to one comment which we found unfortunate. Referring to the prevalence of antisocial disorder among the severely ill in jail, you state, "The latter condition features a long-term pattern of irresponsible, impulsive and violent behavior."

It is not necessarily true that an antisocially disordered person is violent. The criteria for the disorder include, but do not require, a history of violent behavior *per se*. Other symptoms, such as failure to honor financial obligations, to function as a responsible parent or to plan ahead, can also make up the picture of an antisocial disorder.

We feel that this statement inadvertently highlights an impression that the severely ill are likely to be violent. The question of whether the severely ill are more violent than the non-severely ill is a very important one with rather delicate public policy ramifica-

tions. Popular culture has promulgated the stereotype of the mentally ill as mad slashers, a view that has little scientific validity and does much to compromise successful reintegration of the mentally ill into the community.

The current thinking on this issue is that the severely ill are *no more* — or at worst, only *slightly more* — violent than the non-severely ill.

Karen Abram, Assistant Professor Linda Teplin, Professor Dept. of Psychiatry and Behavioral Sciences Northwestern University Medical School Chicago, Ill.

### Pseudo-proof

In many applications, true random numbers ("Numbers at Random," SN: 11/9/91, p.300) are useless and only pseudo-random numbers will do. Why? Because in critical-mission applications you typically write two different computer programs using two different methods to reach an answer. Only if both programs yield the same answer do you assume you've got a proper solution, but this requires that both programs receive *identical* input. If the input is

a stream of truly random numbers (say, from a microphone listening to falling raindrops), then the two programs will yield different answers because they have different input data. Pseudo-random numbers, however, will prove or disprove the programs because both programs may use the generator to create the same input data.

Peter Skye Glendale, Calif.

# The tug test

It was gratifying to read "Detecting Jupiter's tug on radio waves" (SN: 11/9/91, p.294). Einstein himself, as early as 1911, proposed this test, and he repeated it in his classic 1915 paper on general relativity. Apparently, Einstein doubted the possibility of measuring the deflection of light by the sun during a total solar eclipse, and presented the Jupiter deflection, which is 100 times smaller, as a possible alternative. While the solar deflection was verified in 1919, it took scientists 80 years to measure the Jupiter effect.

Michael Lieber Fayetteville, Ark.

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