

SCIENCE NEWS®

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Incorporating Science News Letter

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COVER: Grooves in low-lying valleys at latitude 34°N in the Nilosyrtis region of Mars are, according to one geologist, "the best photographic evidence we've ever had of real, large-scale glacial flow on Mars." They resemble earth features where near-surface materials flow in their entirety very slowly, aided by the freeze-thaw of interstitial ice. Photo, taken during Viking 1 orbiter's September "walk" around Mars, covers an area 90 by 80 kilometers. See p. 245 for latest Viking news. (Photo: NASA/Viking 1)

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LETTERS

Science court

On the "Science Court" idea (SN: 9/25/76, p. 198), I found myself agreeing wholeheartedly with Margaret Mead. Much to my surprise I encountered additional support in a writing of Aristotle (Guthrie, 1939): "And indeed it is arbiters, not litigants who are wanted for the obtaining of an adequate recognition of the truth" (p. 97). Those who search for truth must not be bound by a legal pronouncement. Instead, let each be guided by their creative spirit, and in disputes let truth arbitrate.

Gregory Wheeler
Pasadena, Calif.

Electronic learning

The article on electronic learning (SN: 9/11/76, p. 170) brings up a point.

In "Stability and Change in Human Characteristics," Dr. Benjamin Bloom states that by age four, 50 percent of a child's IQ improvement capability has been used, or lost. By 8: 30 percent, 13: 12 percent and by 17: 8 percent. All this means that by the time a child is sent to school, or is introduced to the new teaching technologies, the "bright ones" have already been determined from the "dull ones." And nothing can be done to change this much.

Thus, the crucial and revolutionary prospects for this new technology are the possibilities of wide-spread use in the nursery and the living room to upgrade the child's IQ environment.

In such a way, the child that would otherwise have become "dull," may have the chance, due to the new teaching machines, to develop more fully into a "bright one."

David Park
Dix Hills, N.Y.

Pitfalls of small samples

It disturbs me that more and more often reports appear in which conclusions are drawn from such small samplings that the significance of the results is doubtful. I realize that SCIENCE NEWS only reports upon the research. Nevertheless, it worries me that many readers with inadequate understanding of the problem may consider research valid however small the sampling.

Your article "XXX: No link to aggressive crime" (SN: 8/14/76, p. 103) is a case in point. The researchers found approximately 13 people with XXX chromosomes, according to your article (2.9 XXX's per 1000 in their sampling of 4,558 tall subjects). I

would not be willing to base any conclusions regarding this sort of psychological tendencies on a sampling of 13 people.

I think you would do a great service to young readers and readers not trained in science if you would include an editor's note in such reports calling attention to the danger of being misled by such a small sampling.

Madeline Love Wilson
Atascadero, Calif.

Illusions with Mars photos

Is anybody else having the same problems as I with the photographs of Mars's surface taken from the orbiters? Sometimes when the caption says volcanoes, I see pimples: That is, I see rounded mounds where there are actually cup-shaped depressions.

I discovered that by turning the picture upside down, my senses returned to normal: The pimples became depressions. In turning the page around I had, in each case changed the direction of light from bottom to top. This suggested that our earthly perception of roundness vs. hollowness is dependent on overhead illumination, at least in photographs.

I have noticed this illusion in earth terrain photographs, too, where river valleys and mountain ridges tended to exchange places for the same reason.

Stuart Grover
Lincoln, Mass.

Animal research

It ill-behoves scientists like Mary and Robert Tyson to react as they did on your Oct. 2 letters page, with an angry outburst, to the genuine concerns of the public about animals involved in research.

Do the Tysons believe that all but 5 percent of scientists don't continually feel empathy for their animal subjects and doubts about their right to inflict discomfort on these creatures in human interests? As one who for several years had to face mice burdened with tumors, I'd be concerned if most scientists *don't* have doubts.

It's the duty of publicly supported researchers who understand the complexities of the issue to carefully and clearly explain, again and again, why such research is unfortunately unavoidable. And it is the responsibility of newswriters to facilitate such communication.

Lois Wingerson
Flushing, N.Y.

(For a thoughtful and detailed report on this particular dispute, see the News and Comment section of the Oct. 8 SCIENCE.—Ed.)

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