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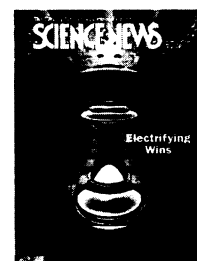
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Cover: Chess isn't the only game in which computers can now compete at or near the championship level. Researchers and software developers have used a variety of strategies to make significant improvements in the capabilities of programs that play such games as checkers, backgammon, bridge, Go, and Scrabble. (Photo illustration: Mark Gilvey, Design Imaging)



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Letters

Differing views of heritability

The attempted criticism of behavioral genetic research and the concept of heritability in "Elderly intellect may owe a lot to genes" (SN: 6/7/97, p. 349) demonstrates instead a recurrent misunderstanding of the methodology. The fact that average human height has increased over time because of an environmental influence (namely, nutrition) does not disprove the fact that height is heritable.

Heritability is defined as the proportion of phenotypic differences caused by genetic differences. Thus, heritability deals with variance around the mean, not the value of the mean itself.

Rather than attempt to explain why the mean height is 5'4" or the mean IQ is 100 (or thereabouts), behavioral geneticists explore why some of us find ourselves below the mean and some of us above. For both height and cognitive ability, genetic differences account for a greater proportion of the

observed differences between individuals than do disparities in their environmental circumstances.

Kathryn Corson
Instructor in Social Sciences
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Critics are well aware of the methodology of heritability. They disagree with the assumption behind that methodology, namely, that genetic and environmental effects operate independently and thus "add up" to individual differences on various traits. Critics view a heritability estimate of, say, 60 percent for cognitive ability as an empty statistic that says nothing about the mechanisms by which genes and environments interact to influence mental capacities.

—B. Bower

Canola's no crop

In "A giant step toward creating better fats" (SN: 5/31/97, p. 335), the term "canola" is used as if it were the name of a crop from which canola oil is derived. In fact, the word

is a contraction of "Canadian oil," used to denote a refined (to remove natural toxins) oil derived from the rapeseed plant.

Bob Terry
Isla Vista, Calif.

Another day, another phobia?

At long last the cholesterol-fat phobia is losing its momentum ("Harbinger of a Heart Attack," SN: 6/14/97, p. 374). Now, we are turning to anti-inflammatory hysteria. We are told that inflammation is the enemy in allergy, asthma, arthritis, and autoimmune diseases. We are swallowing anti-inflammatory drugs with abandon.

A word of caution: Inflammation is the fundamental healing mechanism of the body. All tissue healing follows its physiological rules. Causes of injury are many, but of healing only one—inflammation.

We must be careful not to blunt Nature's mechanism for repairing the body in the name of modern science.

Edward S. Friedrichs
Brown Deer, Wis.

