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Cover: The mathematics of "averages" provides a way of uncovering hidden information. In the case of computerized X-ray tomography, it transforms the intensities of X-ray beams that have passed through a cross section of the human brain into a map that shows tissue defects (shown here as background photo). In another case, a related mathematical technique is being applied to the rhyming pattern in Plato's Republic and other works to reveal the order in which Plato words his books (Photo courtesy, Juan M the order in which Plato wrote his books. (Photo, courtesy Juan M. Taveras/Massachusetts General Hospital)



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Letters

Acupuncture and hypnosis

I commend Dr. Marlowe on his pioneering endeavors using hypnosis as an anesthetic ("Hypnotism Under the Knife," SN: 3/22/86, p. 186). However, the statement "I think acupuncture is largely hypnosis" deserves some comment.

I feel that the results of acupuncture in human patients are only slightly, if at all, due to hypnotic suggestion. In animal patients I feel strongly that the results of acupuncture are entirely the direct results of acupuncture, not hypnosis. As a practicing veterinarian incorporating acupuncture into my therapeutic armamentarium, I know of many animals that have undergone successful surgery with acupuncture analgesia. Since restraint is still a problem, acupuncture analgesia is used only on very selected, unique cases. Acupuncture as a therapeutic modality, however, is widely used and is quite successful in the treatment of various animal diseases and syndromes.

Not knowing anyone effectively able to hypnotize domestic animals, and assuming the

mechanism of acupuncture is similar in animals and people, I find it difficult to accept hypnosis as a major component of acupuncture.

Earl Sutherland Versailles, Kentucky

There is some doubt that ether was the only factor leading to the demise of hypnosis as a tool in surgery. While the 19th-century Scottish surgeon mentioned in the article indeed saved more lives than were saved using alcohol, many of his patients under a trance screamed, cried and struggled during the surgery. (See T.X. Barber, "An empirically-based foundation of hypnotism," *Amer. J. Clin Hypn.*, 12:100-130, and Barber, "Multidimensional analysis of hypnotic behavior," J. Abnormal Psychology, 74:209-220; both articles 1969.)

Frank B. McMahon Professor, Psychology Southern Illinois University at Edwardsville Edwardsville III

Heterosexual AIDS

Less than 0.25 percent of AIDS victims categorized as female-to-male infections seems, at first glance, very reassuring ("Female-to-male AIDS link found," SN: 3/15/86, p. 164). Only 41 of the 18,070 people who are dying of AIDS could not have gotten it any other way, assuming for the moment that there is no other unsuspected risk factor such as casual contact. Even one additional death is one too many. The 41 must be taken as a minimum, however.

This is an especially diminished population, as these 41 men have no other risk factors. How many bisexuals and intravenous drug users were infected heterosexually but were not counted because of their more obvious risk factors? How many of the 18,070 victims were men with exactly one risk factor (including any heterosexual activity within the last three years)? That information may give a better estimate of the relative contribution of heterosexual relations to this tragic disease.

Charles R. Watson San Jose, Calif.

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