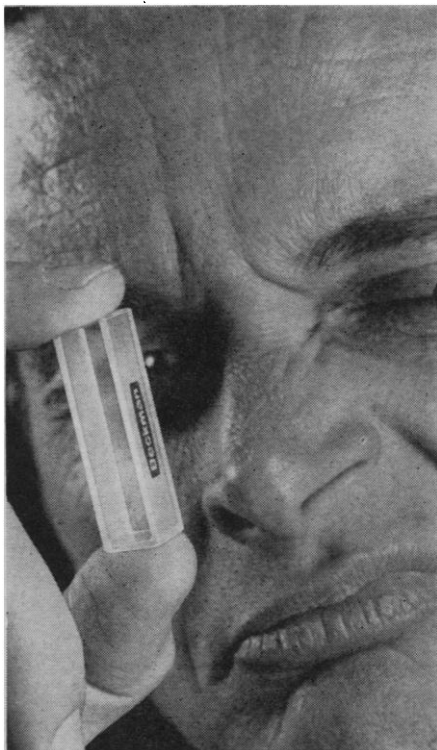




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could get polio?" he answered, "It's possible."

Upon examination of chiropractic textbooks in current use we find that chiropractic claims that such illnesses and diseases as allergies, diabetes, heart trouble, tonsillitis, and cancer can be cured by adjusting or manipulating the spinal column. It is not surprising that the three-judge court, in a unanimous ruling, stated, "There has been no showing here that the state has done more than necessary to protect the health of its citizens." The court's opinion also noted, "If the education obtained in chiropractic schools does not meet the standards of the United States Office of Education it may well be that the legislature of Louisiana felt that in the public interest a diploma from an approved medical school should be required of a chiropractor before he is allowed to treat all the human ailments chiropractors contend can be cured by manipulation of the spine." Chiropractic must demonstrate the validity of its claims before it can deserve the endorsement of the scientific world.

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Algebra and Illusion

The disillusionment evident in E. N. Gilbert's "Information theory after 18 years" (15 April, p. 320) is very different from the usual tone of the articles on this subject. For the past 18 years we have been hearing of the great scientific accomplishments that were going to come out of information theory. Yet at this late date the author of this sympathetic but realistic review is unable to cite a single, tangible, scientific achievement that has resulted from information theory ("The results are still almost exclusively on paper").

This is a shocking fact. Information theory is a theme that has been successfully exploited in hundreds of grant applications and thousands of papers ("... a page count in the journals devoted to information theory shows that the field is still growing"). Yet these elaborations of the original idea (which was a good one) have been almost entirely sterile and useless. What went wrong? How can we avoid these same mistakes in the future?

The same threat of scientific sterility has arisen in many different areas.

Information theory was the forerunner of a whole series of mathematically oriented new "sciences." This new math started with "game theory" and continues on through the latest fad, "simulation." In all these there is a very high proportion of pseudoscientific nonsense. This is privately acknowledged by the competent people in these areas. Many scientists, however, are not aware of this situation because statements in an algebraic language look very much alike, whether they make any scientific sense or not.

What can working scientists learn from the fact that, in 18 years, the widely heralded information theory has failed to produce a single, solid, scientific accomplishment? This much at least: There is no magic in mathematical languages. The claims that are made for "computer simulation" and the rest of the new math should be taken with a grain of salt.

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"Amerind"

June Helm's use of the term "Amerind" in her book review (1 April, p. 58) reminded me of an incident I learned of while reading through the Frederic Ward Putnam papers. Putnam, curator of the Peabody Museum of American Archaeology and Ethnology at Harvard University, served as vice president representing the United States at the 13th International Congress of Americanists held in New York City in 1902. At a dinner meeting in the St. Denis Hotel on 25 October, the menu was printed on birch bark with the items designated in anthropological terms. The appetizer was listed as "Amerind Siouxp." During the after-dinner speeches Putnam remarked, "Amerind" seems to have been placed where it belongs—in the soup.

On the back of his menu there appears a note appended, probably, by his daughter Alice Putnam, which reads, "End of Amerind as a name for Indians." In spite of Putnam's dislike for the term and his effort to eliminate its use, "Amerind" has persisted in the literature and has found its way into the larger dictionaries.

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