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COVER: Geometry often intervenes to help solve mathematical problems that are basically numerical, like finding the best way to assign differently qualified workers to different jobs. Here on flat paper is an impression of what happens to 50 or 100 dimensions when 50 or 100 planes intersect to box in a solution. See p. 234. (Illustration: John Ellis.)

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LETTERS

SETI, friends and opponents

The write-up of the symposium on SETI at the IAU meeting in Montreal (SN: 8/25/79, p. 132) contained several significant errors. Most SETI enthusiasts (such as Bernard Oliver) do *not* believe that "once a civilization achieved a certain level of technology it would just naturally spread out and colonize space." Rather, they maintain that interstellar travel is impossible, or at least impractical.

Instead, it was those persons at the symposium—such as myself—who *do* believe that interstellar travel is possible and will some day be a reality who were the ones who were most skeptical of the value of SETI. For if interstellar colonization is practical, then the most plausible reason why we have not been colonized is simply that there is nobody else out there (at least within this galaxy) to engage in colonization, or to signal us.

Your article gives the impression that I am a SETI enthusiast, which I certainly am not.

*Michael H. Hart
San Antonio, Tex.*

A sweet note

An article entitled "Controversy Over New Sweetener" (SN: 8/11/79, p. 103) displayed John Olney's one man fight to ban aspartame (a much needed replacement for saccharin). Olney's objection to the phenylalanine content of aspartame is absurd! He fears that the sweetener will "accidentally" be used by sufferers of phenylketonuria (PKU), thus causing brain damage. Fat chance!

First, the incidence of phenylketonuria in our population is 1 in 10,000. These rare cases, diagnosed immediately after birth, are put on diets strictly avoiding phenylalanine. This includes among other things *all* proteins. This diet must be initiated before the infant is nine months old or it is useless (see Tietz, *Fundamentals of Clin. Chem.*). But our outspoken Olney overlooks the thousands of dietary proteins available which would overdose any PKU infant. Rather, he insists that the myriad diabetics suffer the lack of an artificial sweetener for fear that 1 out of 10,000 infants will accidentally devour packets of the new artificial sweetener.

Olney's fears are unreal for a second reason. Even if phenylalanine is introduced to the PKU baby, brain damage can be prevented by simply removing the source of the amino acid from the diet. So for Olney's fear to become actuality the 1 out of 10,000 infants must accidentally devour packets of sweetener day after day for months and months! Is this scientific argument? Olney's brand of "scientific thought" is restricting many new drugs, cures and pleasures from the suffering public.

*Thomas E. Holloway III,
Dallas, Tex.*

Speak progress

SCIENCE NEWS is a truly outstanding publication and I have been a very pleased subscriber for many years. The informed layman should have no trouble reading and understanding any of the articles. The young readers are brought up with the latest developments and we older readers, if really informed, are constantly alert to the need to abandon the old ways and welcome the new.

If we were to cling to the language of the 1940s and 1950s, then how could we possibly comprehend the theories of quarks, quasars, neutron stars, black holes and the new cosmology?

I have been asked frequently to explain to laymen, in five minutes, the theory of time dilation. This, of course, is impossible, for the words that I would need to use would not be in the layman's vocabulary and the time required to explain each of these words would be far greater.

An active mind should welcome your expanding use of the metric system as an opportunity to become more knowledgeable than the other fellow. Had I been born and raised in China perhaps anything more modern than the abacus would have been unacceptable to me, but the slide rule, the electric calculator and the electronic solid-state calculator were successive causes for me to learn and enjoy new ways to do the same things, each one outmoding the other.

One fact remains. The younger people know the latest, as do I. However, I know the why and wherefore of mental and written mathematics, how to use the slide rule, how to use the "Monroe" or the "Frieden" electric calculators and many many more things that only my willingness to progress brought about.

If I am to teach the young, then I must know everything they know and much much more.

*Rody J. Clutter
Pittsburgh, Pa.*

The sterility of fashion

Of course PCB's will be increased in body fluids in a sample of 1979 students (SN: 9/15/79, p. 183). But why explain a drop in sperm count as a result of PCB's? The use of tight-fitting men's underwear, causing testicular temperatures to remain at body temperature, interferes with spermatogenesis. Better to return to boxer shorts than to dissect students.

*Dennis Montre, M.D.
Minneapolis, Minn.*

(If Klein, Fiorucci and others will include the three-yards-of-cotton look in their next collections. —Ed.)

Correction: The laboratory-grown insulin-producing hamster cells (SN: 7/28/79, p. 72) produce only 0.2 to 0.33 percent (not one-third) as much insulin as cells in the hamster. The cells do not produce infective SV40 viruses, but a special class of proteins commonly associated with SV40 transformed cells.

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