LETTERS

Prophecy

In his editorial "The support of science" (1 June, p. 909), Arthur Kornberg quotes from the Book of Proverbs: "Where there is no vision, the people *perish*" (italics mine). This quotation is from a secondary source (Old Testament, King James Version) and is incorrect. The Hebrew text (Torah, Nevi'im, Ukhtuvim) reads: "Beain hazon ipara am," and the correct translation of this verse is, "Where there is no vision, the people become *unruly*" (italics mine). Thus, if Proverbs 29 : 18 applies to the consequences of limited support to biomedical research, the prophecy of the original text is not as catastrophic as that of the King James Version.

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Energy Efficiency

In his article "Energy conservation" (13 Apr., p. 155), G. A. Lincoln mentions only briefly the most energy efficient forms of urban transportation available—walking and bicycling. For an 84-kilogram person (about 185 pounds), walking requires about 264×10^3 joules per passenger-kilometer; with a 10-kilogram bicycle, bicycling requires only 59.4×10^3 joules per passenger-kilometer (*1*) compared to 450×10^3 joules per passenger-kilometer for the most efficient type of mass-transit reported by Lincoln (*2*). Of course these figures do not account for the low thermal efficiency of modern agriculture, which provides the human energy, but no doubt the figures for petroleum-powered vehicles do not include the energy needed for extraction or conversion to electricity.

Increasingly bicycles are becoming a viable and prominent commuting mode. In congested urban areas, bicycles provide door-to-door convenience with shorter trip times than those in automobiles (based on personal experience). Last year more bicycles than automobiles were sold (*3*), and at least two companies have developed enclosed pedal-powered vehicles designed for urban transit. In spite of the legal barriers and physical hazards of bicycling in an automobile-oriented urban transportation system, this efficient and pollution-free commuting mode continues to expand and should play a role in future urban planning.

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References and Notes

1. S. S. Wilson, *Sci. Amer.* **228**, 90 (March 1973). The figures were converted to the International System following B. B. Barrow [*Science* **179**, 1181 (1973)].
2. The efficiency of a suburban train is 200 passenger-miles per gallon of fuel. Approximate conversion factors are: 42 gallons = 1 barrel; 10^{15} British thermal units = 172×10^6 barrels; 1.609 kilometers = 1 mile; 1055 joules = 1 British thermal unit.
3. According to *Environ. News* (*Reg. 1*) X, No. 3 (March 1973), more than 11 million bicycles were sold in 1972, compared with 10.3 million automobiles. For the first time in the history of the industry, most of the bicycle sales were to adults.

Peer Review Appeal Mechanism

Rather than totally dismantling the peer review system (News and Comment, 25 May, p. 843; 8 June, p. 1035), the National Institutes of Health (NIH) might well consider reforming its procedures to allow for the establishment of an appeal panel. To me, the most serious problem with the existing study sections is the lack of effective means of appealing their unfavorable decisions. If a reconsideration is requested, it is made by the same group that made the rejection. Most areas in academia provide for appeals in cases of tenure, promotion, and other matters, and there would be great value in having the same safeguards for NIH grants. In spite of all efforts to keep personalities out of grants, there are cases, however rare, when something other than scholarly or scientific judgment intervenes.

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Cost of Environmental Quality

Luther Carter (News and Comment, 30 Mar., p. 1310) hails the success of the Sierra Club and its allies in forcing the Columbia LNG Corporation to modify its plans for a receiving terminal for Algerian natural gas at Cove Point, Maryland.