

A capital Universe?

SIR — On one side of the Atlantic, authors and editors continue to use the word universe, whereas on the other they have changed over to the word Universe. Last year, while hastily proofreading an article written for a British journal, I failed to notice that the copy editor had everywhere altered the common noun universe into the proper noun Universe. When the article was published, I realized too late that this apparently harmless alteration had changed in a significant way my intended meaning. By no stretch of the imagination can a universe become the Universe.

Elsewhere¹ I have pointed out that current knowledge and usage assign different meanings to universe and Universe. The Universe means everything, including ourselves, and no doubt our descendants in the distant future will still be trying to understand the ultimate nature of reality. Nobody knows what is the Universe. Illogically, as a proper noun in common use, Universe denotes nothing more than a model of the Universe. When editors delete "universe", they should substitute not "Universe," but "model of the Universe".

The more modest and flexible word universe usually denotes "a model of the Universe". By using universe we avoid the meaningless Universe and the terminological rigmarole of model of the Universe. Every society has its universe or model of the Universe. We in the twentieth century have our physical universe, which is still a long way from being the Universe. We debate the rival merits of big-bang and steady-state universes, and under the rubric early universe discuss the virtues of the inflationary universe. (What a mess the last sentence becomes if Universe is substituted for universe!) Our descendants, though part of the same Universe, will live in different universes. In the history of cosmology we study the rise and fall of universes, or cosmic belief-systems, or models of the Universe, but not of Universes.

Indiscriminate use of Universe confuses the real thing with a model. As a result we forget that we have precious little knowledge of the true nature of the Universe. Like our forebears in past millennia, we tend to think that the end of the search for all knowledge looms in sight. Most people in the past, in the Middle Ages for example, were convinced that they had discovered the real thing. People with different models often finished up at the stake.

There exists only one Earth, and similarly only one Universe. But the difference is vast in more senses than one: With the first we know more or less what we are talking about, but with the second we have no idea. The curious words earth and Universe found in many journals and books look most odd. Logic dictates that we capitalize proper nouns such as Earth,

Sun, Solar System, Galaxy, Local Group, and leave it at that.

EDWARD HARRISON

*Department of Physics
and Astronomy,
University of Massachusetts,
Amherst, Massachusetts 01003, USA.*

1. Harrison, E.R. *Cosmology: The Science of the Universe* (Cambridge University Press, New York, 1981).

Imunovir

SIR — Replying to my letter¹ criticizing the UK campaign for the launching of isoprinosine (or Imunovir) as an effective anti-herpes treatment, Helen J. Wright made, on behalf of the laboratory commercializing the drug, numerous assertions and insinuations². I feel obliged to comment very briefly on some of them; the readers of *Nature* will have no difficulty in seeing most of the contradictions and the reasons for this defence.

To call W.H. Wickett's drugstore book³ an objective "independent text" on herpes does not correspond to reality. The author conducted, on behalf of the manufacturers (Newport Pharmaceuticals), a non-controlled clinical trial on herpes patients, and he reported his results in this book. If the name of the "test drug" is not mentioned until p.217, and this on the express request of the manufacturers, it is mentioned 12 times in the references between pages 218 and 225. The tantalized reader will have no difficulty in discovering the substance producing the wonderful results. But there is something more puzzling: Wickett apparently published his results only in this book and reported them at a couple of scientific meetings. Why do such extraordinary results, and those obtained by others using the same drug and cited by H. Wright, remain at the stage of meeting abstracts, which even a computer survey fails to pick up?

Bona fide readers who saw the various assertions concerning the drug are still wondering what the drug really does for herpes patients, whether it cures the "bouts"^{2,3} or diminishes to "nearly zero" the frequency of the attacks⁴. If this were the case, the number of patients should indeed decrease.

I am not surprised that articles such as those in the *Financial Times* and the *Sunday Times* promising a miraculous cure for diseases of great psychological impact — even if the titles of articles are written, as H. Wright suggests, by "irresponsible sub-editors" — are found "well balanced" by those whose main concern is the sale of the drug. I maintain that articles written for the lay public should be underplayed rather than exploit the spectacular. Readers of lay publications do not usually read journals such as *Nature*, where statements are made with extreme care, despite the fact that, or perhaps because, the readers

take everything with several pinches of salt.

This is the case of C. Wenz's article where the author cautions, because of the placebo effect, against drawing hasty conclusions in assessing the efficacy of Imunovir "until more clinical trials have been completed"⁴.

H.J. Wright has confirmed my belief that only those with vested interests would reject my criticisms and the idea of exercising self-censorship against aggressive publicity. I am certain that most will refrain from such practices and I also hope that the lay media will adopt a more restrictive policy in printing news related to health matters.

DIMITRI VIZA

*Faculté de Médecine,
15, rue de l'Ecole de Médecine,
75006 Paris, France*

1. Viza, D. *Nature* 313, 344 (1985).
2. Wright, H.J. *Nature* 314, 126 (1985).
3. Wickett, W.H. Jr *Herpes: Cause and Control* (Pinnacle, New York, 1982).
4. Wenz, C. *Nature* 311, 404 (1984).

Fuels from the farm

SIR — There seems to be an error in Anna Lubinska's article (*Nature* 4 April, p.395). It is stated that 8 million tonnes of cereal surpluses could produce 2 million tonnes of ethanol and that 1 hectare of land can produce 4 tonnes of ethanol. This would mean that 1 hectare of land produces 16 tonnes of cereal grain, but that is surely not the case. A good average yield through the countries of the European Communities is nearer half this figure. It should be borne in mind that the vagaries of the cereal intervention system ensure that it is the less efficient farmer who actually produces the surplus. These farmers are more likely to produce 4 tonnes per hectare of low quality cereals. The immense complications of agricultural production should be borne in mind when calculating potential hydrocarbon energy production by farms.

P.J. RYAN
*91 Elliman Avenue,
Slough, Berks SL2 5BD, UK*

Nullius in verba

SIR — It was good to have the exact meaning of the Royal Society's *Nullius in verba* explained by the president (see *Nature* 23 May, p.272). In all fairness to young scientists, however, he should have urged caution in taking the society's motto as a rule to walk by. For those who reveal too early their realization, which will come soon enough if they are independent thinkers, that many authorities of the day are emperors with very threadbare clothes, the going is likely to be rough.

P. R. BELL

*Department of Botany
and Microbiology,
University College London,
Gower Street,
London WC1E 6BT, UK*