Geonomists All

THE neologonumismatologists have been busy again, this time in the Earth sciences. On the face of it there is certainly a problem, at least to the tidy minded, which is nowhere better illustrated than in the naming of university departments. There are departments of Earth science(s), geology, geological science(s), geoscience(s), geophysics, geochemistry—and almost all combinations and permutations of every science remotely connected with the Earth or planets. Not that the naming of a department necessarily bears any particular relationship to the work carried out there. A geology department is as likely as not to contain geophysicists and geochemists; and the fact that a department is labelled "Earth sciences" need mean nothing more than a classical geology department with a trendy chairman. Nor, when it comes to a straight choice between precise equivalents, need the decision be based on other than irrational grounds. At least one department in the United States is named "geosciences" rather than "Earth sciences" simply because to the chairman the latter sounded like a high school course.

Because of all this confusion, is there a case for a single word to cover "the whole of the Earth sciences"—however one chooses to define such a phrase? On the assumption that there is, Elsevier has carried out a survey of Earth scientists throughout the world to assess the desire for an all-embracing word, and the name "geonomy" in particular (Manten, *Earth-Science Reviews/Atlas*, **5**, A88; 1969). To cut a long table short, 62 per cent of a sample of 265 were in favour of geonomy, 36 per cent were against it and 2 per cent had no opinion. In spite of the poor statistics, individual countries showed some interesting variations. At one end of the scale Czechoslovakia was thirty-eight to three in favour, and at the other the United Kingdom was eleven to two against. In general, the eastern European countries were for geonomy, the English speaking countries were against and western Europe was about evenly divided.

It is perhaps a pity that the survey was framed in terms of a particular word, for more adventurous suggestions were thereby inhibited. The only other words which anyone was moved to suggest were "geognosy" and "geognosis". "Geognosy" was coined by G. C. Füchsel in 1761 for the combination of geology, mineralogy and knowledge of ore deposits. It never caught on, although Geikie and a few others used it synonymously with "geology". It soon became obsolete; and it is not difficult to see why. The geognostic sounds like a geologist who feels that nothing is known about geology.

It takes little imagination to see that geonomy is at least a slight improvement on these, although it also suffers from variously defined antecedents. Its first usage is not known; but in 1964 V. V. Beloussov suggested it to cover all sciences involved in the study of the upper mantle. Meanwhile, L. Glangeaud and R. W. Van Bemmelen were actually using it for "geodynamic phenomena on a global scale". Van Bemmelen later extended the term to cover all sciences of the Earth. Nor is the confusion reduced by consulting dictionaries or encyclopaedias, where geonomy is variously defined, if at all, as (i) mathematical geography; (ii) the laws governing changes in the superficial strata of the Earth; (iii) the study of the Earth in all its geological, physical, chemical and mechanical aspects; (iv) the science of the form and structure of the Earth, and (v) the science of the physical laws of the Earth.

According to Van Bemmelen, all this shows that "the term is not yet too much semantically burdened by former usage". That is a matter of opinion, though Manten still considers its use justified. First, it would eliminate confusion (only if universally adopted, presumably) and awkwardness from much of present terminology. It is short, singular and easily translated into other languages. An adjective and a name for students may easily be derived from it, whereas this cannot easily be done for, say, "Earth science" in Russian, French or Dutch. It also offers a counterpart to astronomy and bears a similar relationship to its constituent sciences. Finally, from the etymological point of view it is a pure word in contrast to such hybrid words as geoscience which combine Greek and Latin.

Whether or not we shall all become geonomists only time will tell. In so far as the principal language for communication in the Earth sciences is English, and English speaking people are heavily against the term, it does not look too promising. Nor is it clear that if a new word is desirable, "geonomy" is the best. Objections range from the philosophical to the severely practical. Etymologically "geonomy" derives from the Greek "nomos", or "law"—and the precise significance of laws in the context of the historical sciences has never been agreed. (The same argument might also be used against "astronomy", of course.) From the practical point of view, it seems doubtful whether geonomy will be able to sweep away the current proliferation of terms, at least for a long time to come, even if, say, the International Council of Scientific Unions were to decree it. And wouldn't it really be better to think of a word completely uncluttered by previous usage?

ENDOCRINOLOGY

Monks and their Hormones

THE shortage of materials that sometimes seems to hamper the progress of clinical research has not yet proved too much for the ingenuity and diplomacy of Dr J. A. Lorraine and his staff at the MRC Clinical Endocrinology Unit in Edinburgh. Recently eleven