maintained, this introduces a much-needed long-range coarse adjustment.

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Reference

1. KOPAC, M. J. Science, 113, 232 (1951).

Information Wanted

I AM preparing a biography of Richard Everingham Scammon, who was professor of anatomy at the University of Minnesota from 1914 to 1930, and distinguished service professor, Graduate Faculty, since 1935. Dr. Scammon is now retired and living at Branson, Mo.

I would appreciate your bringing this project to the attention of your readers, some of whom may have interesting and valuable stories, anecdotes, letters, or other reminiscences pertaining to him. All correspondence in the original will be carefully preserved and returned to the owner. I would request that all communications be sent directly to me.

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Language Problems in Science

DISCUSSIONS about language problems in English and American journals are always a source of mild amusement to those of us who belong to the smaller languages. Mice must have a similar feeling if they can hear the elephants discussing the disadvantages of being small!

Generally, a scientist from one of the smaller languages must possess a working knowledge of—besides his own—the three main languages, English, French, German. The designation "main languages" does not refer to the number of people using them as their mother tongue, nor to the actual number of pages of science being published in the various languages today. It simply reflects the fact that the relevant literature has been published in these three languages. This is a fact that cannot be debated, whether we like it or not.

The need to learn three foreign languages (and generally to learn at least one of them thoroughly) imposes a not-inconsiderable extra intellectual burden, even if these languages are rather closely related. Do the proponents of Esperanto (or any other "synthetic" language) realize that the introduction of this language as a means of scientific communication would mean that we shall have to learn a fourth language (admittedly somewhat easier than the rest)? Even if by universal agreement, starting tomorrow, Esperanto should be the only language to be used in scientific publications, there would still be the old literature (very important in many branches of science) which would necessitate forever the learning of other languages, and in many cases a spot of Latin besides.

There is another point glibly overlooked by the proponents of Esperanto—viz., that it is very far from being universal in structure. Esperanto is an Aryan language—west Aryan, to be more specific—and to non-Aryans it is just as difficult to learn as the much more useful living languages.

Under special circumstances many considerations may justify the publication of scientific material in a small language; but speaking as a member of a very small nation myself, I completely agree (in matter, though perhaps not in form) with the denunciations that have appeared in Science of all tendencies toward linguistic isolationism. Scientific studies are pursued all over the world by people speaking no end of languages, and I have no more right to demand that my colleagues shall learn Norwegian to study what I may produce, than anybody else has the right to demand that we shall all learn Burmese. We cannot demand that the scientific world shall take notice of a publication when we ourselves do nothing to make this possible. If we cannot write the other language ourselves and cannot afford a complete translation, simple consideration should prompt us to give at least a summary. (But the art of making summaries is no easy one!)

Linguistic isolationism is no monopoly of the small languages. In the great ones it takes the less obnoxious form of neglecting all literature of other languages and of not bothering to learn even two foreign ones sufficiently well to use them. This is generally a detriment to the individual only, whereas the loss of an important publication in a small language will generally be a detriment to science as a whole.

Lineicome maintains (SCIENCE, 113, 607 [1951]) that, "if allowed to use their national tongue, many writers will publish much of scientific value that would remain unpublished (and therefore totally inaccessible) if it had to be translated." Is Lineicome prepared to learn Burmese to gain access to this literature? I am not, and I doubt if any Burmese colleague would be prepared to learn Norwegian. Abstracting journals do a great job, but have we any right to load the burden of translation upon the shoulders of our colleagues?

However much sympathy one might have for nationalism, linguistic isolationism is inconsiderate and constitutes, I think, one of the sins that cannot be forgiven in human society.

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Having spent two months in Japan I have had my attention greatly sharpened as to communication. I've just caught up with the exchange of letters between H. David Hammond, D. R. Lincicome, and Ancel Keys. I take it as obvious that language is being used for chauvinistic purposes in many places, and am convinced that both language and science are being used for such purposes wherever the USSR is in political control.

However, the real questions about scientific writing