Russian words in the language of the user and thus make him able to pronounce the words reasonably accurately?

If the former is the case, then, of the number of systems which have been presented, there does not seem to be a single one which is adopted universally, which is unfortunate.

If the latter, however, is the case, then surely no point is gained in using Chech alphabet to signify Russian words to an English-speaking person. The latter would have to learn Chech to learn Russian. Surely, the direct process is simpler and more direct. I wish to point out that for the purposes of both reasonably correct pronunciation and ready filing, the system used by the *Chemical Abstracts* (readily obtainable by writing to the editor) is by far the simplest and reduces Russian to English letters and not to some third intermediate or synthetic language.

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EDITORIAL CHANGES OF SCIENTIFIC PAPERS

THE discussions on editorial changes of scientific papers which have appeared in SCIENCE[1] have been very valuable—not alone because they have discussed equine serum and horse serum but because they have brought out several worthwhile points of view. May I add to the discussion for what it may be worth, and may I by way of introduction suggest that the *Proceedings* of the American Society for Horticultural Science, to which I am referring and in which I have a hand, is not being held up as an example of superior editing. It has, however, over a period of years developed an editorial policy which leaves to the author the final decision in controversial matters. And this has come about in part through a number of sad experiences.

First, about twenty-five years ago a manuscript was submitted by a young scientist, which was rejected by our editorial committee and later published in an experiment station bulletin. The bulletin has become a classic in the literature of plant science. Second, about ten years ago, a paper by a recognized authority in genetics was submitted anonymously to another recognized authority in genetics for review. The reviewer termed the paper inconsequential and branded the author as knowing little about the field of genetics. The author in turn replied that the reviewer did not understand the paper and evidently was not a geneticist. Experiences such as these leave an editor shuddering and horrified. Needless to say, they affect one's viewpoint.

And so, the editorial policy of the American Society for Horticultural Science has been to throw the responsibility back upon the author. We say to the reviewer, "Final approval or rejection of suggestions lies with the author. . . . Suggestions are to be considered from the standpoint of being helpful to the author in presenting the data." We say to the author, "You are at liberty to accept or reject the criticisms." Obviously, editorial supervision is exercised over elementary spelling and grammar, but these are hardly matters of controversy. And, where an author prefers, "scion" becomes "cion," "clone" becomes "clon" and "sweetpotato" becomes two words. By common standards this is, of course, poor editing.

But we do try to have the material understandable, and we try to help the author to this end. We lean, though we do not encourage it, towards the side of letting a man "make a fool of himself in his own way." And sometimes he proves to be not so much of a fool as was at first suspected.

In short, our policy is focused around an attempt to be helpful; we try to humanize the relation between editor and author; we suggest changes and leave to the author the final judgment and control of the situation. The result is a very gratifying response, close understanding and excellent working relations.

To be sure, the topic of editorial supervision and control is not quite so simple as this point of view might seem to imply. There are such matters to consider as cost of printing, space on library shelves, cluttering of the literature, nature of the publication medium, nature of the material to be published, audience to be served, helpfulness to the reader and even protection of the author from himself. They carry different weights in different situations.

Stuart P. Sherman once said to his class in English at the University of Illinois, following an address by Sergeant Alvin C. York, in which there was some criticism of the grammatical expressions used by Sergeant York in addressing the German machine gunners, "They understood him, didn't they?" The point is that part of the effectiveness of Sergeant York's reply was in the way he said it—it was distinctly his way, and as such it may have carried far clearer meaning than had it been altered by an editorial committee to suit some arbitrary standards. At least, "he got results."

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GENEVA, N. Y.

PROPOSAL FOR ACCELERATED DISSEMINATION OF SCIENTIFIC KNOWLEDGE

AFTER three years of blockade, which strangled the inflow of scientific literature, the gift of microfilms has been most warmly welcomed by Chinese research-

[1] SCIENCE, August 27, 1943, January 21, 1944, and March 24, 1944.

ers and students. But the fact that it still requires at least 22 days for the information to reach destination (one week for an article to get published in a weekly periodical like SCIENCE, one day to process the microfilm and two weeks to air transport to Kunming) has set the writer thinking of a plan for reducing this time lag to a minimum, which is embodied in the following proposal.

Although the preferred procedure of publishing matters of scientific import is still via the printed journal, the microfilm has already taken over a part of this function, especially in the case of lengthy papers on restricted subjects, where nowadays only an abstract is published and the original microfilmed on application. If photography can effect an earlier appearance of papers of a particular type, the radio, if drafted into service, should revolutionize the circulation of scientific publications of all kinds—be it a short note or a monographic treatise. By radio broadcasting, any scientific information can reach its intended audience the world over in the space of a few hours, certainly not requiring a 22-hour interval. By agreeing on a system of codewords, diagrams, graphs and formulas may be broadcast almost as readily as the text itself, until developments in television should place in our hands facilities not now available. By enlisting the aid of the highest research organizations of the leading United Nations, special stations can be established and maintained for the express purpose of science broadcasting.

For preserving the speeches in permanent form, the system of recording from the loudspeaker, long in use by the radio stations, is admirably adapted to this purpose. The only improvement to be made is the substitution with Cellophane tapes, as recently developed by Fonda, for the familiar discs of resinous composition. While the discs require frequent changes and therefore interruptions, the Cellophane tapes permit continuous recording for eight hours. With this semi-automatic system, the actual recording can be attended to by a trained assistant, and the need of arranging a suitable time to both the sending and receiving stations is entirely obviated. In case an article treats of a highly technical subject, a specialist in the particular field may be called in to take down the playback. From this transcript, mimeographed or printed copies can be made for wider distribution.

From journal articles this practice can be extended to books of considerable length. The royalty problem can be readily solved by reference to precedents established in the other fields of radio broadcasting. If only a digest is broadcast, it may prove a virtual stimulus to the sale of the printed book.

The desirability of accelerated dissemination of scientific knowledge is too well understood to require stressing here, but it may be pointed out that broadcasting would tend to unify the scientific language, itself a potent stabilizer of the peace to come. Having experienced the effect of intellectual isolation, the writer is prompted to bring this proposal to the consideration of the scientists and statesmen of the Allied countries. If it can not conveniently be acted upon during the war, it certainly will be our main concern after the war. We are on the threshold of a new age of contracted space and diminished time and the present suggestion is in keeping with this spirit of the future.

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SCIENTIFIC BOOKS

CHIMPANZEES

Chimpanzees. A Laboratory Colony. By ROBERT M. YERKES. xv + 321 pp. Illustrated. Yale University Press. 1943. $5.00.

THIS book is the story of an unusual project in psychobiology. It gives the history of Professor Yerkes's work with chimpanzees over a seventeen-year period and does it in an engaging manner. The book will interest the biologist, the psychologist, the medical man and also the general reader.

Yerkes successfully developed a colony of chimpanzees through controlled breeding and rearing of experimental animals. In the course of the work he faced many practical problems relating to such necessities as feeding, housing, hygiene, health, disease prevention and cure. A considerable body of general information was accumulated about chimpanzee structure and function, instincts, habits and other behavior patterns both in captivity and the native habitats. There are discussions of such topics as emotional traits, social relations, drug addiction and susceptibility, parasitic control and related problems of health. A special chapter is devoted to memory, foresight and insight, and another to language and symbolism. An entire section of the book is concerned with care and handling. An epilogue tells the story of the genesis, development and realization of a research idea. There is a selected bibliography of references. The book is richly illustrated by photographs of apparatus and pictures of animals in a variety of experimental situations. Yerkes is very generous in giving credit to his students and associates for their many contributions.