The Committee on Inter-American Scientific Publication

Harlow Shapley, *Harvard University*

A DIRECT REPORTING SERVICE to all the 1,323 Peruvian physicians; the building up of a mathematical library in the City of Mexico; the processing and placing of 92 articles in technical and scientific journals of the United States; the compiling of a Latin American *Men of Science*—these are among the activities of a small committee that has been working for eight years in the interests of promoting both the international spirit of science and inter-American cooperation. Other activities include providing surveys of scientific developments in the United States, written by experts in the various fields, for publication in one or more of the many scientific journals of the other American republics; and working with half a dozen of the leading scientific societies of the United States in the preparation of monthly or bimonthly summaries of progress that are put at the disposal of Latin American editors.

The Committee on Inter-American Scientific Publication was started in September, 1941, under the auspices of the Coordinator of Inter-American Affairs. The plan was orginated by members of the faculty of the Massachusetts Institute of Technology and Manuel Sandoval Vallarta directed its activities for the first year. Since that time the committee has been under my chairmanship and its headquarters have been at the Harvard Observatory until very recently, when larger space became available at the American Academy of Arts and Sciences, 28 Newbury Street, Boston. From the beginning, Christina Buechner has been executive secretary.

The other committee members at the present time are: Roger Adams, chairman, Department of Chemistry, University of Illinois; Bart J. Bok, associate director, Harvard College Observatory, and chairman, National Research Council Committee on Unesco; Robert J. Caldwell, formerly minister to Bolivia, later dean of humanities, Massachusetts Institute of Technology and at present, cultural relations attaché, United States Embassy, Buenos Aires; Watson Davis, director, Science Service; James R. Killian, Jr., president, Massachusetts Institute of Technology; James H. Means, chief of medical services, Massachusetts General Hospital; and Franz Schrader, chairman, Department of Zoology, Columbia University.

A year ago the National Research Council and the American Association for the Advancement of Science agreed to provide joint sponsorship of the Inter-American Committee. They set up a joint advisory committee composed of: F. R. Moulton, formerly administrative secretary of the AAAS; E. C. Stakman, professor of plant pathology, University of Minnesota, and president of the AAAS; and R. L. Zwemer, executive secretary of the National Research Council.

If we judge by the wholehearted cooperation the committee receives from the scientists and scientific institutions of all the Latin American countries, we must grant that the project is meeting an important need in the promotion of One World of Science.

Our initial activity was directed to obtaining for the scientists of the other American republics a wider scientific audience for their technical contributions. Publication in Europe had been interrupted by the war and most North American scientists, unfamiliar with the Spanish and Portuguese languages, were unaware of the work of their southern colleagues. The Inter-American Committee asked Latin American scientists to submit technical papers that merited a wider attention than was provided by their national journals. An article sent to the committee, sometimes after screening by Latin American advisors, was translated, edited appropriately, and submitted, always on its own merits, to the editor of the most suitable journal in the United States.

This initial enterprise has been highly satisfactory. From its small budget the committee was able to pay for translation and a limited number of reprints, and to meet other minor expenses. Once good relations had been established between American scientific editors and Latin American contributions, our liaison work was completed. We had expected this particular function to decrease in importance, but we still receive many communications that need our intermediary assistance.

To date, 161 scientific articles have been sent to us from the south—from Argentina, Brazil, Chile, Colombia, Cuba, Ecuador, Guatemala, Mexico, Peru, Uruguay, and Venezuela. About 70 percent of the submitted manuscripts have been accepted by editors in the United States, for publication in the following journals: *American Heart Journal; American Journal of Hygiene; American Journal of Mathematics; American Journal of Pathology; American Journal of Physiology; American Journal of Roentgenology and Radium Therapy; American Journal of Tropical Medicine; American Mathematical Monthly; Archives*

of Pathology; Astronomical Journal; Astrophysical Journal; Biometrics Bulletin; Blood—Journal of Hematology; Cancer Research; Duke Mathematical Journal; Endocrinology; Gastroenterology; Genetics; Journal of the American Chemical Society; Journal of the American Pharmaceutical Association; Journal of Applied Physics; Journal of Bacteriology; Journal of Biological Chemistry; Journal of Chemical Education; Journal of Chemical Physics; Journal of Clinical Endocrinology; Journal of Mathematics and Physics; Journal of Nervous and Mental Diseases; Journal of Neurophysiology; Journal of Organic Chemistry; Journal of Pharmacology and Experimental Therapeutics; Physical Review; Physiological Reviews; Proceedings of the Society of Experimental Biology and Medicine; Science; Surgery, Gynecology, and Obstetrics; and *Transactions of the American Mathematical Society.*

From the beginning we had hoped to make our work a two-way project. We felt that we should not only receive papers from Latin America, but that our scientists should contribute to publications in the various American republics. We have succeeded in carrying out this plan, again with surprising success. Three of the operations should be briefly described.

After considerable investigation, including a visit of the executive secretary to most of the universities and scientific institutions of Latin America, we discovered the rather unexpected fact that there are in existence more than 1,200 scientific publications in the Latin American countries. We found that the editors of many of the most important journals would like to use articles from North America, and especially to use those contributions that would help keep the scientists of the various countries in step with the rapid developments in the United States. One of the best ways to keep up with a subject is to get experts to write summaries of progress and problems in specific fields. We asked some leading American scientists if they would not send to us, for transmission to the most suitable Latin American journals, articles of 2,000 to 3,000 words. (Incidentally, we accompanied our request with the information that the small funds available would permit a payment of $50 to cover wear and tear on nerves and secretaries.)

Our solicitation of special surveys and summarizing articles has produced many original contributions. Of the 88 that have already been received, or are being prepared, I shall list only the first five papers received: "Human Biology of the Greeks," by J. Laurence Angel; "Modern Trends in the Tropical Meteorology of the Americans," by Robert D. Fletcher; "Some Recent Advances in Chemical Kinetics," by George W. Beadle; "Concerning Aging," by William deB. MacNider; and "Enzyme Kinetics and the Dynamics of Their Behavior," by Hudson Hoagland.

The submitted contributions are translated into the appropriate language by the journal editors. The articles have been so well received that some American editors have suggested that we put their journals on our list. One series of papers on architecture and home planning merits special mention. It was beautifully printed, with many illustrations by *Nuestra Arquitectura* in Argentina; the seven general American contributors were Charles Abrams, Henry S. Churchill, Jacob Crane, G. Holmes Perkins, José Luis Sert, Christopher Tunnard, and Catherine Bauer Wurster.

A second service from American scientists to Latin American colleagues is provided by the American scientific societies, which have arranged to send through the committee, for distribution to hundreds of scientific journals in Latin America, short and generally not too technical notes on current developments. We are greatly indebted to the societies, and especially to those who have compiled these periodical news items, for their liberal cooperation. The first summaries came from the American Chemical Society, the American Pharmaceutical Association, the American Medical Association, and the Geological Society of America. The editors receiving these various current science notes are permitted to use them with or without credit to the relevant society in the United States or to our committee. Naturally, the summaries are widely used.

I have already mentioned one of the special services —sending a monthly article, on some specific disease or medical subject, to the doctors in Peru. Three distinguished Peruvian physicians, Telemaco Battistini, Alberto Hurtado, and Carlos Alberto Seguin, have formed a committee to sponsor a special series prepared by American doctors and medical scientists. These articles are translated, published, and distributed to all practising physicians of the country. The first was by I. Forest Huddelson on the subject of human brucellosis (undulant fever) and the second by Chester S. Keefer on penicillin. Twenty of these up-to-date articles have already been published or are on their way. Needless to say, this assistance to the doctors and citizens of Peru is warmly appreciated. There are also direct and indirect benefits to the medical science of the United States. In tropical medicine, as well as in many other fields, we can learn much from our South American colleagues.

The work with the Peruvian medical scientists was greatly assisted through the personal interest of Ernest B. Howard, formerly associated with the Divi-

sion of Health and Sanitation of the Institute of Inter-American Affairs and now assistant secretary of the American Medical Association. We find that our activities can often be coordinated with that of other organizations, to our mutual benefit. It is quite possible that the medical work for Peru can be extended to other Latin American countries. Progress is being made toward setting up other collaborative groups in Latin America which should promote not only interchange with our committee, but also useful interchanges among the scientists of the different Latin American countries.

There will probably be opportunities for important cooperation with Unesco's operations in the United States. Mrs. Buechner has worked with the Pan American Union in forming a guide and description of the various universities, colleges, and scientific institutions of the American Republics. The Inter-American Committee has also been closely associated with the large translation project managed by *Science Service,* and is thus in close contact with the scientific publishing houses of Latin America.

Finally, I should mention that the existence of the Inter-American Committee has become so well known in Latin American scientific circles that the office in Boston has the opportunity of undertaking a multitude of miscellaneous services. They include bibliographic work, guiding Latin American students and scholars in their travels through the United States, entertaining scientific visitors, and some assistance to the many science students in the Boston area (including the annual "Evening with the Stars" at the Harvard Observatory). To handle these miscellaneous operations competently, we shall soon require a larger budget and a larger staff.

The gratifying cooperation given our committee has led us to propose that the Committee on Inter-American Scientific Publication should become an International Committee on Scientific Information. From 34 countries of Europe and Asia we have received requests for the special articles by experts, for the summaries prepared by the scientific societies, and for other services of the sort we now give in the interests of our Latin American assignment. The cultural attachés connected with our embassies and legations in a number of countries in the Eastern Hemisphere have already distributed copies of our material. So far as it goes, this distribution from government offices in Europe and Asia is useful; but we feel that it would be better to deal directly with the scientists, and with their scientific journals and institutions.

Robert Ridgway's Color Standards

D. H. Hamly

Department of Botany, University of Toronto

PRIOR TO THE APPEARANCE of Ridgway's *Color standards and color nomenclature* in 1912 (*22*) English-speaking biologists had neither a standardized set of colors nor a generally recognized set of color names. Scientists had long been striving for accurate description but had not felt the specific need for precise color terminology until about 200 years ago, when the many naturalists interested in the mass of new material brought in by world explorers had to introduce order into their descriptions if the information they recorded was to be of any value to others. In two of the first important systematic works written in English, especial care was taken in respect to color records, both in the written descriptions and in the coloring of the copper plate engravings. Mark Catesby, writing in 1743 (*1*), says: "In Designing the Plants I did them fresh and just gathered; and the Animals, particularly the birds, I painted them alive (except a very few . . .)." He concludes by referring to possible color variability of two kinds: pigment changes in his illustrations and actual color differences in specimens arising from seasonal variations. George Edwards reported his methods of drawing, engraving, and coloring in the preface to *A natural history of birds* (*4*). He states: "A copy carefully and exactly coloured from the original drawings will be deposited in the Library of the College of Physicians, of London, which may serve as a Standard to refer to and to compare with, to try the Truth of the Colouring, in case the Plates should outlive me, and any should question the Authority of the Colouring." He adds, in Part II in 1747, "This book hath the Advantage to be Original in its Figures, as well as its Descriptions; not one of the former being copied from others, or the latter being translated or transcribed."

Many of the color records made since the develop-