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SCIENCE, founded in 1880, is published each Friday by the American Association for the Advancement of Science at Business Press, Lancaster, Pa. Entered at the Lancaster, Pa., Post Office as second class matter under the Act of 3 March 1879.

SCIENCE is indexed in the *Reader's Guide to Periodical Literature*.

All correspondence should be addressed to SCIENCE 1515 Massachusetts Ave., NW, Washington 5, D.C. Manuscripts should be typed with double spacing and submitted in duplicate. The AAAS assumes no responsibility for the safety of manuscripts or for the opinions expressed by contributors.

Change of address: The notification should reach us 4 weeks in advance. If possible, please furnish an address stencil label from a recent issue. Be sure to give both old and new addresses, including zone numbers, if any.

Annual subscriptions: \$7.50; foreign postage, \$1; Canadian postage, 50¢. Single copies, 25¢. Special rates to members of the AAAS. Cable address: Advancesci, Washington.

The AAAS also publishes THE SCIENTIFIC MONTHLY.



Of Tom-Toms and Telephones

Let's face it.

Compared with current needs for the communication of technical information, our communication system is not much more adequate than tom-toms would be for transmitting, from Schenectady to Spokane, a message giving the latest developments in nuclear fission. Eventually some distorted variety of the original message would get through.

Our current system of book and report publication, sent to libraries to be cataloged and stored, is as much out of step with the times as are tom-toms for transmitting messages. Sheer bulk of reporting is too great to be kept up with by the conventional means of the receiving, cataloging, storing, and recalling. But no means has yet been devised to supplant satisfactorily conventional means for library handling of reports. Something must be done to organize, systematize, arrange in coherent recoverable order all the information that is pouring out of research and development activities in countless science specialties. We are improving perpetually the methods of getting out technical reports, but handling on the using end remains in the tom-tom stage. It is time we quit beating the tom-tom and started ringing in on an adequate system of cataloging, storing, and recovering information. Electronization seems to be the answer, but it has pitfalls that should be thoroughly investigated.

The complexity of a communication system necessary for a given civilization depends on the scale of the civilization and its degree of technologic development. Our civilization is the largest in scale and has reached the highest degree of technologic development known in history. Therefore, our communication system must be the most complex ever to function. But it can be complex without fulfilling its function. Our present-day communication system for technical materials is just such a complex but inadequate system. Since no over-all organization of technical communication exists, even to call it a system is of doubtful legitimacy.

We need a system analogous to the telephone. A telephone call, across town or across a continent, is from one person to another. One person transmits information and another receives it. No matter how complex the transmission and switching devices, the message goes through. Wrong numbers and misinformation are, by and large, the fault of the transmitting person and not of the transmitting equipment. The problem of technical communication today is to get the message from one person who has information to another who wants it. It is that simple. It is that difficult.—JOHN H. WILSON, *Editorial Branch, U.S. Naval Ordnance Test Station, China Lake, California.*