formational generative theory to linguistic anthropology may be summed up as follows: By being mentalistic (purporting to explain mental processes such as the ability of speakers of a language to recognize partial and total similarities of sentences) the informant (native speaker = man) becomes central, and in a very real sense more important than the analyst. methodology is completely formal, hence the theory is a combination of humanism and rigor. It claims metatheoretical constraints upon language that is, to be a universal grammar. Substantive claims include the striking similarity of the deep structure of languages versus the vast differences of baroque surface structure. The impact of this finding on the Whorfian hypothesis remains to be examined.

Transformational generative theory is also revolutionizing linguistic typology because it clearly distinguishes two types of universals: substantive universals (the universals of structural-taxonomic linguistics) and formal universals or conditions for speech (that is, statements about the structure of man's innate language processing faculties). By explicitly accounting for the linguistic competences of native speakers, the theory will clarify the relationship between linguistic and nonlinguistic competences, which I feel is the central issue of language and culture.

It is in the light of the return of man into linguistics and linguistic anthropology that Boas' insight of 1939 may begin to be realized in the next decade: "... the scientific understanding of man will in all likelihood grow from our understanding of language" (p. 9).

OSWALD WERNER

Department of Anthropology, Northwestern University, Evanston, Illinois

Space-Science Olympics and the COSPAR Symposia

Space Research V. Proceedings of the Fifth International Space Science Symposium (Florence, Italy), 1964.
D. G. King-Hele, P. Muller, and G. Righini, Eds. North-Holland, Amsterdam; Interscience (Wiley), New York, 1965. xix + 1248 pp. Illus. \$45.

Here is a situation that somehow has got out of hand: the publication of the annual COSPAR symposia on space research. This volume is intended to be an almost complete record of the 162 papers in the physical sciences presented in May 1964 at Florence. (The papers in the life sciences will be published separately.) As such, it contains, according to the table of contents, 154 papers, but on inspection 54 of these prove to be abstracts only. These abstracts represent papers that were to be published in full elsewhere, were not submitted by the editorial deadline, or were rejected for some reason by the editorial committee.

This 5.6-pound, 1248-page tome is typical for the series, but the price of the volume and the price per page have each been increasing steadily until they have now almost doubled during the past 4 years. Surely the number of individual research workers who purchase such an expensive collection of papers must be small, a fact that large-

ly defeats the main virtue of the publication of symposia—wide dissemination of current research results in a special topic.

It is occasionally argued that this series offers Western scientists a convenient opportunity to see at least a sampling of what is being done in other countries, particularly in the Soviet Union. (One might think that this advantage would also apply in the opposite direction, especially since Russian abstracts are included for most of the papers. I understand, however, that no more than a few tens of copies of recent volumes have been sold in the U.S.S.R.) Personally, I am not impressed with this "sampling" argument. The journal literature serves the same function much better (if not so conveniently for the casual reader), and today the Russian work is largely available in English translation with only a modest delay. Indeed, this availability not only obviates this type of "Proceedings" but makes them virtually obsolete shortly after they are published. Publication of original research is the proper function of the periodic research journals, and any infringement on this prerogative is likely to lead to an inferior product:

First, within COSPAR and the various national committees, abstracts of the papers are reviewed before the

papers are accepted for the symposium, and the session chairmen and certain others at the symposium are sometimes asked to review the papers as presented orally and advise the editorial committee as to whether it is appropriate for COSPAR to publish the full paper. Still, this procedure is obviously less discriminatory and restrictive than a conscientious review of the final manuscript (a procedure not followed for these volumes).

Second, symposia serve a marvelous function in bringing together people who work in related areas to talk informally and present incomplete, as well as finished, pieces of work to a critical audience. The premature publication of much of this material (because of deadlines that are not set by the authors) defeats the very objective of raising the quality of the final product. Justifiably, the trend among the various "abstract journals" is not to include individual papers published in symposium volumes.

The editors have clearly worked conscientiously and selflessly to bring out a volume involving so many individuals from so many countries at a rate (within about 8 months after the symposium was held) that at least approaches the speed of some of the faster journals. It must be very discouraging to them, therefore, to see the number of typographical errors in the volume despite the fact that these errors were marked on the proofs.

In reviewing volume 2 of this series three years ago, D. R. Bates pleaded for some self-restraint on the part of the organizers of symposia and asked that they try to forestall "the ruthless final war-the war for land between the librarians and the farmers." I think that, in addition, the publications committee of COSPAR should reappraise the possible types of commemorative volume, with the view of best serving the interests of space scientists. And the participants might well enquire of themselves whether they want their very best work to appear first in a symposium "Proceedings."

To summarize, it appears that the various countries, especially the United States and the Soviet Union, are playing a kind of space-science olympics on the pages of these volumes, and it seems clear that the quality of the papers is thereby adversely affected.

JOSEPH W. CHAMBERLAIN Space Division, Kitt Peak National Observatory, Tucson, Arizona