journal either dies a natural death, as it should, or continues its existence as a collection of articles reprinted from the many technical journals devoted to specific subject-matter. As few executives will subscribe to the policy of the publication of a mere collection of reprints, since this is too obviously an extravagant procedure, it is usually necessary, for the very existence of the private journal, that the employees of the laboratory concerned be required to submit their papers to their own journal for prior publication. In general, society publications are at liberty to reprint such material, but their editors likewise feel that the extravagant policy of publishing the same article in two journals should not be encouraged. Most of the large society-controlled journals for this reason require that their editors accept no paper for publication which has appeared in any other medium.

The menace of the private journal has another far-Many societies already claim reaching influence. ownership to the written report of investigations presented before their stated meetings, and this policy can be and, with the continuance of private journals, must be more rigorously extended and enforced. The society journal is the center at which the activities of an organization concentrate. It is the duty of each member of a society to see that his particular journal is given every possible support. An institution which enforces prior publication in a private journal therefore acts contrary to the best interest of the national organization and in many cases prevents its personnel from playing an active rôle in the national and cooperative development of research. In this way the privately printed journal defeats the very purpose for which it is supposedly sustained. It fails to secure adequate publicity for its own work and its maintenance militates against the national recognition of its contributors who may be barred from participation in the national meetings and from honors which might otherwise be extended.

About the only excuse for a private journal is that it serves as a means for the publication of extended memoirs which would be rejected by society-controlled journals. Two reasons may occur for such a rejection. The paper may contain a large amount of superfluous material which could have been readily omitted in which case it might have been acceptable. Often a lengthy paper will be read by possibly ten or less interested individuals, and an abbreviated account of importance to a larger group of readers could be published in a recognized journal with a statement to the effect that mimeographed copies of the complete report with numerous data are on file for loan by the author's institution. On the other hand, it may rarely occur that the publication of an

extended manuscript is highly desirable but because of the excessive cost funds are not available for its appearance in a society journal. The work might then well appear as a separate brochure or the institution concerned could make arrangements with the society journal to defray a part of the cost of publication. This latter plan has been successfully adopted by several recognized journals and research laboratories.

Present regulations, possibly instigated by the Government Printing Office, do not permit the participation of government laboratories in such a program, but if the majority of the scientific public were convinced that curtailing of the numerous *hetero*geneous government journals and the distribution of the material in national journals of homogeneous character were conducive to the scientific welfare of the country, it is quite possible that the iron-clad restrictions now existing could be partially removed.

In conclusion the writer wishes to emphasize that a large group of scientists in this country is convinced of the detrimental influence of privately published journals containing material of heterogeneous character, and the same objection, but with less serious consequences, applies to most academy proceedings. It would seem that the subject is of sufficient importance to warrant careful consideration by the governing boards of organizations and societies devoted to broad fields of research.

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## FLAGELLUM DIVISION IN PARANEMA GLOBIFERUM

OWING to the fact that there prevails no little skepticism about the splitting of the flagellum in division of the Mastigophora, this observation is reported.

It is often rather difficult in our laboratory to obtain Euglena when desired, but another mastigophoran is very often used as a type because it is easily obtained in our cultures. This is *Paranema globiferum* (determined by Dr. R. W. Hegner, of Johns Hopkins), and the processes here described have been observed many times.

The first evidence of the beginning of longitudinal binary fission in these protozoa is the appearance of a forked flagellum. The forking increases until the organism appears to be biflagellate. Division of the body then begins, the gullet splits and in from five to ten minutes the new individuals separate and proceed in search of food which, under our observation, consisted of small algae (*Ophiocytium capitatum*).

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