Stetson accepts Jelstrup's results as correct within a limit of error not greater than 20 meters, and scrutinizes the original data of Börgen and Copeland, whose longitude values had to be based on lunar culminations and star occultations. He concludes that the probable error in the determinations, expressed in linear measure, can be no more than 80 meters. Since there is a discrepancy of 615 meters between Jelstrup's longitude position and the earlier value, it appears that the longitude of Sabine Island must have changed during 62 years by at least some 500 meters. When we add to this a discrepancy of about 100 meters in latitude between the two determinations, the net linear change in position amounts to nearly a third of a mile, in a direction somewhat south of west. Stetson discounts this figure by a large fraction, and accepts "seven hundred to eight hundred feet" as the minimum shift indicated by comparison of the two sets of data. This analysis by a competent astronomer must receive serious consideration. However, the layman in such matters is left with an uncomfortable feeling that the mean probable error may be given undue weight in treating a single set of data into which may enter inaccuracies from some unsuspected source. I confess to a strong skepticism based on comparison with developments at Kornok, another Greenland station that has figured prominently in the problem of shifting coordinates.

Kornok (Oornoq) lies on the Godthaabfiord in western Greenland, near latitude 64°32′N, longitude 51°02′W. Observations to determine coordinates at this location were made by Falbe and Blume in 1863. Twenty years later von Ryder reoccupied the station, and obtained a value for longitude more than 400 meters *east* of that reported by the earlier expedition. Both parties of course employed lunar observations for comparisons of time. In 1922 Jensen, using modern radio time-signals, reported a longitude value about 1,200 meters *west* of that obtained by von Ryder. In 1927 the Danish Geodetic Institute again occupied the station, and announced a value about 180 meters west of Jensen's. Wegener[2] and du Toit[3] lay especial emphasis on comparative results of the two modern determinations, which they interpret as an indication that Greenland moved westward in the 5-year interval at an average annual rate of 36 meters. However, the Danish Institute repeated the observations in 1936, and obtained a longitude value essentially identical with that of 1927.[4] In his published statement the director of the institute does not specifically mention Jensen's value of 1922, but presumably he includes it in his general opinion that "the deviations of the old observations from the new ones are the result of observation errors."

If we should accept the results of all observations at Kornok, the behavior indicated for that part of Greenland would seem erratic in the extreme. The story would be as follows: Between 1863 and 1883 the station moved eastward more than 400 meters, an average of more than 20 meters annually. From 1883 to 1922 movement was in the reverse direction, at an average rate of nearly 31 meters per year. During the next five years the westward drift continued at the faster pace of 36 meters yearly. What may have happened after 1927 is a matter for some speculation. Either the movement stopped abruptly, and had not been resumed nine years later; or sometime after 1927 the direction of drift again reversed to eastward, and in 1936 there had been a return to the exact longitude of 1927. Such a succession of events may be conceivable. It seems significant, however, that all evidence of shifting position vanished in the nine-year interval between modern observations that are vouched for as accurate by a highly reputable geodetic organization.

It would be interesting to have a competent analysis of the data from the early observations at Kornok, similar to the analysis of the Sabine data by Stetson. The methods used at the two positions were essentially the same, but of course the results in one case may prove to be less reliable than in the other. However, criticisms of conclusions based on the nineteenth-century determinations at the two stations have been answered repeatedly with the statement that the amount of apparent change in longitude is many times the probable error inherent in the observational methods employed. Similarly J. P. Koch claimed that any error involved in the triangulation by which he related the Sabine station to Danmarkshafen must have been less than the probable error of the longitude determinations. Whatever the theoretical merits of such claims, we shall look forward to eventual check of the coordinates at Sabine Island by the same precise methods that have been used at Kornok.

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[2] Alfred Wegener, "Die Entstehung der Kontinente und Ozeane," 4th Edition, Braunschweig, 1929, pp. 27–29.

[3] A. L. du Toit, "Our Wandering Continents," London, 1937, p. 300.

[4] N. E. Nörland, "Astronomical Longitude and Azimuth Determinations," *Roy. Astr. Soc. Monthly Notices*, Vol. 97, 1937, pp. 505–6.

THE GENERIC AND SPECIFIC TRIVIAL NAMES OF THE TERTIAN AND QUARTAN MALARIA PARASITES

THE Official List of Generic Names in Zoology was established by the International Congress of Zoology in order to promote stability in zoological nomencla-

ture by placing on record the correct names of the principal genera in each of the Classes and Orders of the Animal Kingdom, together with their type species. Hitherto names have been placed on the Official List in Opinions rendered by the International Commission on Zoological Nomenclature, but in 1943, the International Commission decided that it was desirable to make the Official List more readily available and accordingly decided to publish it as soon as possible in convenient book form and with a full index. The preparation of the Official List for publication in this way, which was begun in the autumn of 1943, involved the checking of all the relevant bibliographical and other references to the generic names concerned and their type species. In the course of this work, errors were detected in a number of the Opinions containing decisions relating to the Official List. These errors are being brought at once to the attention of the International Commission with a view to their rendering an Opinion as soon as possible containing such rectifications as may be necessary.

Among the errors detected were errors in the entries in Opinion 104 (published in 1928) relating to the author's name and date of publication of the generic name for the Malignant Tertian Malaria Parasite (*Laverania* Feletti and Grassi, 1889). Further, in the case both of this name and of that for the Quartan Parasite (*Plasmodium* Marchiafava and Celli, 1885) the type species was found to have been cited under a name which was not the correct name under the International Code of Zoological Nomenclature.

The names of these parasites, as recorded in Opinion 104, are the names now universally employed for these species in the enormous medical and technical literature relating to malaria, and it would clearly be as wrong as it would be impracticable to attempt to introduce changes in such names merely on grounds of zoological nomenclature. In the present case such changes would be particularly undesirable, since they would involve the transfer of the specific trivial name *"malariae"* from the Quartan Parasite (on which it was bestowed by Grassi and Feletti, 1890), by which name this species is universally known, to the Malignant Tertian Parasite on which in 1881 it had been independently bestowed by Laveran (and by which name this species is never called). Transfers of trivial names in this way cause great confusion and the only solution in such a case is for the International Commission to use their plenary powers to suspend the rules in order to validate the names currently in use.

It was accordingly decided early in 1943 to invite the International Commission to deal with this question under their plenary powers and, for this purpose, a thorough investigation into the highly complicated literature of these names was made, with the assistance of Sir Rickard Christophers and Brigadier J. Sinton, whose paper, "The correct name of the Malignant Tertian Malaria Parasite," published in 1938,[1] must form the starting point of any work on this subject. In the course of this investigation, names previously overlooked were brought to light and other unsuspected nomenclatorial difficulties were disclosed. A paper setting out in detail the present position under the International Code and containing recommendations to the commission for placing the whole matter on a satisfactory footing has been prepared and will appear in the next part of the *Bulletin of Zoological Nomenclature,* the official organ of the International Commission on Zoological Nomenclature.

Quite recently the officer in charge of malaria control in war areas, Atlanta, Georgia, U. S. A., communicated to the International Commission an application prepared by Drs. Curtis W. Sabrosky and Robert L. Usinger, U. S. Public Health Service, drawing attention to the errors in Opinion 104 and requesting the International Commission to use their plenary powers to suspend the rules for the purpose of validating existing nomenclatorial practice in regard to these parasites. This application has since been published in the issue of SCIENCE for September 1, 1944. It is extremely gratifying to the executive committee of the International Committee to find that malariologists in the United States, working independently, have reached substantially identical conclusions in regard to this matter, since this should greatly facilitate the early adoption by the International Commission of an Opinion setting this matter at rest once and for all.

In order to secure the widest support for the action proposed to be taken, the executive committee, on behalf of the International Commission, invite expressions of opinion from specialists concerned in any aspect of the malaria problem. Such communications, which should be addressed to the International Commission on Zoological Nomenclature at their Publications Office, at 41, Queen's Gate, London, S.W.7., will at once be published in the commission's official organ, the *Bulletin of Zoological Nomenclature,* in order that the whole of the material relating to this case may be before the commissioners when reaching their decision.

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Secretary
THE INTERNATIONAL COMMISSION ON ZOOLOGICAL NOMENCLATURE

[1] *Brit. Med. Jour.,* 2: 1130–1134, 1938.