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The Kansu-Hohsi Corridor and the Suloho-Ochinaho drainage regions

by

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The publication of this paper has been made possible by funds supplied by the Sven Hedin Foundation and by the Publication Board of the Royal Swedish Academy of Sciences which is gratefully acknowledged. The paper is an attempt to summarize our knowledge about the development of the border region between the Tibetan Highland and the oldland of Central Asia, viz. mainly the Tarim Platform (Serindia) and the Sino-Korean Platform, bounded to the north by the South Mongolian eugeosynclinal belt, supposed to represent the warped Oceanic crust. Since 1920 I have devoted the greater part of my spare time to the study of the geology of this region based upon the literature available and about 13 years of actual fieldwork from its western border in the Pamirs eastwards to the Yellow Sea. It motivates my attempt to encompass the results of the Expedition under this general scheme.

By far the greater part of our surveys in the Kansu-Hohsi Corridor is due to B. Bohlin and G. Bexell. Bohlin, besides being a trained field geologist, also devoted much time to archaeological researches in this region where the latest geographical development is tied intimately to the cultural geographic development of one of the most ancient lines of communication between China and Europe. Bohlin has also greatly contributed to the final edition of this paper.

The decease of F. Bergman in 1946 and N. G. Hörner in 1950 interrupted their further investigations of the very large material of archaeological, resp. geological data gathered in the Edsengol region. Thanks to Bergman's very careful field notes and a detailed catalogue of the collections, B. Sommarström has very ably completed Bergman's report and has published the result in two beautifully illustrated volumes (1956–1958).

Hörner had planned a detailed sedimentological investigation of the Edsengol delta sediments. For this purpose a very large material of sediments had been collected from stratigraphically well defined horizons. This involved a review of various methods of granulometric analysis and the degree of accuracy attained. It also involved investigations of the rate of displacement of moving sand dunes under the influence of meteorological factors, based upon detail mapping of test areas in the field and subsequent laboratory analysis. The principal methods used are summarized in Publ. 40 by G. Montell and E. Norin. Hörner's scientific activity during the 1940ies was devoted exclusively to this kind of research, unfortunately unfinished.
INTRODUCTION

Since 1937 the following publications have been issued in the series Reports from the Scientific Expedition to the North-Western Provinces of China under the Leadership of Dr. Sven Hedin, see also pp.:


Ser. IV Palaeobotany: B. Bohlin Publ. 51, 53.

Ser. V Invertebrate Palaeontology: G. Troedsson Publ. 4; H. Frébold 11; G. Regnell 17; F. Kahler 52.


Ser. VII Archaeology: F. Bergman Publ. 7; T. Arne 27; V. Sylwan 32; J. Maringer 34; B. Sommarström 39, 41.

Ser. IX Meteorology: W. Haude Publ. 8; F. Albrecht 14.


Ser. XI Botany: A. Magnusson Publ. 13, 22; T. Norlindh 31; B. Bohlin 33.

The most important material gathered during the expedition concerning these geosciences has thus been worked out and published by members of the expedition and other co-workers as far as it has been possible. Still remained, however, a comprehensive account of the results of the scientific activities of the expedition.

Such an account was planned by Dr. Hedin to be embodied in a "Memoir on Maps". Vol. I of this memoir, "Records on Surveys" and Vol. II "Index of geographical names" were published in 1967. Vol. III was planned to contain all round descriptions of each of the thirteen sheets in the Atlas of maps. However, this plan soon turned out unpractical. It was therefore decided to concentrate the description of the maps into Vol. III, subdivided into three fascicles, viz. III Fasc. 1 "The Pamirs and the Karakoram-K'unlun mountain systems", III Fasc. 2 "Relation between the Tibetan Platform and the Tarim Basin", and III Fasc. 3 "The Kansu Corridor and the Suloho-Ochihar drainage systems"; a preliminary summary of Fasc. 2 is given in B.G.S.U.U.N.S. Vol. 8, 1980. Besides the present volume Fasc. 3 also Fasc. 1 is ready as completed manuscript.

As seen on the Table of Contents of Fasc. 3, this volume constitutes mainly a review of the field works of the team of scientists active in Kansu and in the Lop Nur region. Apart from Bohlin and Norin, all these scientists are deceased: Bergman 1946, Hörner 1950, Hedin 1952, Chen 1964, and Bexell 1977. It is therefore of importance that the results of their researches, summarized in Fasc. 3, are issued before the other parts.