THE WESTERN END OF THE TIBETAN PLATEAU

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ABSTRACT: The Tibetan plateau terminates between the NW-SE oriented, right-lateral strike slip Karakorum fault and the E-W oriented, left-lateral strike slip Altyn-Tagh fault, forming a wedge from wich Tibet is now being extruded eastwards.
The Plio-Pleistocene Sutlej basin, the Garpo pull-apart, the Purang and the Shiquanhe grabens are associated with the late Tertiary displacement of the Karakorum fault system.
In this western part of the plateau, the S (Lhasa) and N (Qangtang) Tibetan Blocks can be subdivided into four zones (fig. 1):

1- The Ladakh - Kailas zone is bounded to the S by the Indus - Yarlung suture and to the N by the Shiquanhe ophiolitic melange.The latter can be followed along the Karakorum fault, dismembered, and correlated westward with the Shyok melange (fig. 2).

2- The South-East trending Bancong Lake zone consists mainly of early to middle Cretaceous sediments intruded by huge (?)late Cretaceous granitic bodies. This zone can be correlated with the Saltoro belt appearing W of the Karakoram fault, between the Shyok and Nubra valleys (fig. 2).

3- The East Changchemno zone belong to the Qangtang Block, bounded to the S by the late Jurassic Bancong - Nujiang suture and is separated from the Loqzung zone to the N by the SW-NE oriented, left-lateral strike slip Changchemno fault. We correlate the Bancong -Nujiang suture with the N Saltoro suture in Ladakh and the Northern suture in Pakistan. To the NW, the East Changchemno zone can be followed into the Aghil - Shaksgam sedimentary belt of the Karakorum Tethys.

4- The Loqzung zone consists of a curved NW to E trending belt of folded late Paleozoic to late Cretaceous mainly shallow water sediments.

To the N, the Lake Lighten (Longmu Co) cryptic suture separates the Qangtang Block from the Aksaï Chin zone belonging to the Western Kun-Lun Block. This last zone is characterized by a thick Cretaceous sedimentary cover lying disconformably on partly metamorphosed and folded Paleozoic black slates (Kilian facies).

A. M. C. Şengör (ed.), Tectonic Evolution of the Tethyan Region, 505–506.

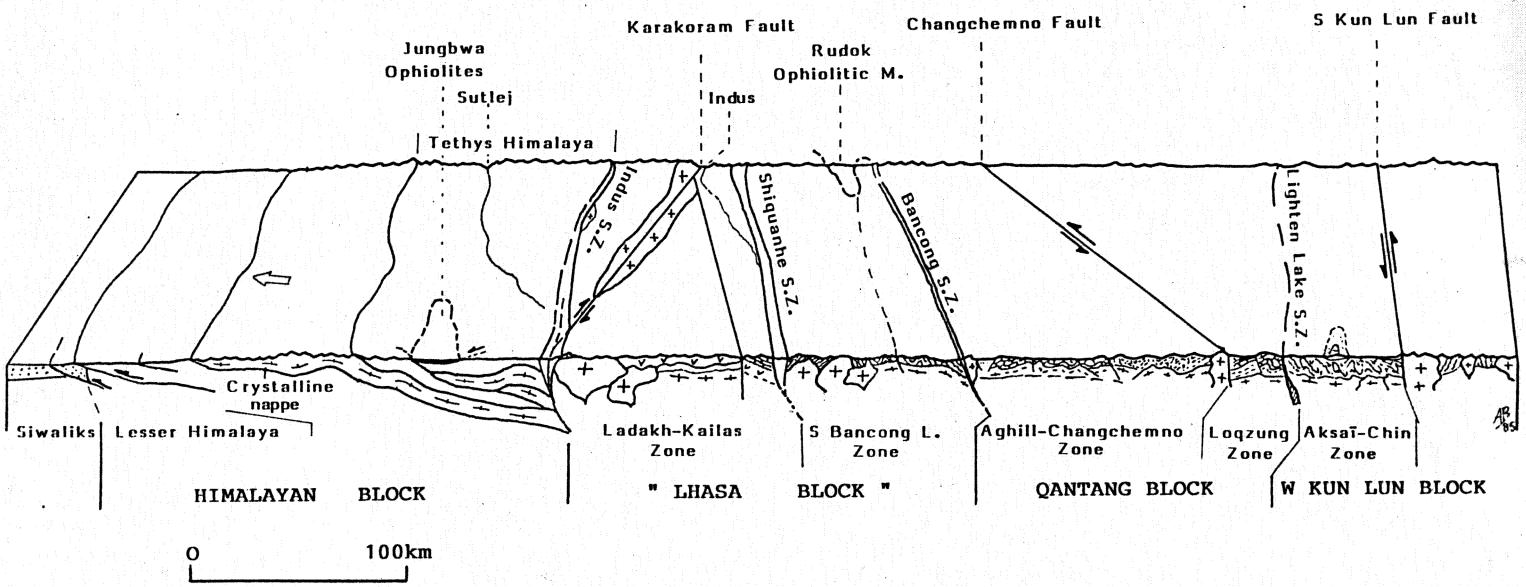

Figure 1: Block diagram of the western Tibet region looking west and showing the main tectonic features.

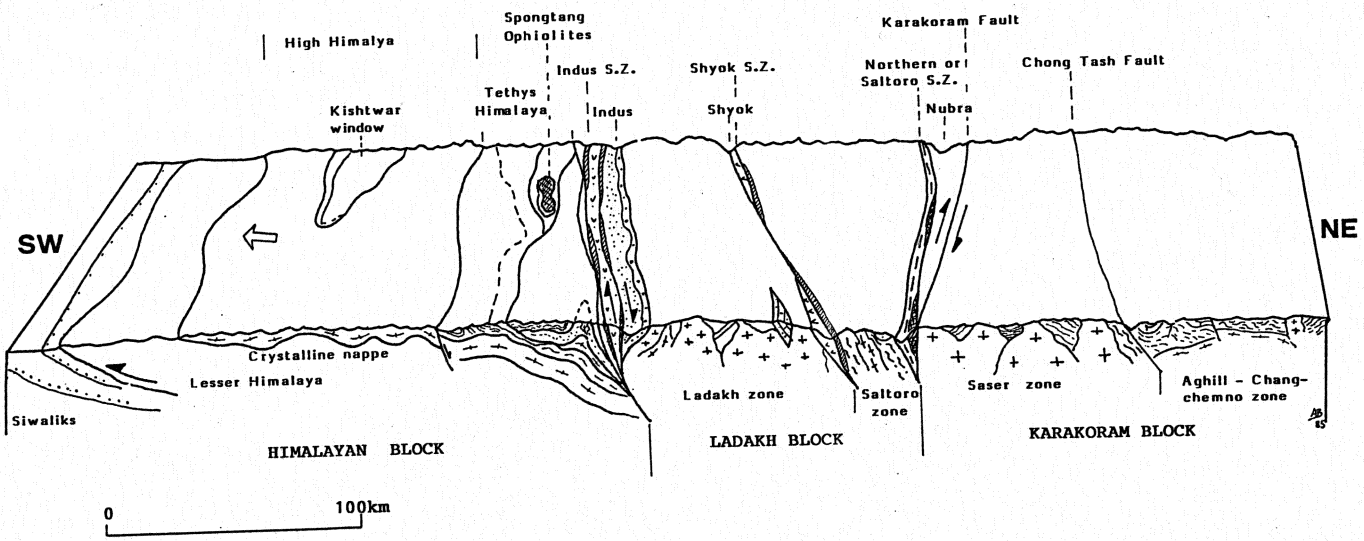

Figure 2: Block diagram of the Ladakh region (NW Himalaya) adjacent to the western Tibet and showing the main tectonic features.