

Weathering damage on Pharaonic sandstone monuments in Upper Egypt

Monuments under investigation

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The Pharaonic stone monuments in Upper Egypt represent cultural heritage of outstanding universal value. All monuments have suffered weathering damage. In the year 2000 an Egyptian-German research co-operation was started aiming at the systematic investigation of stone weathering on the historical monuments in Upper Egypt as a contribution to monument preservation. Pilot studies were carried out on the Karnak Temple, Luxor Temple, Horus Temple and Hathor Temple, composed of sandstones originating from the Gebel el-Silsila region. Results on the petrographical properties of these sandstones and their state of weathering damage on the Pharaonic temples in Upper Egypt are presented.

Karnak Temple



Sacred lake, Column hall and 1st Pylon

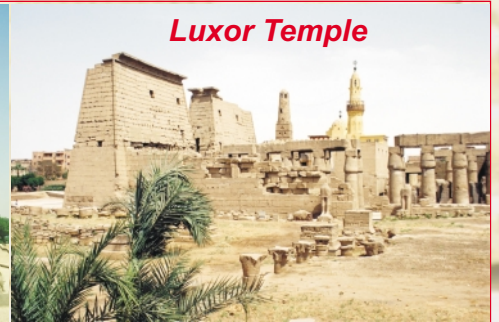


Great Hypostyle Hall



Ramesses II statue, Obelisk

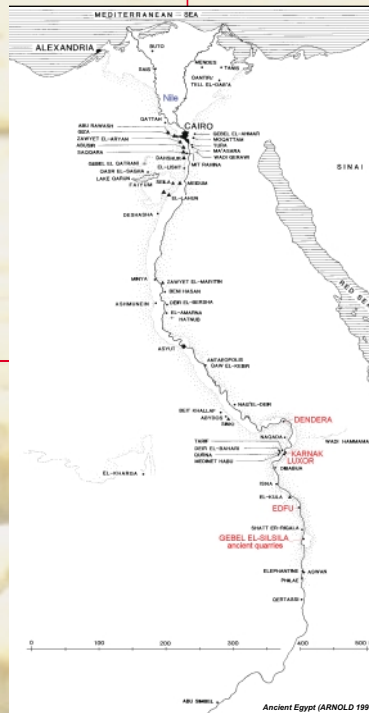
Luxor Temple



Great Pylon and Court of Ramesses II



Avenue of the Sphinxes and 1st Pylon



Avenue of the Sphinxes and Great Pylon

Hathor Temple, Dendera



Front facade designed in the style of a Pylon



Grand Pylon



East facade



Hathor-headed columns



Statue of Horus



Outer wall and Grand Pylon