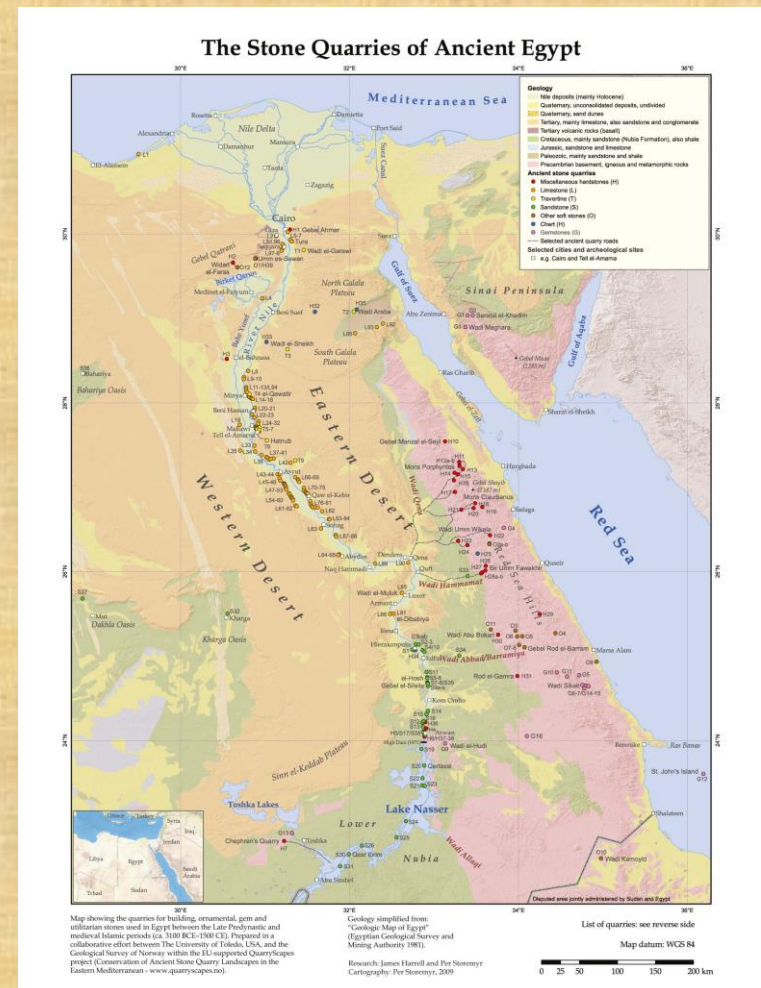


LIFE IN THE EASTERN DESERT OF EGYPT

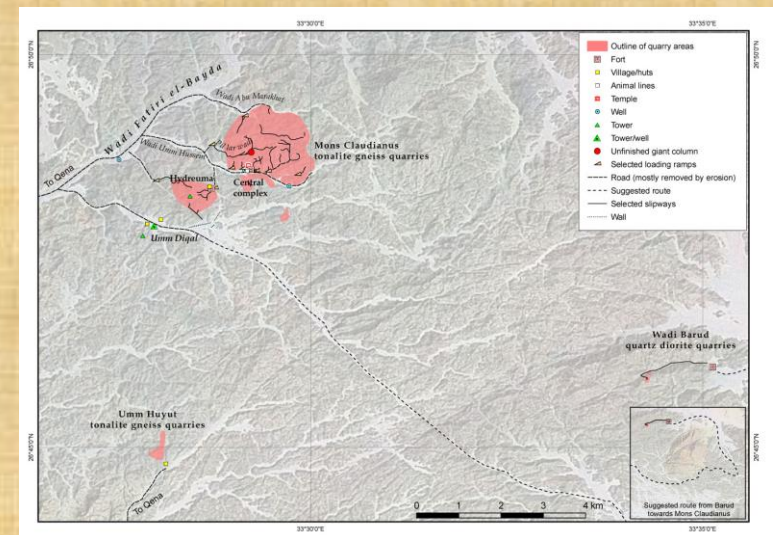
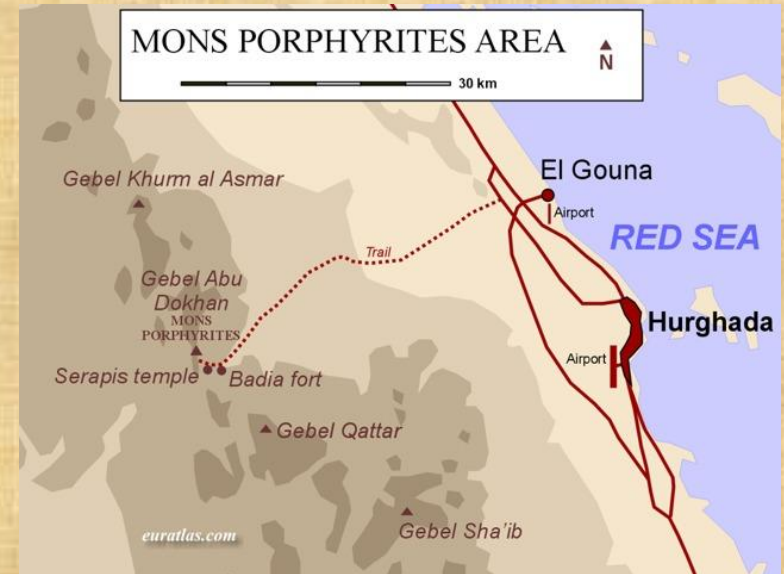
Unit 6 – Hard Stones and Hard Labour:
The Major Imperial Quarries

CLAH7014



Locations, Dates and Purpose (2)

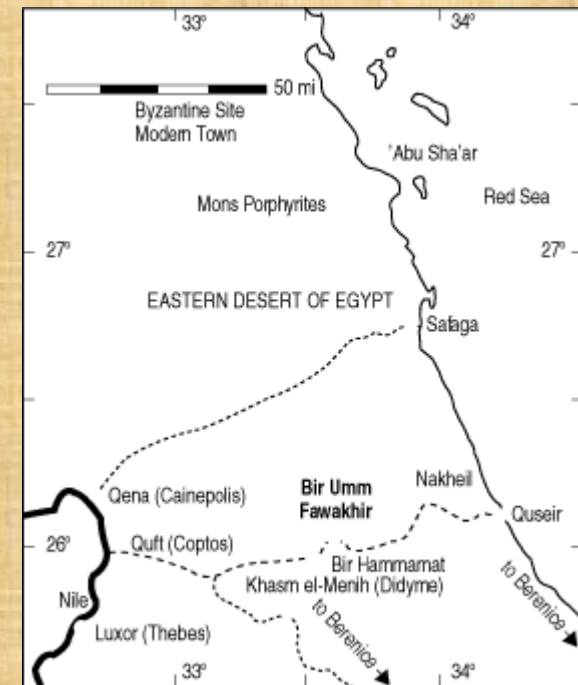
- In the Roman period, the two major areas were worked for their hard-stones the Gebel Dokhân and the Gebel Fatireh.
- Gebel Dokhân equates to what the Romans called Mons Porphyrites, and was quarried for its valuable purple and black porphyry
- Gebel Fatireh equates with Mons Claudianus, which was worked for its black-speckled grey granodiorite/



Quarry Settlements



- Both Mons Claudianus and Mons Porphyrites consisted of a major settlement/central fort but with a number of satellite areas.
- Many of the satellite sites at Mons Porphyrites were 5km or so from the main fort.
- Surveys of Mons Claudianus have revealed about 130 separate quarry sites on the hillsides - many quite small, being on average 20m across.



Periods of Activity

- ▣ Noticeable upsurge in activity around the late-first to early-second century AD at both sites.
- ▣ Mons Claudianus: peak in the reign of Trajan.
- ▣ Mons Porphyrites: first identified by Gaius Cominius Leugas (23rd of July, AD 18); much of the material belonging to the second century AD.



Major Imperial Projects

- ▣ Hard-stones from Egypt were frequently used in major imperial construction projects.
- ▣ A coarse quartz diorite (granito bianco e nero) from Wadi Barud, near Mons Claudianus, was used in flooring of the Domus Tiberiana.
- ▣ Granodiorite from Mons Claudianus were also used in the Pantheon and Trajan's Basilica.



Management and Protection of the Quarry Sites

- ❑ None of the inscriptions or ostraka found in connection to Mons Porphyrites, Mons Claudianus and Wadi Barud makes specific mention of the Prefect of Berenike.
- ❑ Mixture of military administration and monitoring by imperial freedmen.
- ❑ Freedman *procurator metallorum* seems to have managed imperial interests.
- ❑ Mons Claudianus: legionary centurion had oversight. Below a *praepositus* (a man in charge), usually the rank of centurion or decurion.
- ❑ Both offices appears at Mons Porphyrites. Also the presence a *centurio frumentarius* is attested.

Population and Lifestyle

- ▣ Workers at the sites: *tabularii* (keeping account of the quarry stocks), stone-cutters, finishers, smiths, bellow men, water-carriers, carpenters, and guards, etc.
- ▣ Clearly women and children at Mons Claudianus, as indicated by textual (*O. Claud.* 158, I 137, 162), and material evidence.
- ▣ Convict or free labour?
 - Captives from the sack of Jerusalem being sent to Egypt in chains (Josephus *Jewish War* 6.418).
 - Aelius Aristides asserts that the porphyry quarry is worked by convicts (*Orations* 36, 67).
 - Eusebius - Christians sent to the porphyry quarry of the Thebaid region in AD 308 (*The History of the Martyrs in Palestine* 8.1).
 - Documents alluding to workers at these sites suggests freemen who were in receipt of pay, often at better rates than their contemporaries along the Nile Valley.

Extraction and Transport

- ❑ The hard-stones were extracted by chiselling in wedge holes along the lines of the block.
- ❑ Metal wedges were inserted into these and hammered until the rock cracked. Once this happened the blocks could be worked into rough shape for transport.
- ❑ Stone was not carved into its finished form, however, until it had reached its intended destination in order to reduce the risk of damage during transport.
- ❑ Extracted stone lowered down artificial ramps which had been carved into the mountain side; presumably by use of sledges, ropes and pulleys with human and animal labour.



Transport Logistics (1)

- ▣ Distances from Kainopolis (modern Qena) on the Nile to the major quarries was quite significant, 120km in the case of Mons Claudianus and 165km in the case of Mons Porphyrites.
- ▣ Difficult mountain passes which had to be traversed on the route down to Kainopolis.
- ▣ Large numbers of work animals needed to transport the hard stone, especially columns – faunal and textual evidence suggest mainly donkeys and camels.
- ▣ These animals were harnessed to carts that would at a slow pace drag the stone cargoes.

Transport Logistics (2)

- ▣ One document mentions a 50 foot column; at quarry 11 in the Mons Claudianus region, a column of 60 feet in length and probably over 200 tons in weight.
- ▣ 60 foot column would require a team of around 200 camels or 400 mules
- ▣ Routes to Kainopolis:
 - wheel ruts in the tracks
 - animal tethering lines near the stations and external watering tanks
 - Most stations were about 20-30km apart, but at the lower end some were only 8km apart.

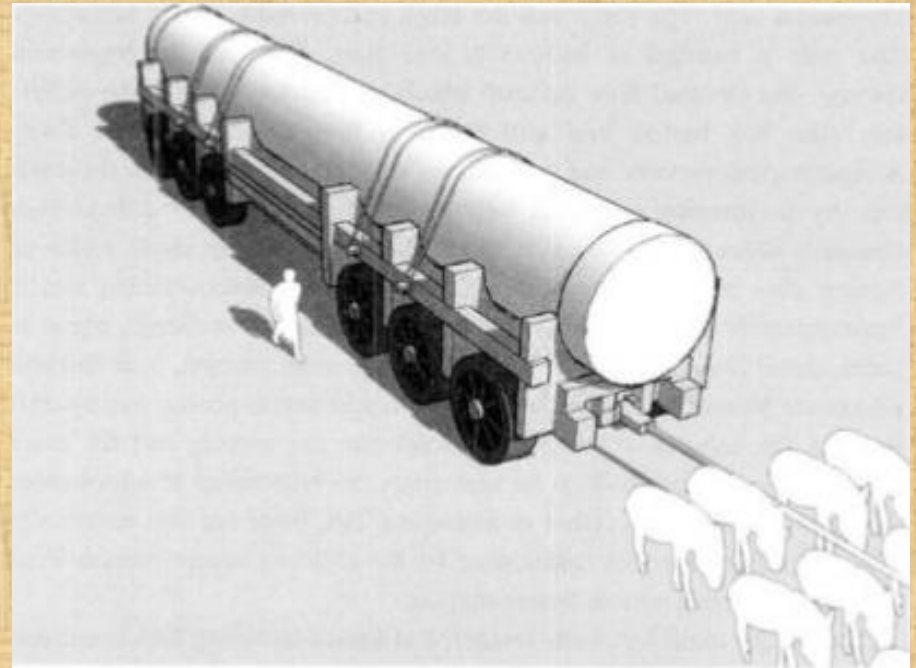


Image from *The Red Land* (2008)