

periods. Those quarries located up to a few kilometers from the Nile may have a larger number of temporary shelters or even stone huts, but still lack settlements. Instead of long-distance roads, there are short slipways leading to nearby construction sites or the river. A canal for water transportation has been recently discovered leading to the Unfinished Obelisk in the Aswan granite quarry, but such constructions are very exceptional. Cairns and standing stones exist, but they are fewer and less obvious than in the desert. Religious or ritual structures, such as small rock-cut shrines and stelae, are commonly present within these quarries, but there are no elaborate temples. Some quarries, however, are located within or very near the precincts of temples and necropoleis with pyramids and mastabas. In general, it is expected that quarries will be located in the im-

mediate vicinity of construction sites, assuming that stone of suitable quality is available. The conspicuous limestone quarry beside Khafre's pyramid at Giza is a good example of this (Figure 6). Many such quarries, however, have gone unrecognized because they are buried under ancient construction or modern excavation debris, or river- or wind-deposited sediments. Others have been destroyed by later building activities.

*Skilled practice and local traditions*

Taking a broad view of the extremely long time period covered in this paper, the archaeology of quarry sites suggests that, contrary to the boasts in ancient quarrying inscriptions, relatively small numbers of highly skilled, free craftsmen constituted the primary workforce. Criminals and enslaved war captives comprised only a minor component.

The numbers of such personnel were rarely in the hundreds and never in the thousands. However, an often sizeable number of auxiliary personnel were present, and these were responsible for the supply and transport logistics, and guard duties. Life must have been hard, especially at remote desert quarries, but there were exceptions such as at the far-away Roman site of Mons Claudianus in the Eastern Desert. This had as many as 900 workers in its most active period, and boasted a bathhouse and wines imported from other parts of the Roman Empire. Although the quarries were of prime importance for the state and its elites, whether in Dynastic or Ptolemaic Egypt or in distant Rome, in recent years there has been a trend among researchers to downplay the role of central state control in favor of local, family- or clan-based entrepreneurship. Research on such issues

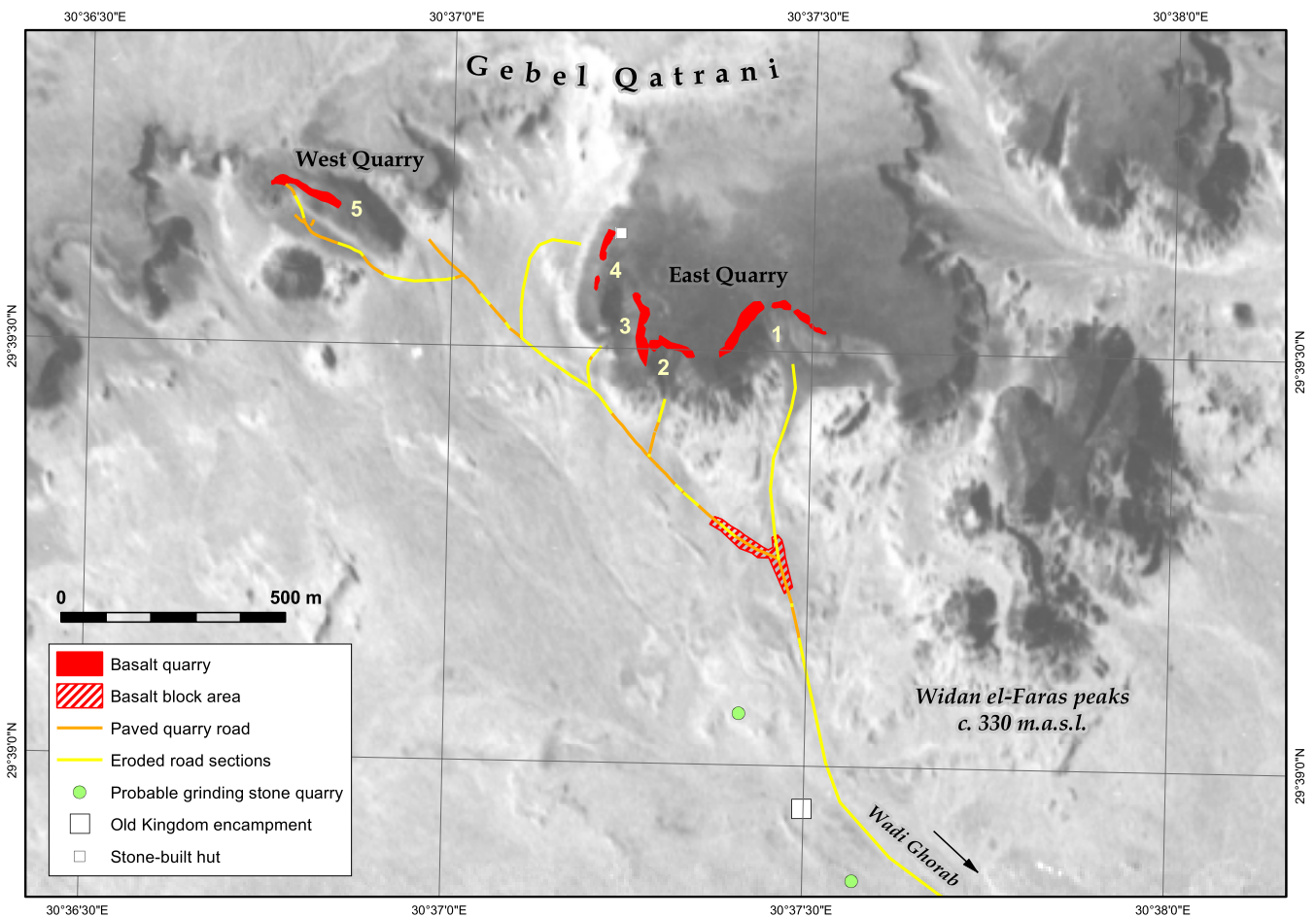


Figure 22. Detailed map of the Widan el-Faras basalt quarry (H2, Old Kingdom) showing the five areas with workings, the network of branching, mostly paved quarry roads, and other associated infrastructure. Map by Per Storemyr based on a survey by the QuarryScapes project with a US declassified Corona satellite image (ca. 1965) used as background.



Figure 23. Widan el-Faras basalt quarry (H2, Old Kingdom). Top: view from the quarry looking south past the peaks of Widan el-Faras toward Lake Qaran just visible on the horizon. Middle left: circular waste piles below the quarry produced by the dressing of basalt blocks. Middle right: part of the paved road leading from the quarry (on the escarpment in the distance) to a quay. This segment of the road is made with pieces of silicified (petrified) wood. Bottom: 300 m-long quay near Qasr el-Sagha with abandoned basalt blocks littering its surface. Photos by Per Storemyr.