## **Chapter 5**

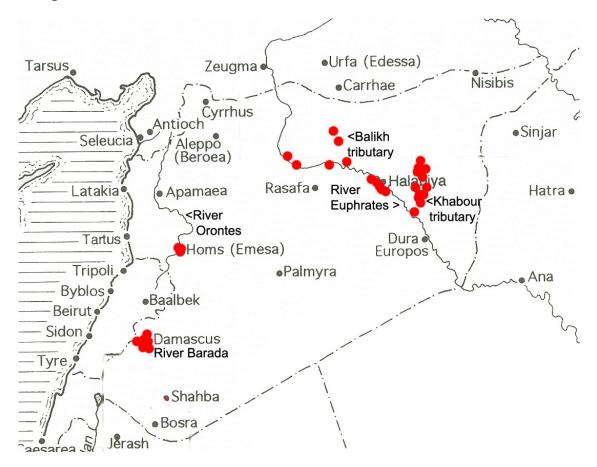


Fig. 5.1: Map of Syria showing locations of irrigation channels and their relations to major rivers and tributaries [drawn: author].

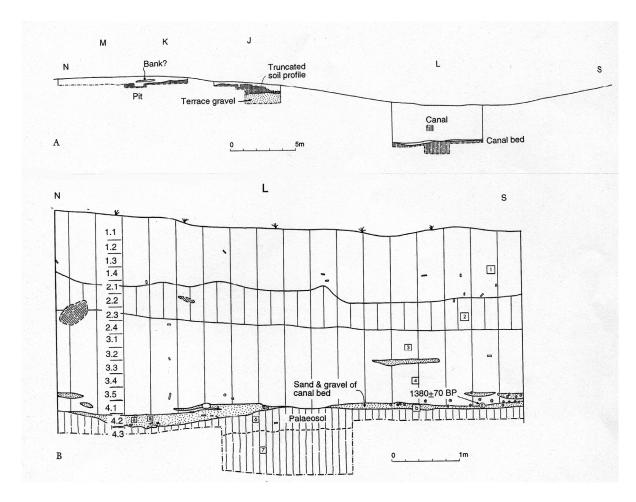


Fig. 5.2: Excavations in the Sahlan-Hammam irrigation channel. A: Generalised cross-section. B: Section in base of channel in trench L [Wilkinson 1998, fig. 5].

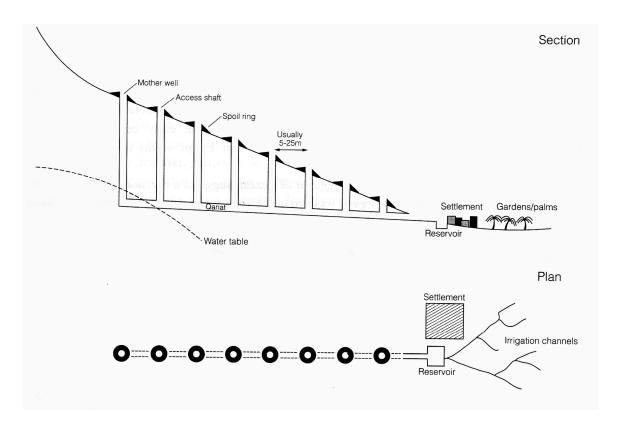


Fig. 5.3: Schematic cross-section and plan of a typical qanat system [Wilson 2003a, fig. 11].

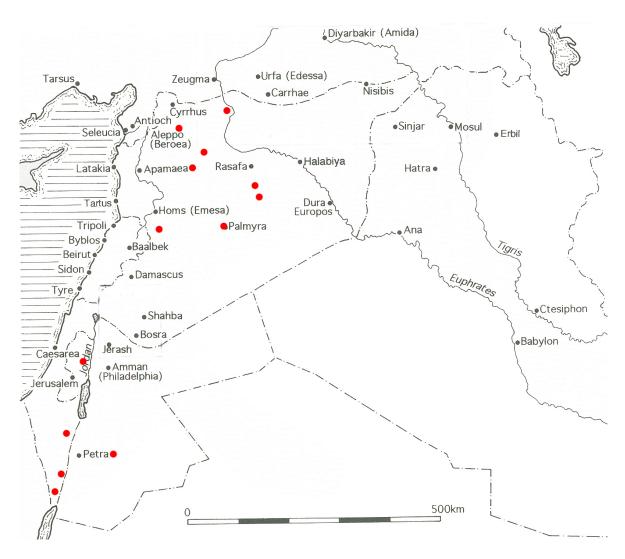


Fig. 5.4: Distribution map of quant sites of Roman and late Roman date in the Near East [drawn: author].

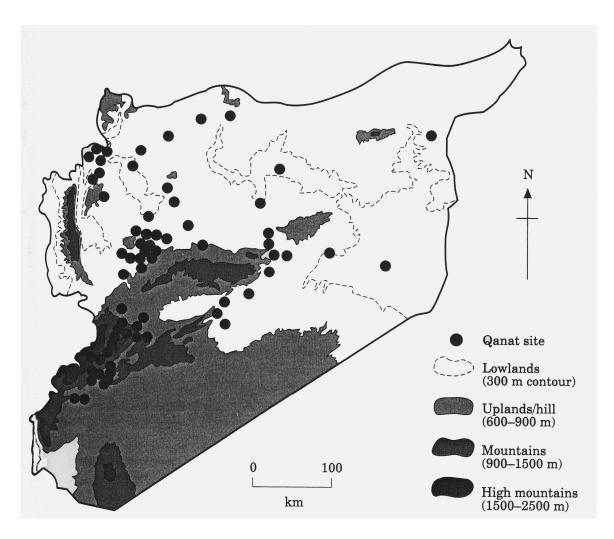


Fig. 5.5: Relationship between qunat sites (of all dates) and topography in Syria [Lightfoot 1996, fig. 5].

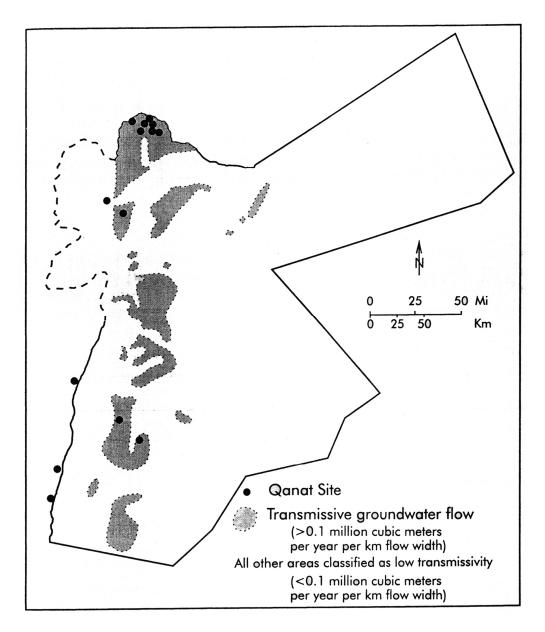


Fig. 5.6: Relationship between quant sites (of all dates) and groundwater transmissivity in Jordan. Shaded areas indicate shallow aquifers with more transmissive groundwater flow (>0.1 million cubic metres per year per km flow width) [Lightfoot 1997, fig. 7].

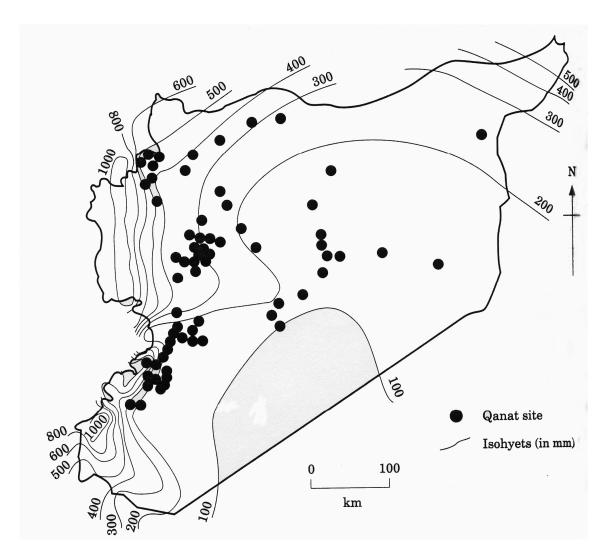


Fig. 5.7: Relationship between qanat sites (of all dates) and average annual rainfall in Syria [Lightfoot 1996, fig. 4].



Fig. 5.8: Interior of the Efca spring flow tunnel, Palmyra, Syria [photo: author].

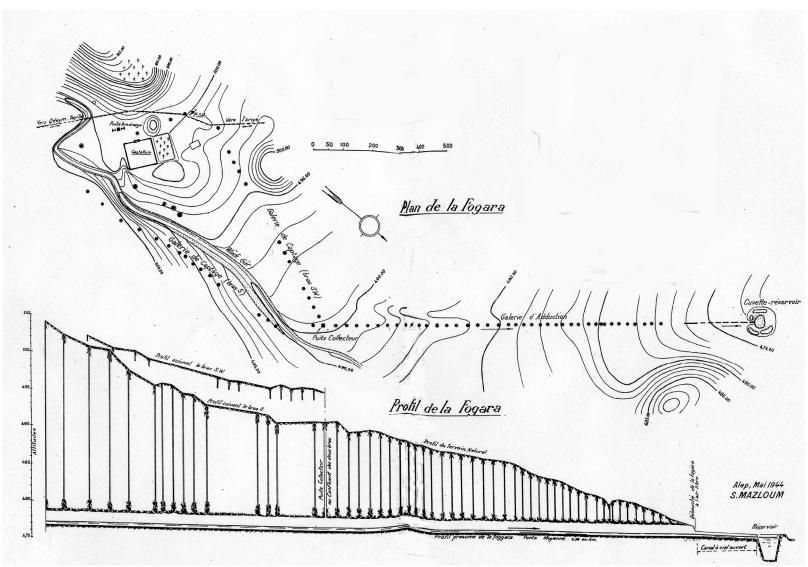


Fig. 5.9: Section (below) and topographic plan (above) of the Amsareddi qanat, Syria [Mouterde and Poidebard 1945, plan 2].

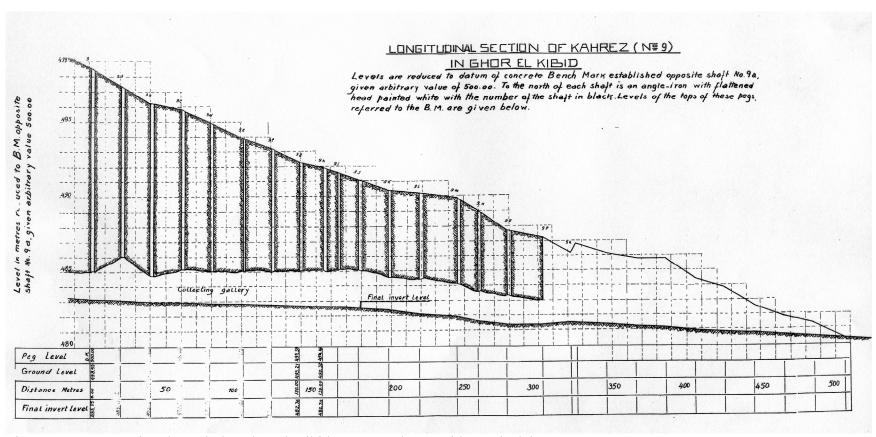


Fig. 5.10: Cross-section through the Ghor al-Kibid qanat, Jordan [Ionides and Blake 1939].

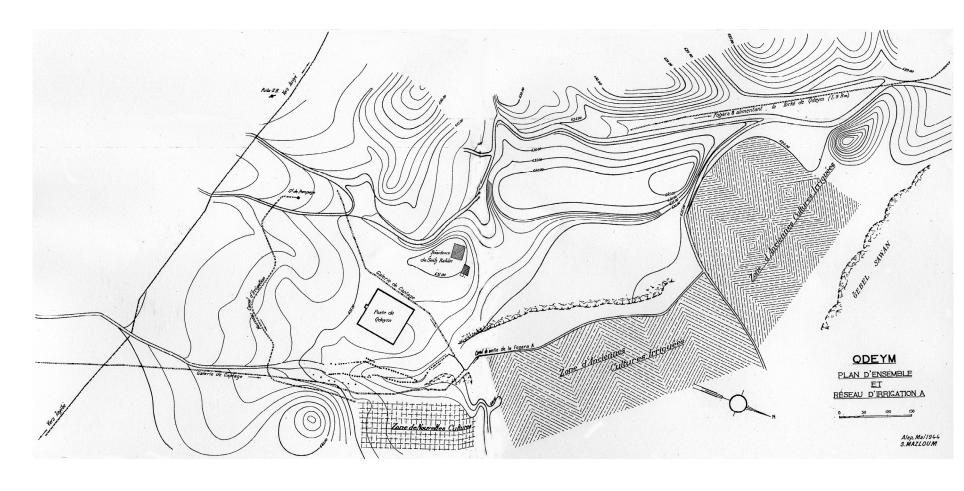


Fig. 5.11: Plan of the landscape in the vicinity of the Qdeym qanat, Syria, also showing the irrigated areas [Mouterde and Poidebard 1945, plan 3].

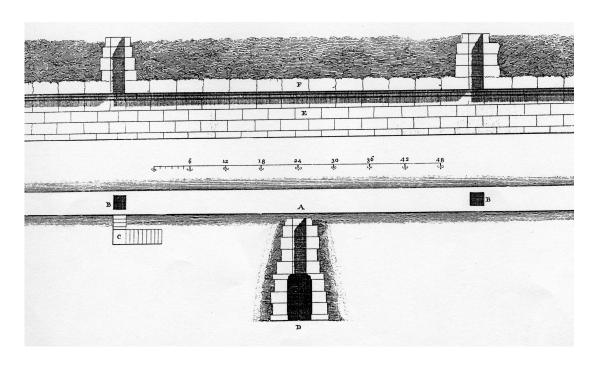


Fig. 5.12: Umm al-Omi qanat, Palmyra, Syria [Wood 1753, plate 27].

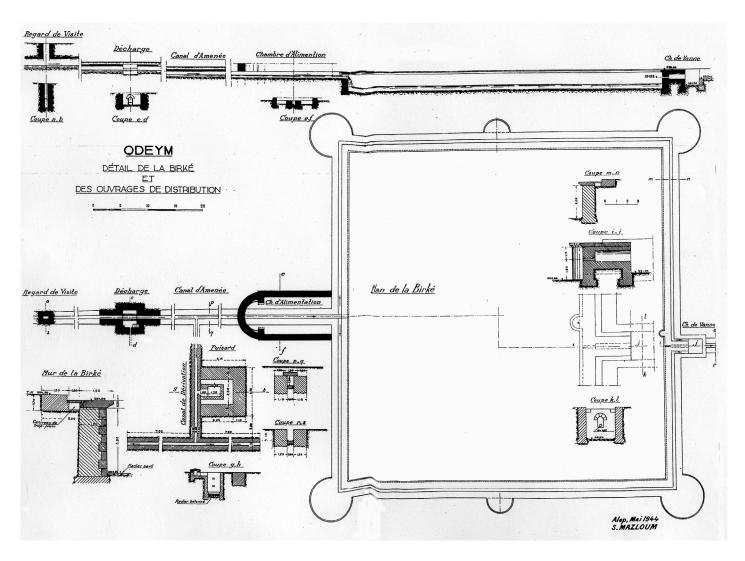


Fig. 5.13: Plan of the terminal reservoir on the qanat at Birke de Qdeym [Mouterde and Poidebard 1945, plan 5].

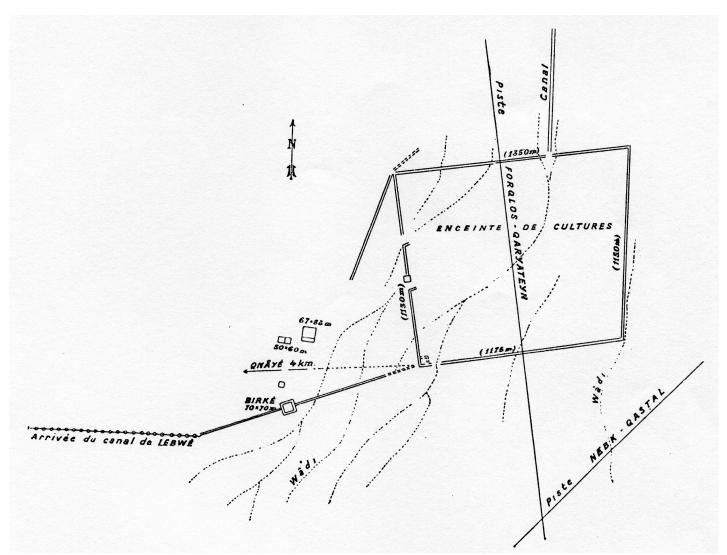


Fig. 5.14: Plan of Qnaye, Syria showing the terminal reservoir (*birke*) and the irrigated area (*enceinte*) [Mouterde and Poidebard 1945, fig. 16].

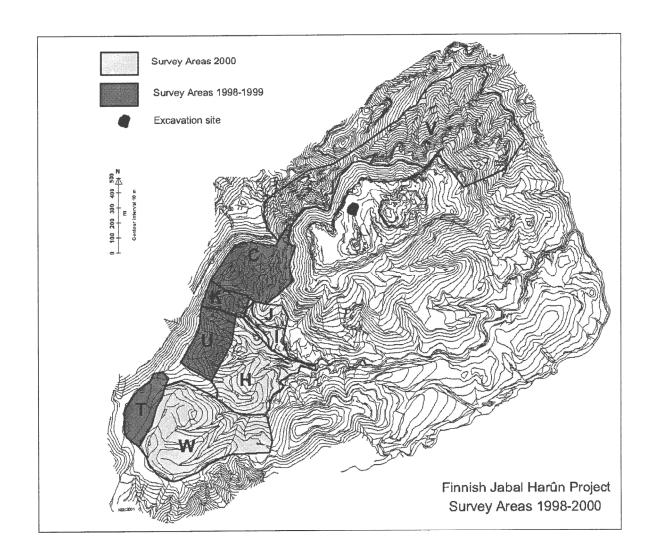


Fig. 5.15: General topographic map of surveyed areas, Jabal Harun, Petra [Lavento and Huotari 2002, fig. 1].

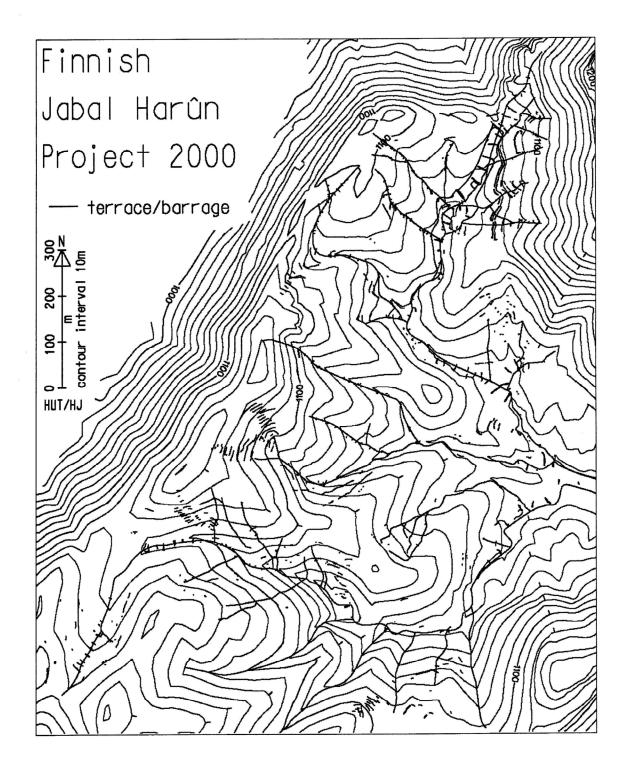


Fig. 5.16: Topographic map showing the main and tributary wadi walls in the southern part of the survey area, Jabal Harun, Petra [Lavento and Huotari 2002, fig. 2].