



Pillars of aqueduct bridging Wadi Jeko at Fenan, Jordan

Ancient Jordan city may rival Timna's place in copper history

Whilst Timna, on the west bank of Wadi Arabah in Israel, has been extensively explored by archaeo-metallurgists over the past quarter of a century, there has been little research eastwards across the border in Jordan.

It is now believed that an area round the ruins of the ancient city of Fenan may eventually rival Timna in importance in the early history of metals.

Fenan is situated to the south of the more widely-known ancient city of Petra, which is about 60 miles north-east of Timna across Wadi Arabah inside Jordan.

By invitation of Dr. Lutfi A. Khalil of the University of Jordan, Amman, and with the support of the University's Institute of Archaeology, Professor H.-G. Bachmann, a member of IAMS Scientific Committee, has visited Wadi Dana and Fenan. He reports slag heaps amounting to about half a million tons, water reservoirs, aqueducts, remains of terraced fields and ruined buildings, all of which indicate the importance of the site.

"First analysis of some of the finds point to a technology which is closely related, if not identical, to that practised during the later periods in Timna," says Professor Bachmann.

"As yet the complete chronology of the Fenan mining and smelting sites is unknown. Most of the visible remains belong to Roman-Byzantine times, but metallurgical activities may go back to the 2nd millennium BC. It is a highly important area and calls for further research."

Rock of Moses

The surrounding area is rich in history. At nearby Petra, the terrace on which the city is built is pierced by Wadi Musa (the valley of Moses), one of the traditional places where the leader of the wandering Israelites struck the rock and water gushed forth. As at Timna, the valley is enclosed by sandstone cliffs veined with every shade of red and purple to pale yellow, and eroded into fantastic shapes.

The Greek name Petra ('rock') probably replaced the biblical name Sela. The site, at once accessible and secluded, appears to have been occupied from Paleolithic times as Acheulean-type tools have been found on the upper slopes. The Neolithic period is represented by a settlement on the road to the northern suburb of Al Barid where dwellings, flint arrowheads and other implements have been uncovered.



Ruins of a monastery at Fenan

Traditionally, Petra was the home of the Horites who were driven out by the Edomites, who in turn suffered defeat by Amaziah, King of Judah, who slaughtered survivors by casting them down from the rock. The Edomites were replaced by the Nabateans who made Petra their centre about 312 BC and later achieved a monopoly of the spice trade since they commanded the routes from Gaza and Damascus to the Gulf of Aqaba. Later Petra became the capital of a state which extended from Jordan to the Negev and to the Mediterranean coast of Al Arish in Egypt.

Smelting site in Wadi Dana, east of Fenan



Fenan: water channel leading to one of several cisterns within the city's boundaries

Petra continued to flourish for some time after the Roman occupation until changing trade routes led to the rise of Palmyra and caused its commercial decline. In the 12th century the Crusaders built a castle there. Otherwise the site was occupied only by wandering tribesmen and it was in this condition when rediscovered for the Western world by the Swiss traveller J.L. Burckhardt in 1812.