

Cultural Change and the Water Systems of Roman Arabia
Christian F. Cloke (University of Cincinnati)

Ancient water systems are often analyzed from a technical standpoint. In comparison, their cultural significance is poorly understood. In the Nabataean Kingdom, urban waterworks achieved great sophistication prior to considerable contact with the Roman world. When Rome annexed this kingdom, fashioning the province of Arabia in 106 C.E., sites such as Bostra and Petra were reconfigured to meet new needs. Yet many water systems in these cities remained predominantly Nabataean in inspiration. At Bostra, where the new provincial government was based, Roman waterworks were put in place to serve the army and bureaucracy of the city, while in the Nabataeans' more ancestral home at Petra, pre-existing lines of urban water supply were maintained for centuries. At more remote sites, like the desert fortress of Humayma, home to Nabataeans, Romans, and a variety of foreigners, a hybrid array of water systems developed, making use of several cultures' hydrological know-how.

This paper analyzes waterworks in Nabataea and Roman Arabia in order to assess cultural change and interaction, demonstrating how developing civic needs and a dynamic cultural landscape affected practical matters of water supply and consumption. This line of inquiry reveals that cities where Nabataean engineering was well-established prior to 106 C.E. were the most resistant to change, while cities with a shorter cultural history were more clearly transformed with the coming of Roman rule. Although a much-needed case study in its own right, this paper also uses new material to illuminate processes of cultural change and exchange in the Roman Near East.