



Archaeogeophysical Studies in the Ruins of Kars-Ani (Turkey) in the 2009 Excavation Season

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The Ani ancient city, which is at 48 km distance to Kars (Turkey), is founded at the banks of the Arpacay River flowing in the vicinity of Turkey - Armenia border and is in the borders of Mevcut Ocakli Village. Recent studies show that the first settlement in Ani ancient city could be in the 5th millennium B.C.(Chalcolithic Period) and moreover, there were some buildings built in the Iron and Bronze Period.

In the early 9th century, Ashot Msaker, who was Bagratuni dynasty (806-827), declared their first capital city at Bagaran, some 40 km south of Ani, and then transferred it to Kars in the year 929. In 961, King Ashot III (953-977) transferred the capital city from Kars to Ani. Ani expanded during the reign of King Smbat II (977-989). Recent research shows that by the early 11th century the population of Ani was over 100,000.

After capture of Ashot, Ani surrendered to Byzantine controlled in 1045. A Greek governor was installed in the city. In 1064 a Seljuk Turkish army, headed by Sultan Alparslan, attacked and captured Ani. Then the Georgians captured Ani in 1124, 1161 and 1174. By the 14th century Ani was ruled by the Turkish dynasties, namely Jalayrids and the Kara Koyunlu. After the Persian Safavids ruled Ani, it became part of the Turkish Ottoman Empire in 1579. A small town remained within its walls until 1650 A.C. and it was completely abandoned by the middle of the 18th century.

Examples of Sasani, Arabic, Armenian, and Seljuk architecture can be found among the Ani ruins. Ani is home to the first Turkish mosque built in Anatolia, namely Ebül Menücehr. The mosque was erected by the members of the Seljuk Dynasty in 1072.

The first archaeological excavations were conducted at Ani in 1892. Since then, several archaeological excavations have been done in Ani.

In the 2009 excavation season, magnetic methods were applied in Ani ruins to find the exact locations of the ruins. Magnetic Gradient Measurements were taken in front of Ebül Menücehr Mosque. After processing of the magnetic gradient data and opening the trenches in potentially promising locations, a road belonged to Seljuk Period was found. There were walls and aqueducts both sides of the road. In addition, the same region, a ceramic container was taken out in a good condition. It might have been used for fragrance or medicine container. Moreover, 6 coins belonged to Seljuk period were found.

Key Words: Ani-Kars, Archaeogeophysics, Magnetic Gradient Methods.