

The main goal of the project is to determine the importance of marble and recreate the image of trade in it in southern Levant of the early Byzantine period (4th-7th century AD). In the ancient world, this material meant both petrographically true marble, i.e. metamorphosed limestone, as well as other rocks with a decorative appearance (e.g. limestone, porphyry and granite). Such raw material did not occur naturally in this area or in its immediate surroundings and was imported from parts of the Mediterranean World hundreds of kilometers away. Given this fact, it is reasonable to ask why so much effort was being put into it. Understanding what marble was used for and in what kind of buildings is key in this regard. Were they architectural details and liturgical equipment imported primarily for the needs of the large quantities of churches built at that time? Or was it commonplace to use this material, e.g. in thermal baths and residential buildings?

In the context of studying the early Byzantine economy, the key task is to determine the origin of marble imported into southern Levant. The most important mining centers for this raw material were located in today's western Turkey, Greece, Egypt and Tunisia. Laboratory analysis of marble samples discovered in southern Levant will be carried out to reveal which of these quarries provided the raw material. Furthermore, the project will attempt to determine whether individual mining centers specialized in the production of specific types of goods such as columns, altars and vessels.

It is also important to determine what the marble trade in southern Levant looked like. Meaning, was this material available only in the Mediterranean coastal region near the port cities it first reached? Or was it being transported in large quantities inland? Our knowledge of the mechanisms governing trade in this material will help determine whether its consumers were located mainly in cities or in villages and in secluded monasteries.

Although this material was one of the most expensive building materials in antiquity, the issue of its use between the 4th and the 7th century in southern Levant is still largely unrecognized. Filling this research gap is important for understanding the significance of this material and trading it in the late antiquity. So far, similar research has been conducted mainly in the field of trade in ceramic vessels and their content and monetary circulation. Including another category of goods in this context, in the form of marble items from the vast and important region, which was southern Levant, will be an important element in the discussion on the economics of the Mediterranean World in the early Byzantine period.

The project will involve a diverse methodology, taking into account traditional archaeological, historical and art historian analyzes, as well as modern archeometric methods, statistical and geographical studies. One of the source bases includes published marble monuments discovered in today's Lebanon, Israel and Jordan. They will be catalogued and classified, taking into account their function and form. Such systematization of the material will allow answering the most important questions related to the use of and trade in this material in southern Levant. Knowledge on this subject will also be expanded to include information from inscriptions or hagiographic texts mentioning which marble and under what circumstances was imported from overseas. Determining where marble was imported from will be based on laboratory analysis. The study will apply e.g. stable carbon, oxygen and strontium isotopes measurements, as well as petrographic and chemical characterization. This will involve the use of objects sampled from excavations in Lebanon, Israel and Jordan. The analysis of marble distribution will use models of terrain accessibility and calculations of the distance between consumer settlements and ports responsible for distribution of such goods.

The publicly available database of marble items and source texts mentioning them, prepared as part of the project, will be a reference tool for archaeologists, historians, art historians, as well as conservators and specialists in the field of cultural heritage management. On the other hand, the results of archeometric analyzes determining the origin of individual forms of marble products (architectural details, liturgical equipment, everyday objects) will constitute the primary comparative basis for future research on trade in this material in the early Byzantine period. Another effect of the research will be the preparation of an analytical geographical availability system that will help understand the impact of terrain factors on the spread of marble in southern Levant.