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Reviews

Vladimír Hašek, Josef Unger: **Religious Architecture in the Czech Republic in the Light of Geophysical Prospection and Archaeological Excavation.**

BAR International Series 2128, Oxford 2010, 90 pages, 73 pictures.

To the publications that deal with non-destructive methods in archaeology we can add this slim volume focused on the geophysical prospecting of religious architecture. Such practices have become increasingly attractive in recent years. One key reason being the ability to examine a site without major intervention, thus preserving it for future generations who will hopefully have better techniques to obtain much more information than is possible today. Arising from current research in this field, in which both authors participate, is the long-term interdisciplinary cooperation of several experts within the “Non-destructive survey of underground space in historic buildings” project. Prior to the initiation of this project both authors published a number of articles on the topic (in such publications as *Ve službách archeologie*) and it could be said that this book is a summary of some of them, enriched by new research of recent years.

The book is divided into several parts. After an introduction outlining the role, function and possibilities of studying religious buildings, there is a chapter that discusses religious architecture and its elements from the 9th to the 18th century, and also includes mention of funeral rites which are closely linked to sacred buildings. Another part of the book focuses on the history of the first research methodology and geophysical prospecting, at least in basic principles, and explains the use of microgravimetry, methods of dipole electromagnetic profiling (DEMP), ground penetrating radar, and other non-destructive methods, such as minicamera survey, which was used in 2005 for research at the royal

crypt of the Cathedral of St. Vitus in Prague Castle.

The main point of the book examines the results of the above-mentioned methods applied during archaeological excavations of church buildings that are clearly and logically divided into several groups according to dating, location (town, village) and functions (church, monastery). The last research group concerns Jewish religious sites. The aim of geophysical prospecting was to observe the masonry foundations of older removed features, find tombs and graves, specify the homogeneity of the environment and lithological properties of the near-surface layers of soils, and also to suggest both perspective and negative locations for situating surface exposure.

One of the first projects where geophysical prospecting methods were used was in the early 1970's in the Chapel of Assumption of the Virgin near Veverří Castle. Investigations detected graves, tombs and other remains.

Geophysical measurements were also performed in Kralovo Pole, in the city Brno, where the goal was to locate the ruined Chapel of St. Vitus from the 13th century. The GPR method was able to determine the exact position of the choir and the double space of the nave. The measurements correspond to existing images of the site. Geophysical methods have been used in research at the Rotunda of St. Catherine in Znojmo, where measurements show the positions of possible graves. Further measurements were performed in Olomouc at several locations in the area of the Cathedral and the Church of St. Moritz. In the first instance results indicated a possible southern limit of the building, in the second the exact position of an already known baroque crypt under the nave of the church was determined. Prospection at Nebovidy using GPR aimed to provide information about the existence of relics of the original parish church and to map them. The data

collected by GPR at the Church of St. Martin in Bohušov confirmed the known tomb, and suggested the possible existence of another tomb or grave. Geophysical and archaeological research in Kurdějov identified an underground corridor in the baptistry of the Church of St. John the Baptist. Mapping the rotunda, the graves and tombs, was the main task at the Church of St. George and the Church St. Peter and Paul in Tasov. Geophysical prospecting in the Church of Master John Huss in Uherský Brod verified the presence of older walls and tombs. The main goal in Třebíč was to locate the position of graves and tombs, and the walls of the Chapel of St. Benedict. Results from using DEMP in Doubravník identified the likely foundation walls of the original 13th century church. In Šumice u Uherského Brodu several anomalies were found that marked the position of a grave or tomb. These were confirmed by archaeological excavation. Geophysical prospecting and archaeological research in the area of the parish Church of St. Francis Xavier showed the possibility of the existence of several tombs, and in one case it was probably a tomb with more places.

These and other relics are described in detail in the book, with pictures of the results of geophysical measurements, and explanations of findings. Other religious buildings mentioned in the book are also accompanied by a photograph (present view), the photograph of the archaeological research and reconstructions using pictures or 3D models. The book introduces only some of the important religious sites that were investigated by geophysical methods, and shows the advantages and disadvantages of the use of these methods. It also shows us that the use of these methods in archaeological research gives us a more detailed picture of important and frequently no longer extant sacred sites in the Czech Republic.

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