## Patterns of Intermittent Abandonment and Reoccupation at the Mayan of Zaculeu, Guatemala (AD 1450 -1550)

## Popular science abstract

The contact of different cultures is very often associated with the clash of different worldviews. Religious differences are probably one of the most significant social problems that many societies had to deal with during the expansion of the colonial powers. In the case of the Americas, the expansion of the Spanish empire involved the imposition of Christianity on the indigenous communities, thus overthrowing their previous beliefs. During the Spanish conquest of Mexico and Central America in the 16th century, many ancient, pre-colonial ceremonial centers were forcibly abandoned by indigenous peoples or intentionally destroyed by the Spaniards in order to suppress indigenous religion. In this way, the Spaniards sought the eventual conversion of the indigenous population to Catholicism. This research project, based on archaeological evidence and historical data, aims to examine how the abandonment of important pre-Columbian ritual centers in the sixteenth century proceeded. An example of such an indigenous ceremonial center was Zaculeu - a Mayan city located in the western part of Guatemala. By analyzing the process of abandoning and re-settling this important site over the decades after the Spanish conquest, the project aims to test the hypothesis whether the Maya, after the arrival of the Spaniards and the imposition of Christianity by them, still built and rebuilt pre-colonial religious architecture according to traditional patterns. The proposed project will answer the following questions: 1) what are the archaeological traces of the temporary abandonment and reoccupation of Zaculeu, and what are the traces of the final abandonment of this city? 2) Were defensive structures such as palisades or low barricades built when leaving and recapturing the city? 3) Were structures that previously had sacred functions used for residential purposes during the reoccupation of the city in the early colonial period?

In order to check whether the indigenous inhabitants of Zaculeu created architectural structures during the reoccupation of the city in the first decades of the colonial period, non-invasive georadar research - GPR (ground penetrating radar) will be carried out. It is a geophysical method that will be able to locate stone platforms and foundations located below the surface of the earth. GPR penetrates the surface of the earth using electromagnetic waves to create an image with visible anomalies. Based on the results obtained with this method, archaeologists will carry out excavations at selected sites that may show promising results in terms of confirming and documenting the hidden architecture revealed by the georadar. Remains of low-rise structures with defensive functions are expected to be discovered, as well as evidence of suspended construction projects. Earlier archaeological excavations in Zaculeu, carried out in the 1940s, revealed several unfinished constructions, which were probably put on hold by the arrival of the Spaniards. Zaculeu is an ideal archaeological site to study the patterns of Mayan abandonment and reoccupation of cities during the conquest. A detailed account written by a Spanish conquistador meticulously describing the siege and fall of this city in 1525 has survived to this day and is a unique testimony to the Spanish invasion of the Mayan highlands. There are also early colonial archival documents that indicate that after the Spanish conquest, Zaculeu was reoccupied.

The proposed project is a novel approach to finding answers to specific questions about the archeology and history of an important archaeological site in the Mayan highlands. In conclusion, the proposed research at Zaculeu will complement existing archaeological work carried out in other parts of the former Maya area, which has focused on understanding the processes taking place during the transitional period between pre-Columbian times and the establishment of Spanish colonial rule. In addition, by analyzing an archaeological site with a relatively rich historical database as a case study, the results of this project will provide new insights for studies on the abandonment and reoccupation of cities by ancient communities.