Cultural Astronomy investigates social aspects of astronomical knowledge and its manifestations in economy, religion and politics. By attempting to explain the dependence of the cosmological and other astronomically-derived concepts on the natural and cultural context, Cultural Astronomy offers an important contribution to our understanding of past societies and of the general processes of cultural evolution. The cultural landscape of Slovenia is distinguished by a large number of Roman Catholic churches that provide a unique dataset from which to examine church orientation using modern scientific methods. This study focused on the significance of church orientations, which project solar or lunar astronomical positions translated into Julian and Gregorian calendar dates. Written sources report that early Christian regulation of church orientation, set in 325 AD in Nicaea, was towards the east. However, what does ‘east’ mean exactly? Configuring the alignment of a church was a complex act. It portrays a specific cosmogony expressed through the astronomical knowledge of the setting of ancient architecture into a multidimensional landscape. The complexity in the use of astronomical knowledge is demonstrated in the diversity of orientation practice. A number of church orientations concentrate around specific events in the solar and lunar cycle (e.g. solstices and equinoxes), while other churches are aligned towards sunrise or sunset on particular Christian liturgical festivals. Orientations show the interconnection between important Christian celebrations days, their antecedent and their architecture. The present study revealed a specific pattern of motivation for church alignment, ultimately exposing a greater depth of thought, processes, and intentionality than has previously been recognized.

Saša Čaval is a lecturer at the Department of Anthropology, Stanford University and a researcher at the Institute of Anthropological and Spatial studies at the Slovenian Academy of Sciences and Arts in Ljubljana, Slovenia. Her research interest lies within Archaeology of Religion, focusing on the religious ideology inbedded in the Late Antique and medieval Mediterranean architecture and landscape, multireligious medieval funerary monuments in the Balkan landscapes and on the acculturative aspects of multireligious societies in the colonial and postcolonial period in Indian ocean.