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PROJEKTBERICHT | RESEARCH REPORT

RESEARCH GROUP (A-I) CENTRAL PLACES
AND THEIR ENVIRONMENT

**FELIX ROMULIANA.
A LATE ANCIENT IMPERIAL
PALACE AND ITS SURROUNDINGS**

Research results of the period from
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Description of research question, approach and results

Research question

The project focuses on geoarchaeological research of the hinterland of the late antique site Felix Romuliana, on the nature of environmental and cultural conditions which formed the complex site and the surrounding landscape and it also tries to determine possible features of the site's central function.

Research methodology and approach

For the purpose of accessing the natural and cultural landscape around Felix Romuliana and their relationship, decision was made to undertake simultaneously archaeological surveys and geomorphological field works, thus both PhD candidates worked together in a so-called tandem. Goals of the surveys and field works were to establish an inventory of surface archaeological remains in the vicinity of Felix Romuliana; determine their nature or function and temporal affiliation; access their natural setting; access to broader scale of the patterns and hierarchies for each chronological period and if possible, to look it through the Central Place model. This last one included analysing on different scales: economical, religious, ideological etc. In the research of landscape evolution in the surrounding of Felix Romuliana geomorphological field observations, mapping and percussion core drillings in 15 locations were carried out. The undisturbed tubed sediments were analyzed in the Geomorphological Laboratories of the FU Berlin. On the sediment samples carbonate content analysis (LOI, TIC/TOC), magnetic susceptibility measurements, PH and electric conductivity measurements were carried out. To have the age model of the drilling cores samples for C¹⁴ dating were sent to the GGA Hanover and to the Poznan Radiocarbon Laboratory. The research of landscape features and topographical elements was also supported by remote sensing data and GIS methods. The surveys and field works were conducted in two campaigns, simultaneously with ongoing archaeological exca-

vations and geophysical surveys. The primary survey covered 15 km² but the final archaeological analysing comprised the whole territory of Eastern Serbia. Data collection on that scale was only possible by library, documentation and archive works. The archaeological part of the summer field campaign in 2009 was fully used for the surface material processing. Information was stored in a shape of archaeological sites database, maps of settlement distribution, catalogues of surface finds, literature database covering relevant topics of the project and GIS analysis and predictive modelling.

Results

The outcome of the field research is the first complete collection of archaeological record in the hinterland of the site Felix Romuliana and its dynamics in relation to Holocene landscape evolution. The fortified palace was constructed on an alluvial fan complex which dumped into the valley of the Seliski Creek and probably also modified the running of the creek. Since the environment of Felix Romuliana is settled and used from the Neolithic Period anthropogenic processes affected the landscape evolution. Gully erosion and mass wasting as soil creeping are appearing in the vicinity of the fortification. Most probably both surface processes can be connected and accelerated with the land use changes since the Roman Period. The collected archaeological data made possible to analyse great changes in the scale and density of settlements. The dating of the sites is ranging from Neolithic period up to Medieval period. In case of the surrounding of Felix Romuliana it seem that the prehistoric activity overruns the later periods. This especially relates to Bronze age period with the largest amount of recovered surface material. It is than followed by apparent hiatus in the early roman period and sees the monumental building activity in the reign of Emperor Galerius which stays in contrast with what seem to be “depopulated” hinterland. Early Byzantine period shows again flourishing and developing of the site’s countryside. Central place model provided good guidelines for re-thinking one complex site such as Felix Romuliana but showed unapplicable in its classical form (data-sets not being representative since they were collected from limited landscape sample). Research changed the portraying of Felix Romuliana as a short living ideological phenomenon in the late antiquity, but rather gave it larger temporal perspective. The surface survey evidence in the hinterland of Felix Romuliana does not directly support either a case 'for' or 'against' the central place question asked in the beginning. It only shows indication for possible changing of that role (in function and scale) in different periods. The palace seemed to play the role of a central place only on a regional and empire-wide scale. There is less evidence to identify it as a central place on a local level. Different mechanisms are imposing themselves for the formation and development of the site, such as economical and industrial factors.

Discussion of the results in the light of current research

The main contribution of this project is that it brings new perspectives in the archaeology of Roman Balkans by application of interdisciplinary research. The region of Eastern Serbia generally lacks in systematic collections of the surface data. This research on the site-specific nature of late antique economic landscape provides a foundation for examining also the geography of ancient settlement patterns and by means of this showed necessity for landscape archaeology approaches in the future archaeological investigations. The research on geomorphology and the percussion core drillings are also the first detailed study on the landscape evolution of the immediate surrounding of Felix Romuliana.

A predictive modeling approach for prehistoric and historic settlement locations has been developed for the vicinity of the Late Roman imperial palace complex Felix Romuliana. The intention was to compare different epochs, cultures, and natural landscapes in the context of human-environmental interactions. The approach was based on geomorphometric parameters that allow a quantitative and objective analysis of the natural landscape and of the archaeological sites. The settlement locations of four different cultural epochs (Bronze Age, Iron Age, Late Roman, and Middle Ages) were extracted and modeled from an archaeological database. The model results allow the characterization of settlements according to their relief preferences. Preferred settlement locations are found on gently inclined slopes and plains as well as in close proximity to valleys, which mostly indicate streams. This pattern is often found among pre- and protohistoric settlements. A model efficiency calculation proved good mathematical quality and clearly showed how settlement locations were determined by natural landscape features.