

Medieval History, Prof. Dr. Gerrit Jasper Schenck

The Institute of History, Department of [Medieval History](#) invites applications for a PHD POSITION (65% OF FULL TIME) being part of the Research Training Group KRITIS.

“Critical Infrastructure” is to be understood as a descriptive and heuristic concept. In the Middle Ages, it facilitates the analysis of simple socio-technical systems with a character of a basic net, which today can be regarded as essentially for the society of the past, which by the contemporaries can be considered as essentially or was even (politically) propagated as essentially. The research focus in the field of medieval studies (6th-16th century) is on the investigation of long-term processes.

The focus is on networked technical infrastructures. The combination of roads with waterways, bridges, stacking areas, port facilities, etc. can, for example, form a network (also for communication purposes). These systems have been considered important and have undergone a process of densification and inter-connection in cities. They include, among others: Roads, pathways, bridges; facilities that use water, e.g. water supply and disposal systems (wells, bucket elevators, pipes, ditches); systems for the commercial, agricultural and aquacultural use of water (mills, irrigation and drainage systems, fish ponds); transport and supply systems (roads, waterways/canals/locks, raft ponds and ditches, seaports and river ports, in general port facilities with cranes, dockyards, etc.).

A special feature of the historical approach is the possibility to observe not only the 'becoming critical' but also the 'becoming uncritical' of individual systems. This can be a consequence of economic or technical changes, but also of social conflicts or extreme events. Thus, the focus is on the 'construction', 'functional crises' and 'protection' of infrastructures.

Medievalist PhD projects might focus on the topic of temporality. This includes time in the sense of historical context, as resilience and vulnerability often are related not only to a technical system, but to the whole society in question. As well, long-term developments might be addressed (f.ex. slow processes of deterioration as a result of material ageing processes vs. critical events as sudden disasters). Infrastructures may be analysed as producing rhythms in everyday life, or as being results of time layers, as they grow over decades, materializing components from different times, for example roman streets and aqueducts from late antiquity through the middle ages until the Renaissance, changing function and role several times. A particular focus is on the dynamics of infrastructures in a double perspective: the dynamics triggered by infrastructures on or in societies and the dynamics acting from society on infrastructures (circulation, transformation and concept of system of systems).

Of particular importance are the criticality of the infrastructure as well as its material, socio-cultural, religious and political dimensions (e.g. planning, construction and maintenance, prevention of breakdowns, engineers as specialists, administration, brotherhoods/cooperatives/foundations as sponsors, safe-conduct, station for charging and storage, guesthouses, conflicting use, representativeness and symbolism of wells and bridges).

Your application should address one or more of the above mentioned aspects and should reflect the “key concepts” of the Research Training Group. Please address, in your proposal, the conceptual framework, the empirical focus, possibly the source material you have in mind, and sketch a preliminary time schedule for your work. For further questions, please contact your potential supervisor [Gerrit Jasper Schenk](mailto:gerrit.schenk@tu-darmstadt.de) (gerrit.schenk@tu-darmstadt.de).