

## Agent-based Modelling and Simulation for Analysis of Bronze Age Life

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**Abstract.** Agent-based modelling and simulation helps to analyze and predict behavior of individuals in various environments. This contribution applies agent-based modelling and simulation on a historic scenario: it investigates life at Bronze Age in the former mining village Hallstatt in Austria. The model not only mimics the work of individual miners, but also work for production of nutrition, work for wood production. Parameters for the model are derived by archaeological findings and by experimental archaeology. Main interest lies on the time consumption to process the working tasks and on the time consumption for the traveling times and transportation times. Especially travelling times to the fields with crop production, which were situated remote from the mining settlement, are investigated: various simulated scenarios give hints for a second settlement – a new challenge for the archaeologists.

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