

ABSTRACT SUBMISSION

Movement and non-urban complexity in Iron Age Southeast Arabia

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Abstract

Iron Age Southeast Arabia (1300 – 300 BCE) offers an opportunity to study landscape-scale social relations in a non-urban, and likely highly mobile context. This is a settlement pattern in which a decentralized system of settlements, without the size or power to coerce each other, create a tightly knit exchange network and widely shared material culture. During this period, settlements become more numerous, are founded more varied environmental zones, and sometimes have new forms, without becoming urban. This paper focuses on movement as a key element in creating and maintaining this network and uses origin-independent GIS methods to model pedestrian accessibility. From-Everywhere-To-Everywhere models and Accumulated Cost Corridors provide consistent and replicable estimations of accessibility to consider the landscape's affordances and constraints on movement. This paper models the accessibility of the landscape and the relative accessibility (or inaccessibility) of Iron Age sites at regional and local scales to understand the variable roles played by this network of non-urban settlements and their management of their local accessibility landscapes.

Keywords

landscape, GIS, pedestrian, simulation

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