

COMPARATIVE STUDIES IN LANDSCAPE ARCHAEOLOGY

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ABSTRACT

This cumulative doctoral thesis in landscape archaeology incorporates results from ten years of research and focuses on prehistoric patterns of settlement in South Africa, Syria and southern Germany. By studying the development of the natural environment and its effect on human populations, we can observe the dynamics of change over time and space. This approach helps to explain the nature of human adaptation and settlement within an environmental context. These studies complement the field of archaeology by integrating a variety of natural scientific disciplines, including geology, pedology, geomorphology, geography, paleontology, zoology, botany and palynology. The research presented here illustrates the benefits gained by incorporating results from these fields.

The primary focus of this work has been in South Africa at 23 localities in the Geelbek Dunes and the Anyskop Blowout. These localities provide insight into the settlement patterns of the Earlier, Middle and Later Stone Age inhabitants of the coastal strandveld of the Western Cape. The research strategy employs the movement of mobile sand dunes to investigate large surface areas that have been exposed by deflation. The finds lie on the surfaces of three ancient dunes and three calcrete horizons whose ages allow the finds to be bracketed into distinct periods of time. The presence of more than 30,000 lithic artifacts, marine and terrestrial faunal remains, ornaments, pottery and stone hearth features attests to the intensity of the occupations. While Earlier and Middle Stone Age people left mostly ephemeral traces, the Later Stone Age inhabitants occupied specific parts of the landscape for longer periods. The localities of Geelbek document specific activities of its Stone Age inhabitants including hunting and retooling, flint knapping, cooking, material working and bead manufacturing.

The research also made use of a similar approach in the countryside north of Damascus, Syria. Hundreds of archaeological localities provide insight into the settlement patterns of the Lower, Middle, Upper and Epipaleolithic and Neolithic inhabitants of this arid environment on the eastern flanks of the Anti-Lebanon Mountains. The research strategy encompassed survey on a regional scale to investigate land surfaces that have been exposed by geological forces. Patterns of settlement indicate a varied strategy of landuse. Paleolithic inhabitants were highly mobile and used all of the landscape, while settlement during the Epipaleolithic focused on specific geographic landforms, such as water sources and cliff lines with good vantage points. During the Neolithic, settlement moved from the highlands into the desert lowlands where lakes were present. Detailed excavations at two stratified sites provided chronostratigraphic control for finds from the Epipaleolithic and Neolithic periods.

Research in Baden-Württemberg and Bavaria, Germany provided a basis for examining settlement patterns in a humid, temperate environment. Vegetation and thick layers of sediment preclude the types of surveys conducted in South Africa and Syria. Instead, research focused on further investigations near previously documented sites, as well as exposures at quarries, road cuts and river banks. While both approaches were less successful in producing new sites, the survey nonetheless resulted in the discovery of two new Middle Paleolithic sites. The first in the Upper Rhine Valley was an ephemeral occupation in a swampy area along the Rhine River, while the other was a mammoth kill site in a ravine near the Black Forest.

These studies in landscape archaeology underscore the highly fluid and adaptive nature of Stone Age and Paleolithic hunter-gatherers and reflect their interrelationship with the environment. The data suggest that the economic activity associated with being a hunter-gatherer triggers their highly mobile and successful pattern of landuse, which in turn enables their flexible and diversified behavior.