HEALTH, LABOR, AND POLITICAL ECONOMY:
A BIOARCHAEOLOGICAL ANALYSIS OF THREE
COMMUNITIES IN PROVINCIA ARABIA

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ABSTRACT

This dissertation introduces an example of integrating biological, textual, and artifactual evidence to produce a socio- and political-economic history of the Roman province of Arabia and the Byzantine province of Palaestina Tertia. This investigation focused on the interaction between the imperial administration and military and three communities: 1) the pastoral nomads at Zabayir Zahir edh-Dhiyab in central Jordan; 2) the urban population of the prominent trade and production center of Aila on the Red Sea; and 3) the villagers in the agricultural community of Rehovot in the north central Negev.

The available textual data on the Classical Near East were combined with archaeological interpretations and bioanthropological analysis while recognizing the interpretive limitations of these data sets. Drawing from current arguments in historical archaeology, critical examination of the creation, deposition, and discovery of documentary information and material culture served to deconstruct the potential
subjectivity of these data. In addition, extrinsic and intrinsic biases of cemetery-derived bioanthropological information were outlined and assessed within each context.

Evaluation of non-specific indicators of stress provided information on health, quality of life, and access to nutritive and medical resources in each community. Migration was analyzed through comparison of $^{87}\text{Sr}/^{86}\text{Sr}$ isotopes values in tooth and bone to identify individuals who experienced a change in residence between childhood and immediately preceding death. Quantification of osteoarthritis, vertebral osteophytosis, and skeletal trauma served as an indirect reflection of activity levels and patterns in each community.

Interpretation of bioanthropological results within the context of current historical and archaeological knowledge discovered interaction with the Roman and Byzantine administrations affected access to resources, population movement, and activity patterns. Zabayir held a position of power over the Roman military through their knowledge of the local landscape. Rehovot, on the other hand, was more susceptible to administrative demands and intervention than the other two sites. Aila benefited from the diverse economic opportunities present at the site and its role as a major maritime and overland trade center. Results from this investigation underscore the value of bioarchaeological interpretations in the creation and expansion of historical narratives.