

THE UNIVERSITY OF CHICAGO

BEYOND THE WALLS OF JERICHO: KHIRBET AL-MAFJAR AND THE SIGNATURE
LANDSCAPES OF THE JERICHO PLAIN

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BY

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To Mom and Dad x 2

“Potrei dirti di quanti gradini sono le vie fatte a scale, di che sesto gli archi dei porticati, di quali lamine di zinco sono ricoperti i tetti; ma so già che sarebbe come non dirti nulla. Non di questo è fatta la città, ma di relazioni tra le misure del suo spazio e gli avvenimenti del suo passato.”

“I could tell you how many steps make up the streets rising like stairways, and the degree of the arcades’ curves, and what kind of zinc scales cover the roofs; but I already know this would be the same as telling you nothing. The city does not consist of this, but of relationships between the measurements of its space and the events of its past.”

Italo Calvino, *Le città invisibili*

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ABSTRACT

DISSERTATION TITLE: Beyond the Walls of Jericho: Khirbet al-Mafjar and the Signature Landscapes of the Jericho Plain

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This dissertation offers a new understanding of Khirbet al-Mafjar, an early Islamic palace complex just north of the city of Jericho, by using a GIS-supported analysis of the physical and sociocultural landscape of the Jericho plain. The methods used in this dissertation grew out of the assumption that the distribution of settlements of the Jericho plain depended on the natural environment, and that analyzing the evolution of settlement distribution in the Jericho plain from the Hasmonean through Umayyad periods (mid second century BCE to mid eighth century CE) would shed light on some of the rationale behind the placement, function, and design of Khirbet al-Mafjar and other settlements on the Jericho plain.

The first chapter discusses the methodology used in the dissertation, which integrates a landscape model with a basic settlement typology. The second chapter focuses on Jericho's urban core, the population center to which all other settlements, including Khirbet al-Mafjar, responded. The third chapter discusses the settlements of the Jericho plain that formed the context into which Khirbet al-Mafjar was built. The fourth chapter focuses on Khirbet al-Mafjar itself, and discusses its features with respect to both its local context, and the objectives and interests of its Umayyad builders.

INTRODUCTION

Just over two kilometers north of the city of Jericho stand the ruins of Khirbet al-Mafjar, a palace complex built in the first half of the eighth century CE by a member of the Umayyad dynasty. Though sited on the Jericho plain, one of the oldest centers of civilization, and one with a history that has been chronicled over centuries by the many different cultures that have lived and visited there, Khirbet al-Mafjar is without mention in any known historical texts. In this absence of written sources, Khirbet al-Mafjar has been studied mainly through archaeological excavation and art historical assessment, methods that both start with the monument itself. This dissertation seeks to provide a new perspective that starts with the surroundings of the site, offering an examination of the physical and cultural context in which Khirbet al-Mafjar was built.



Figure 1: General location of the Jericho plain (after Hirschfeld 1992, p. 7, map 2)

Khirbet al-Mafjar is part of a sweeping historical narrative that saw the Umayyads consolidating rule, forging a new cultural identity, and defining Islam as a distinct religion. This dissertation grows out of the observation that human settlements are shaped by both broader cultural and historical trends, as well as the physical and environmental conditions of their sites.

To better understand Khirbet al-Mafjar, this study attempts to connect the palace complex with these larger historical themes as well as with the dynamics of its physical landscape.

To do so, this dissertation investigates and develops methods for using landscape archaeology to analyze links between settlement patterns and their socio-political context. Such an examination of the relationship between natural and social landscapes poses a problem of cultural history, of the way in which the values and objectives of different cultures have shaped the settlement imprint of the Jericho plain, thereby allowing insights into Khirbet al-Mafjar (or other sites) that could not be derived from archaeological examination focused solely on the site itself.

In order to gain this new perspective on Khirbet al-Mafjar, this dissertation surveys the evolution of settlement distribution in the Jericho plain from the Hasmonean through Umayyad periods (mid second century BCE to mid eighth century CE), and particularly in the Byzantine and early Islamic periods. By constructing a diachronic picture for the connections between settlement typology and environmental conditions, and the ways different communities interacted with each other and the environment over time, a new vision of Khirbet al-Mafjar comes into focus.

This dissertation begins with the Hasmonean period because it marks a significant break in the settlement pattern of Jericho: the altering of the physical landscape through the use of large-scale water supply systems and the settlement landscape in the context of foreign patronage. Along with their successor, Herod, the Hasmoneans bridge the gap between Alexander and Augustus, between the Hellenistic and Roman periods, a time in which Jericho played an increasing role as a center of a road network linking the cities of the Judean hills with the Jordan Valley and beyond. In the Roman period, the struggle between Jewish rebels and

Roman interests led to a concerted effort by the Roman military to establish command over Judaea, including increased control over Jericho, the result of which was the evolution of Jericho as a Roman city.

Analysis of these earlier periods provides a background for archaeological patterns of the Byzantine and early Islamic periods, toward which this research is ultimately directed. In particular, a changing interaction between the dominant players and different types of built sites over time is part of the background for understanding the settlement landscape which Khirbet al-Mafjar enters.

Methodology Overview

In order to gain insight into the context in which Khirbet al-Mafjar was built, this dissertation starts with the most basic of premises: human groups that settled in Jericho chose locations within the Jericho plain based on cultural identity, ambitions, and needs. Put another way: based on physical features, different areas of the Jericho plain have been conducive to different types of settlement. There is an underlying pattern of interactions between human beings and the pre-existing natural conditions in Jericho, and by looking for such patterns, we can gain a new understanding of its settlement history. Using this premise to understand the historical process necessitates two levels of analysis, one natural and one social. The natural level of analysis creates a landscape model for the physical structure of the Jericho plain. The social level of analysis defines a settlement typology to classify the settlements of the plain during the time period in question. These two levels of analysis are superimposed, allowing the physical model and settlement typology to illuminate a system of relationships. The simplicity

of this approach means that it can be applied not just to the Jericho plain, but to other landscapes as well.

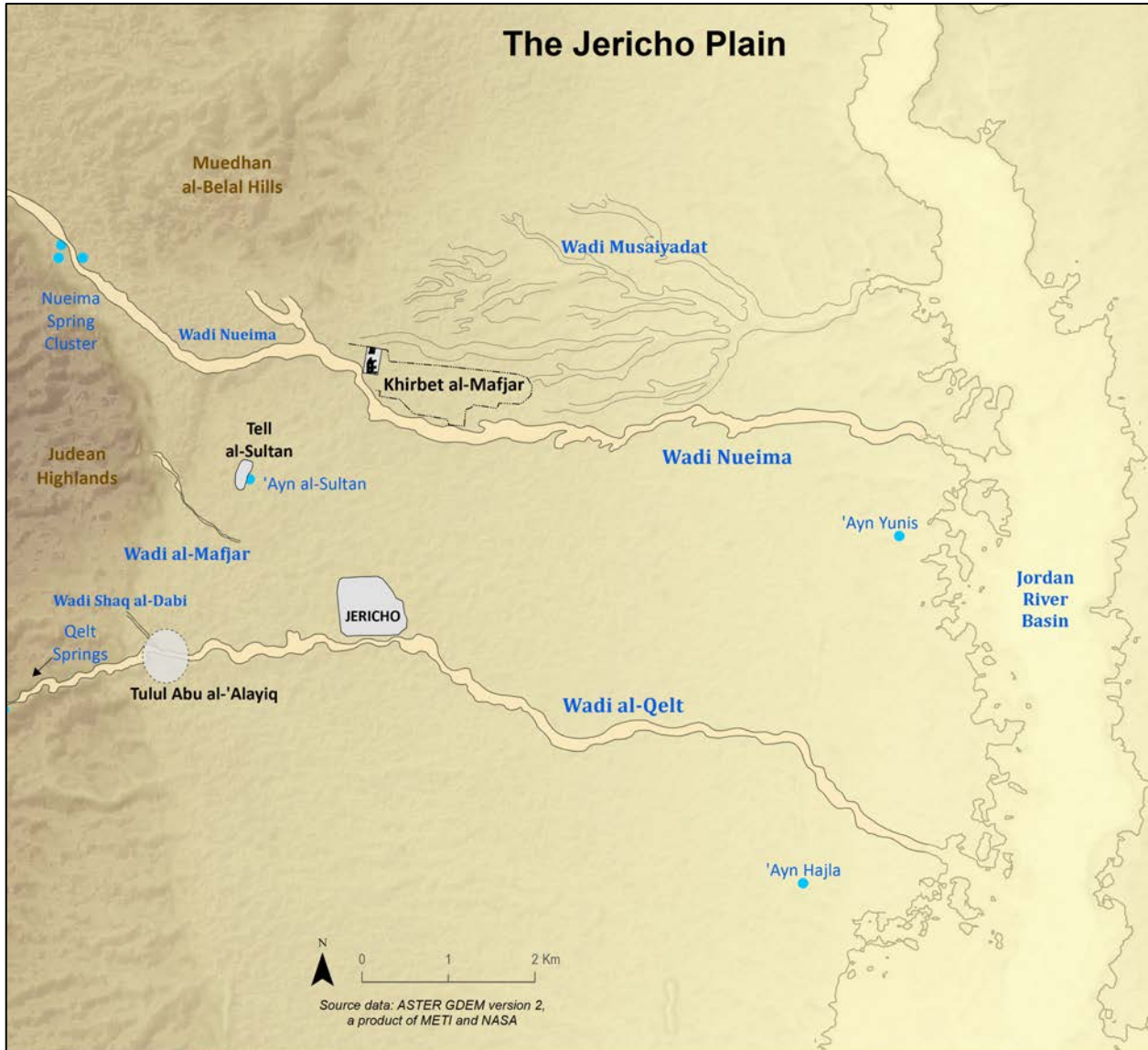


Figure 2: Physical features and key sites of the Jericho plain (GIS plan created by author)

Landscape archaeology for the Jericho plain

Jericho has a long history and a long association with the discipline of archaeology. The Jericho plain is home to three archaeological sites of immense importance and renown: 1) Tell al-Sultan, perhaps the most famous early city in the Near East, over ten thousand years old; 2) Tulul Abu al-‘Alayiq, a series of palaces and gardens built by Hasmonean kings in the second century BCE and expanded in great luxury by Herod the Great; and 3) Khirbet al-Mafjar, the eighth century CE Umayyad palace complex and agricultural estate. These sites have each been the subject of years of sustained archaeological investigation. Tell al-Sultan is most closely associated with Kathleen Kenyon and the work she did in the 1950s, and recently an Italian team from the University of Rome La Sapienza has been conducting fieldwork there. Ehud Netzer, who spent much of his career digging Herodian sites, has been the main excavator of Tulul Abu al-‘Alayiq. For its part, Khirbet al-Mafjar was first excavated by Dimitri Baramki and Robert Hamilton from 1934-1948. Renewed excavations were begun in 2011 under the aegis of the Jericho Mafjar Project, a joint Palestinian-American archaeological endeavor directed by Hamdan Taha and Donald Whitcomb and consisting of members of the Palestinian Department of Antiquities, researchers from the University of Chicago (including the author), and other international scholars.

These projects have produced a substantial corpus of published volumes, and these sites dominate discussion about Jericho in the secondary literature. But for the most part these volumes take a narrow view of settlement and time period. None addresses the fundamental question: Why, despite a continuity of natural conditions, does the settlement pattern of the Jericho plain ebb and flow throughout history between different sites in the landscape? The

recent publication by the Università di Roma La Sapienza, *Archaeological Heritage in the Jericho Oasis: a systematic catalogue of archaeological sites for the sake of their protection and cultural valorisation*, is the study that comes closest to confronting this problem, but the project's stated aim is to create a catalogue of sites rather than develop a coherent framework for understanding interactions between settlement and environment.¹

This dissertation offers a new model by which to explain historical development of the Jericho plain based on the identification of patterns that shaped Jericho's cultural landscape. This approach has been influenced by two seminal works not directly related to Jericho. In the first, *Archaeological Landscapes of the Near East*, Tony Wilkinson outlines the basic stages of landscape analysis. He writes that "landscape features may form a landscape "signature," which comprises a coherent group of features that can be shown to relate to a single entity or time period...Although individual features are difficult or impossible to date, the overall signature can be seen to belong to a broad phase of landscape history."² In order to understand the landscape signature associated with Khirbet al-Mafjar, we need a new emphasis on empirical landscape analysis, something that has not been done comprehensively, especially for the Byzantine and early Islamic periods.

This dissertation was also influenced by the monumental work by Paul Wheatley, *The Places Where Men Pray Together: Cities in Islamic Lands Seventh Through the Tenth Centuries*. The foundation of Wheatley's work is the account of al-Muqaddasi. Like the tenth-century CE geographer, Wheatley provides a systematic outline of urban settlement patterns in each region

¹ Lorenzo Nigro, Maura Sala, and Hamdan Taha, *Padis I: Archaeological Heritage in the Jericho Oasis: A Systematic Catalogue of Archaeological Sites for the Sake of Their Protection and Cultural Valorisation*, Rome La Sapienza Studies on the Archaeology of Palestine & Transjordan (Rome: La Sapienza Expedition to Palestine & Jordan, 2011).

² T. J. Wilkinson, *Archaeological Landscapes of the Near East* (Tucson: University of Arizona Press, 2003), 11.

under question. Most useful for the purposes of this dissertation is Wheatley's treatment of palatine complexes. Wheatley traces the tradition of building large architectural assemblages comprising the principal administrative agencies of government with imposing caliphal residences usually constructed at some distance from the pre-existing urban core. Following Wheatley, this dissertation views Khirbet al-Mafjar as a nexus of functions, discussing the site as a locus for the material expression of religious, administrative, and economic elements.



Figure 3: Aerial photo of Khirbet al-Mafjar and its surroundings (looking south; taken by author)

Organization

In the chapters that follow, this dissertation will build an integrated analysis of the physical landscape of the Jericho plain and its social history as an arena for a tension and exchange between a central urban core and its surrounding settlements, a process linked to values and socio-political context. The intent of these four chapters is to describe the conclusions of analysis in a systematic fashion, starting with the basic premises that shape the

model, and working through the evidence revealed about the major historical eras – Hasmonean/Herodian, Roman, and Byzantine – that set the context into which Khirbet al-Mafjar was inserted.

Chapter One describes a methodology developed for analysis of the Jericho plain, looking at both the creation of the landscape model and the basic settlement typology. Before investigation of specific sites, it is necessary to establish the structural parameters within which they operate. These parameters begin with the physical environment of the Jericho plain, which offers a varied geological, topographical, and hydrological fabric for settlement. These natural features are used to divide the Jericho plain into ten distinct settlement zones. In doing so, the chapter seeks to demonstrate that the merit in creating a model of analyzable components lies in the ability to test a series of common attributes and look for patterns across the landscape. Each settlement zone is considered in light of its hydrology, amount of usable space and agricultural land, access to routes, and access to or seclusion from the urban core. The chapter then gives a brief description of the three basic types of settlement that will be examined in subsequent chapters: urban core, satellite communities, and elite complexes. By classifying these three settlement types it becomes possible to look critically at the link between archaeological evidence and the way we conceptualize the cultural landscape of the Jericho plain.

The next two chapters build the framework for a diachronic picture of the interaction between the urban core and its satellites. Chapter Two uses the landscape analysis presented in Chapter One to investigate the urban core of Jericho. Our knowledge of the urban core that followed Tell al-Sultan remains clouded. This chapter argues that the location of the Byzantine and early Islamic city in the area of present-day Jericho is linked to two elements of the cultural landscape: the natural flow of water from ‘Ayn al-Sultan in a southeast direction towards this

area, and the crossing of the Roman road from Jerusalem over the Wadi al-Qelt in this area. This chapter seeks to synthesize archaeological and written evidence for the Byzantine and early Islamic core, discussing historical and epigraphic sources, presenting evidence from recent excavations and reevaluating older survey data. In doing so, it examines the economic, political, and social infrastructure for Jericho's extended urban system, a system that expanded greatly in the Byzantine period and continued into the early Islamic period. Finally, an examination of ancient and present-day core raises problems related to how the totality of our knowledge of Jericho has been distorted by modern development.

Chapter Three investigates satellite settlements, discussing a variety of manifestations of the core-periphery relationship over time. In particular, the link between settlement location and settlement type is explored. In the second century BCE, the Hasmoneans built Tulul Abu al-'Alayiq, an elite complex later taken over and expanded by Herod. Jericho became a center for the production of cash crops, especially balsam, palms, and wine grapes, all the property of foreign kings from Jerusalem. This chapter examines how the location chosen for Tulul Abu al-'Alayiq reflects Hasmonean objectives status, contextualizing the complex within the natural and settlement landscape. It then moves to the impact of direct Roman rule in Jericho, especially the establishment of a road system that established the urban core as a nexus of routes leading to other centers in Syria-Palestine. Finally, the proliferation of monasteries in the Byzantine period is investigated in the context of increased ties between Byzantine political and religious establishments and the implications for these ties on the settlement profile of the Jericho plain in this period.

Chapter Four focuses on the archaeology of the Umayyad Jericho plain, and above all the elite complex of Khirbet al-Mafjar. It discusses the ways in which Khirbet al-Mafjar was

designed to take advantage of the physical landscape, but also how the structural framework of the architectural complex was designed to fit the cultural framework of the Umayyad state. This chapter also compares and contrasts the overall Umayyad settlement program with previous periods. The landscape model presented in Chapter One demonstrates the similarities in site locations between Khirbet al-Mafjar and Tulul Abu al-‘Alayiq, similarities that are explained in the context of foreign patronage and tensions with the urban core. But this does not tell the whole story of the Umayyad imprint on the Jericho plain. Through analysis of early Islamic evidence, in particular archaeological evidence from outside the limits of Khirbet al-Mafjar, a pattern of Umayyad development in which the new ruling power negotiated a cultural landscape in which they were still a demographic minority is revealed. In the end, this study returns to one of the oldest definitions of landscape archaeology: archaeology beyond the site.

CHAPTER ONE -- Modeling the Landscape of the Jericho Plain

This chapter presents a methodology based on two levels of integrated analysis: a landscape model founded on the natural environment and a typology of settlement types which occupied that environment. These two levels of analysis inform each other to produce a cohesive picture of the cultural landscape of the Jericho plain that will aid our understanding of Khirbet al-Mafjar, as well as its preceding and contemporary settlements. The basic principle of studying archaeological sites in their physical context is old, but the application of these methods to the Jericho plain is new, revealing patterns we could not have otherwise observed.

1.1 Landscape Model -- Introduction

The landscape model proposed in this dissertation, driven by topographical and hydrological conditions, divides the Jericho plain into ten distinct units, referred to as Settlement Zones.¹ In designating the zones, the landscape model took into consideration natural characteristics that would affect settlement patterns. In most cases the borders between zones were formed by easily identifiable and observable characteristics of the landscape; for example, major wadis, which constitute barriers to transportation and pose potential dangers from seasonal floods, were obvious boundaries. The Wadi al-Qelt and the Wadi Nueima are the clearest divides, sectioning the Jericho plain into three strips on east-west axes, running from the Judean cliffs to the Jordan River. Next come smaller wadis, wadi systems, and hills, all of which can limit usable land and increase the cost of hydraulic infrastructure for bringing spring water across

¹ NB: In a nod to the Arab geographer al-Muqaddasi, who usually presented regions under study in a counter-clockwise spiral out from center, the zones were assigned numbers starting with the central area of the Jericho plain, which is where the urban core and Ayn al-Sultan are both located. While Zone 1 is the most heavily populated and has the best access to water, the numbering scheme is not a ranking with respect to habitability or other conditions.

the landscape. For example, the fairly abrupt twenty-meter rise in elevation between Zones 6 and 8 was used as a boundary separating the two zones because of the impact of elevation on water supply: below the rise, water delivery was easy; above it water delivery was difficult.

Other, less obvious boundaries were also set by features that influenced water supply. Forming a Geographical Information Systems (GIS) database of the Jericho landscape facilitated this analysis.² While the study of landscapes is as old as the study of archaeology itself, new technologies help us capture, manage, and evaluate spatial information. As part of the research methodology, this dissertation employs data on topography and water sources to generate a representation of the hydrology of the Jericho plain, which reveals water supply patterns that would influence the development of settlements. Hydrological analysis shows that water in the Jericho plain naturally drains to the southeast, down towards the Jordan River. This southeast trajectory of water flow from ‘Ayn al-Sultan was used to define the border between Zones 1 and 6.

Each zone of settlement is evaluated on the basis of four criteria: 1) availability of water and specific water sources; 2) amount of usable space and cultivable land; 3) access to routes and roads; and 4) access to or seclusion from the urban core. The ten zones thus constitute separate analyzable components, each with a set of empirical data that can be compared and contrasted with new perspective. Describing and evaluating the Jericho plain based on these common attributes allows us to see the natural environment as a collection of structural properties that impact the settlement landscape.

² GIS are computer programs designed for digital mapping and for performing spatial analyses of various kinds. We can interpolate elevation terrain data to create a digital elevation model -- a model of the surface of the landscape. Digital elevation models can then serve as a base dataset for creating a variety of analytical surface models, including slope, viewshed, and watershed. Source data: ASTER GDEM version 2, ASTER GDEM is a product of METI and NASA. Spatial resolution approximately thirty meters.

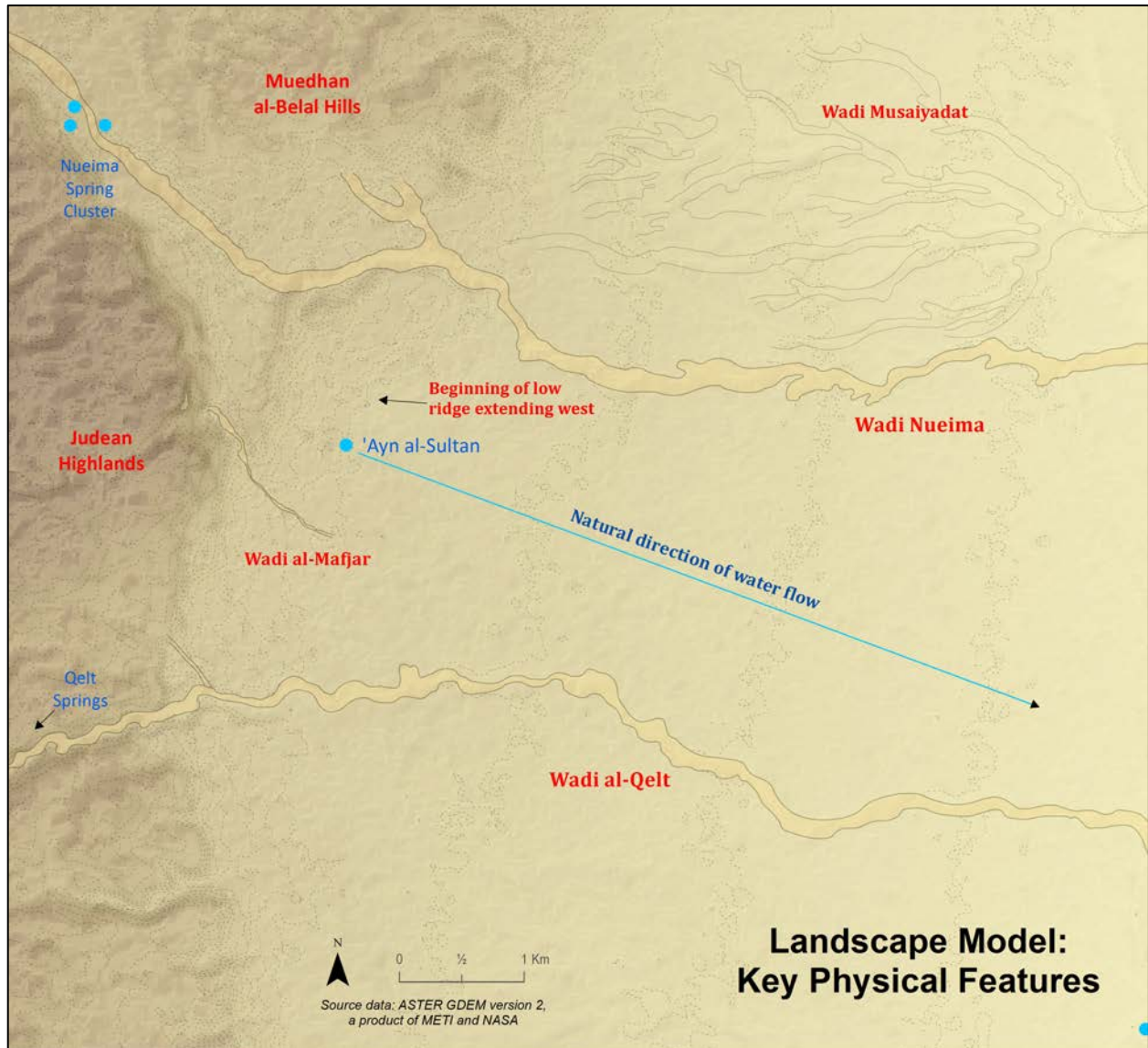


Figure 4: Key physical features in the landscape model (GIS plan created by author)

1.2 Landscape Model -- Overview of the Jericho Plain

The Greek historian Strabo described the Jericho oasis as a theater. The tiers of this theater are the steep mountains that rise to the west of Jericho, separating the Jericho plain from Jerusalem and beyond. At the base of these mountains is Strabo's stage, the Jericho plain, sloping down to the east until it reaches muddy marshland and then the Jordan River. The whole

area is part of the lower Jordan Rift Valley, which is part of the larger Syrian-African Rift system that extends from southern and East Africa up the Red Sea and into Turkey. This rift system has been an axis for human migration throughout history.³ Just as today it separates Israel and Palestine from Jordan and Syria, in the past the long north-south oriented depression of the Jordan River Valley has formed a boundary between Palestine and Transjordan.

Jericho is located in the harsh environment of the Judean desert, a rugged and sparse area of almost eight hundred square kilometers north and west of the Dead Sea. Here we find a unique combination of geographical and climatic conditions.⁴ Extreme heat in the summer under the burning of the desert sun gives way to mild winter temperatures that allow semitropical vegetation to flourish in the Jericho oasis. This vegetation of the Jericho oasis is not watered from the sky: while annual rainfall estimates in Palestine range from 600 millimeters in Jerusalem to over 1,000 millimeters in the Upper Galilee, annual rainfall in Jericho is estimated at only 150 millimeters.⁵ Instead, life in Jericho depends on water from on springs and local groundwater. Ground water is contained in aquifers, porous underground geological strata. If a

³ Aharon Horowitz, *The Jordan Rift Valley* (Lisse ; Exton, PA: A.A. Balkema Publishers, 2001), 9.

⁴ Measuring climate in the pre-modern era is a tricky proposition, relying on indirect indicators such as pollen, lake levels, and carbon isotopes -- all proxies for quantifying atmospheric conditions. Furthermore, significant fluctuations in climate during the current geological period, the Holocene epoch, which began with the end of the last major glacial age circa 11,500 years ago, make it difficult to pinpoint climate change and vegetation conditions within a geographic area as specific as the Jericho plain. The extent to which we can apply environmental studies in one context of the Near East to other parts of the region is unclear.

For Jericho, the nearest climate proxy study comes from Soreq Cave near Jerusalem. Analysis of carbon and oxygen isotopes of a 60,000-year record suggests in the Chalcolithic and Bronze Ages the climate was ten to thirty-two percent wetter than the current overall dry period that began around four thousand years ago. Major wadis that once crossed the Arabian Peninsula have since disappeared, indicating that this wet period was a more widespread regional phenomenon.

See: T. J. Wilkinson, *Archaeological Landscapes of the Near East* (Tucson: University of Arizona Press, 2003), 19-21.

⁵ Emmanuel Anati, "Trade and the Puzzle of Jericho," *Bulletin of the American Schools of Oriental Research* 167(1962, Oct.): 25, note 2.

stratum is enclosed it forms a reservoir or conduit, but, if the stratum has an opening on the surface, the water emerges as a spring.⁶

The obvious starting point for hydrological analysis of the Jericho plain is one of the most important springs in the Near East, the perennial discharge of which made the original urban settlement at Jericho possible. Today called ‘Ayn al-Sultan, it has in the past been known as Elisha’s Spring, from the story in the Book of Kings that describes the prophet Elisha emptying a jar of salt into the spring to make it drinkable. The impressive output of the spring -- around twenty-six cubic meters per second -- created favorable conditions for irrigation at Jericho, and residents likely adopted the practice as early as the late ninth-eighth millennium BCE Neolithic period; cultivated wheat and barley have been archaeologically associated with these levels.⁷ Soil types in the Jericho plain range from brown desert alluvial soil to a silty clay loam. Both are deep, high in lime content, and can be fertile when irrigated and purged of excess salts.⁸ There are many perennial springs in the Levant, but Jericho is distinguished by “the combination of a fresh water supply without annual variation, and of a topography whereby the waters might have spread out over a considerable local area.”⁹

‘Ayn al-Sultan draws its water from a large reservoir aquifer that extends to the watershed of the Judean hills through strata of Sennonian chalk and limestone.¹⁰ The far reach of this extension is the key: by pushing into the hills west of Jericho, the aquifer connects to upland areas with higher rainfall levels than the dry plain. Furthermore, the large size of the

⁶ A. Trevor Hodge, *Roman Aqueducts & Water Supply*, 2nd ed. (London: Duckworth, 2002), 67-8.

⁷ Robert Miller, "Water Use in Syria and Palestine from the Neolithic to the Bronze Age," *Water Management* 11, no. 3 (1980, Feb.): 331-2.

⁸ Charles E. Carter, *The Emergence of Yehud in the Persian Period: A Social and Demographic Study, Library Hebrew Bible/Old Testament Studies* (Book 294) (Edinburgh: Bloomsbury T&T Clark, 1999), notes 102/3.

⁹ P. Dorrell, "The Uniqueness of Jericho," in *Archaeology in the Levant: Essays for Kathleen Kenyon*, ed. R. Moorey and P. Parr (Warminster: Aris and Phillips, 1978), 12.

¹⁰ *Ibid.*, 11.

aquifer mitigates the effects of small-scale climatic fluctuations on water output, so that even at the end of the dry season, stream-flow is still substantial.¹¹ Because of this, even though Jericho has the ecological profile of a steppe (100-300 mm per annum maximum rainfall in winter), its springs give humans the capability of transforming the area into a large agricultural oasis.

The Jericho plain features two other important clusters of springs in addition to ‘Ayn al-Sultan. The first cluster is composed of three springs along the Wadi al-Qelt: ‘Ayn Farah, ‘Ayn al-Fawwar, and ‘Ayn al-Qelt. Netzer and Garbrecht calculate that after allowing for a twenty percent loss rate from spilling and seepage, an estimated one hundred forty liters of water per second, or 12,000 cubic meters per day from these springs could have reached Jericho.¹² The second cluster of springs is found north of Jericho along the Wadi Nueima in the area of Na‘aran, which hosts three springs located close together at an elevation around one hundred twenty meters below sea level and with a total annual capacity of around 8,100,000 cubic meters: ‘Ayn al-Duyuk (5,300,000 cubic meters), ‘Ayn al-Nueima (2,300,000 cubic meters), and ‘Ayn Shusha (500,000 cubic meters).¹³ Water was also available north of Na‘aran at ‘Ayn al-‘Auja, the largest spring in the hinterland of Jericho, with an average annual capacity of 11,000,000 cubic meters, although this spring is more dependent on annual rainfall than the others.¹⁴

For their part, wadis are a key physical element in the landscape of the Jericho plain. The catchment area for the Wadi al-Qelt begins in the hills of al-Bireh and Anata around Ramallah. These waters drain south and east, winding through a deep canyon before emerging through a cleft in the mountains and out into the Jericho plain until it reaches the Jordan River. The Wadi

¹¹ Ibid.

¹² Ehud Netzer and Gunter Garbrecht, "Water channels and a royal estate of the Hellenistic period in Jericho's western plains," in *The Aqueducts of Israel*, ed. David Amit, J. Patrich, and Yizhar Hirschfeld (Portsmouth, R.I.: Journal of Roman Archaeology, 2002), 367, note 4.

¹³ Ibid., 367, note 5.

¹⁴ Ibid., 367, note 6.

Nueima is fed by catchment waters in the hills northwest of Jericho, near the villages of Taibeh and Dayr Dibwan. The wadi enters Jericho north of 'Ayn Duk, making a southward path before veering east to the Jordan River. The other major wadi near the extended urban zone, the Wadi al-Mafjar, cuts a canyon in the mountains past Dayr Quruntul and veers south of Tell al-Sultan. It has a smaller catchment area than the other wadis and does not continue to the Jordan River, instead dying out before reaching the area of modern Jericho.

Above all, wadis can be sources of great possible danger. If heavy precipitation in the Judean hills west of Jericho falls in the catchment areas of the wadis running into the Jericho plain, the result can be severe floods, destructive mudflows, and sediment discharge. An entry in the Survey of Western Palestine description of Jericho recounts how in November 1873 a great storm inundated the Wadi al-Qelt, suddenly within the space of less than hour making the pass around the Deir al-Qelt impassable and dangerous.¹⁵ In addition to the potential flooding danger they pose, wadis were barriers in the landscape and crossing them was avoided, if possible. The Wadi al-Qelt and Wadi al-Nueima have banks up to ten meters high and can be up to ninety meters wide. They cut across the Jericho plain from the Judean hills to the Jordan River, serving as north and south dividers in the landscape.

Movement in the Judean desert is difficult because of the steep cliffs that separate the lowlands around the Dead Sea from the plateaus up to Jerusalem. Jericho offers the most convenient ascent to the plateau and cities of the Judean highlands, including Jerusalem, Bethlehem, and Hebron, which are all situated in a watershed that runs in a north-south band

¹⁵ C. C. Conder and H. H. Kitchener, *The Survey of Western Palestine: Memoirs of the Topography, Orography, Hydrography, and Archaeology*. Volume III. Sheets XVII-XXVI (Judea, London, 1883), 171.

around eight hundred to nine hundred meters above sea level.¹⁶ Jericho forms a central node in a network of roads connecting pilgrimage sites and trade routes in the Jordan Valley and beyond.

1.3 Landscape Model -- settlement zones

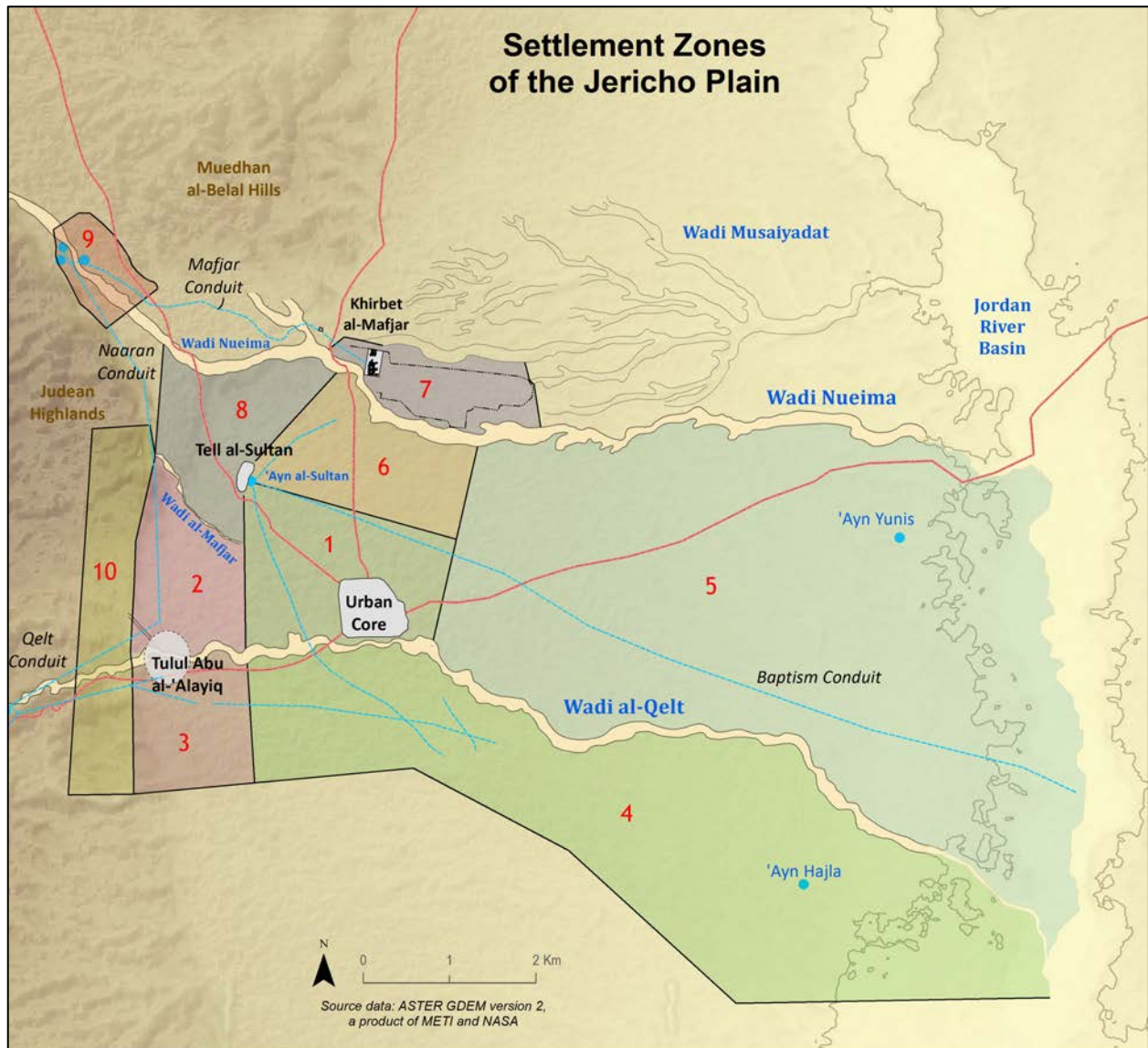


Figure 5: Division of the landscape into ten zones of settlement (GIS plan created by author)

¹⁶ Yizhar Hirschfeld, *The Judean Desert Monasteries in the Byzantine Period* (New Haven: Yale University Press, 1992), 8.

As a result of this geographical and hydrological analysis, the Jericho plain was divided into ten distinct zones, which will now be described.

1. **Settlement Zone 1:** Home of the Byzantine and early Islamic urban core.

- a. Extents: The borders of Zone 1 borders are defined by the natural flow of ‘Ayn al-Sultan (north), as determined by hydrological analysis, the dissipation of water output with increased distance from ‘Ayn al-Sultan (east), the Wadi al-Qelt (south) and the Wadi al-Mafjar (west).

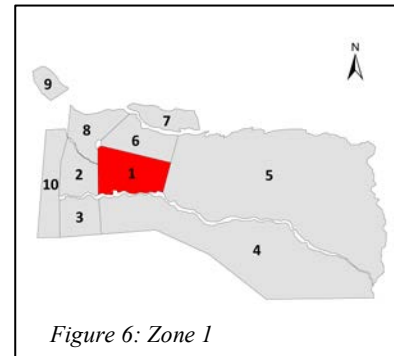


Figure 6: Zone 1

- b. Hydrology: Hydrological GIS analysis shows that the natural output from ‘Ayn al-Sultan flows at approximately fifteen degrees south of east, directly into Zone 1.¹⁷ The result is that Zone 1 was the prime irrigated area in the entire Jericho plain. Water from ‘Ayn al-Sultan could be applied directly to the downslope fields without reliance on reservoirs or cisterns; all that was needed was a basic system of canals and workers to operate wood or stone slab sluice gates. Residents could take advantage of the perennial flow of the spring by using simple ground conduit and cut-off systems to divert water not used directly for drinking or other domestic purposes into directional offshoots targeting different irrigated fields.
- c. Land: Zone 1 comprises a cultivated area irrigated by ‘Ayn al-Sultan, part of a fan spreading out from the spring. The entirety of the zone consists of fertile, open agricultural land.

¹⁷ See also: Dorrell, "The Uniqueness of Jericho," 12.

- d. Routes: Zone 1 sits at the center of a system of roads which connects Jericho to Jerusalem and Transjordan on an east-west axis, up and down the Jordan Valley on a north-south axis, along with another road running northeast to Neapoli/Nablus and Efrain/Taiybeh and beyond.
- e. Link to urban core: Zone 1 was in fact the location of the urban core that followed Tell al-Sultan. The urban core did not occupy the entire zone, but all the land here was intimately linked to it, immediately accessible with no intervening obstacles.

2. **Settlement Zone 2:** Area including part of Tulul Abu al-‘Alayiq, and its agricultural fields.

- a. Extents: Zone 2 is delineated by the Wadi al-Mafjar (north), the Wadi al-Qelt (south), and the steep Judean cliffs rising above the Jericho plain (west).

The eastern border is defined by a combination of the flow beds of ‘Ayn al-Sultan and the Wadi al-Mafjar.

The Wadi al-Mafjar obstructs flow from the spring; in

old aerial photographs, we can see a clear line of division between verdant fields and barren land along the border between Zones 1 and 2.

- b. Hydrology: The suitability of Zone 2 to settlement depends on the willingness to invest hydraulic infrastructure. Any water from ‘Ayn al-Sultan requires an aqueduct to cross the Wadi al-Mafjar, and transporting water from either the Qelt or Naaran spring groups is hindered by difficult terrain.

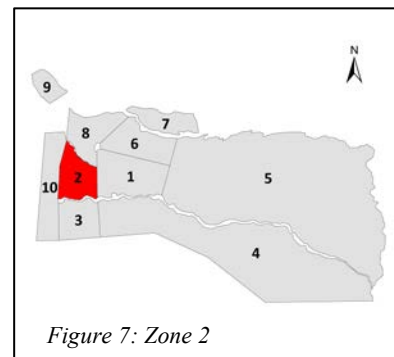


Figure 7: Zone 2

- c. Land: With enough water, there is plenty of arable land in Zone 2, as well as usable space for settlement. There is risk associated with building near the Wadi al-Mafjar, which can swell and flood with winter rains.
- d. Routes: Zone 2 is not in a particularly favorable position with respect to the Jericho road network. It is separated from the Nablus road by Wadi al-Mafjar and from the Jerusalem road by the Wadi al-Qelt.
- e. Link to urban core: Zone 2 is located in fairly close proximity to the urban core, but the link between the two is weakened by the fact that they don't share the same water sources. It is separated from the urban core by the Wadi al-Mafjar.

3. **Settlement Zone 3:** Home to the palaces of Tulul Abu al-‘Alayiq and the Jerusalem road.

- a. Extents: The borders of Zone 3 are defined by the Wadi al-Qelt (north), the dissipation of water output with increased distance from the Qelt springs (east and south), and the Judean highlands (west).

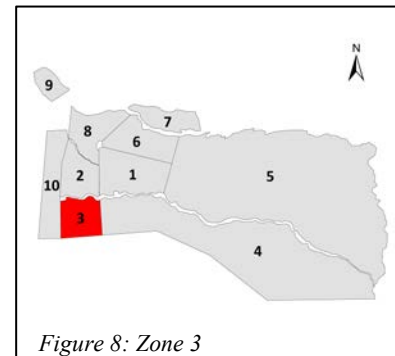


Figure 8: Zone 3

- b. Hydrology: Similar to Zone 2, water supply in Zone 3 requires heavy investment in a hydraulic system to transport water from the springs of the Wadi al-Qelt. It is separated from ‘Ayn al-Sultan by both the Wadi al-Mafjar and the Wadi al-Qelt.
- c. Land: Zone 3 has a good amount of agricultural space. The available arable land was extended through the use of hydraulic systems, including the Birket Musa, a large reservoir built by Herod near his first palace.

- d. Routes: The most important feature of Zone 3 is that it marks the entrance point of the Wadi al-Qelt canyon to the Jericho plain, which included the Jericho-Jerusalem Roman road. This made Zone 3 a strategic point for controlling movement to and from Jericho.
- e. Link to urban core: Zone 3 is separated from the urban core by the formidable Wadi al-Qelt. Its seclusion from the city is heightened by the fact that it isn't watered from 'Ayn al-Sultan and its position along the hills at the western edge of the Jericho plain.

4. **Settlement Zone 4:** Byzantine monastic zone.

- a. Extents: Zone 4 is bounded by the Wadi al-Qelt (north) and extends to the Jordan River (east), the dissipation of water supply (south), and the edge of Zone 3 (west).

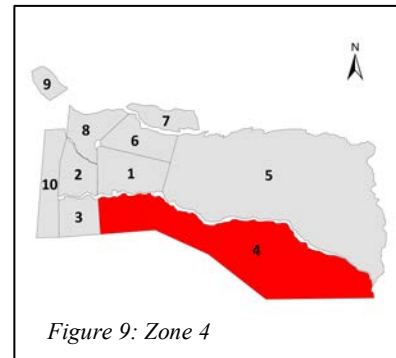


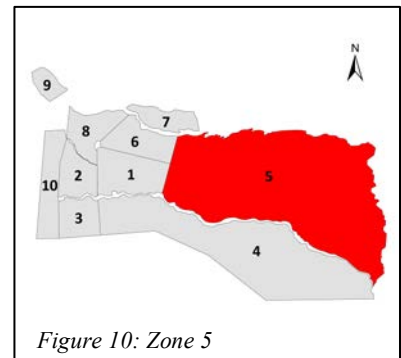
Figure 9: Zone 4

- b. Hydrology: Zone 4 is well watered. It is home to its own spring, 'Ayn Hajla. It also received water from extensions of Wadi al-Qelt and Birket Musa supply system that also served Zone 3. In the Byzantine period, an aqueduct from 'Ayn al-Sultan carried water over the Wadi al-Qelt and into Zone 4.
- c. Land: Zone 4 includes a large area of open land. 'Ayn al-Hajla acted as a kind of mini-oasis around which was a concentration of arable land. Other areas were made cultivable by the aqueduct water supply.
- d. Routes: Zone 4 includes part of the Roman road to and from Jerusalem, although this feature is more strongly linked to Zone 3. It also contains a main route south down the Jordan Valley to the Dead Sea.

e. Link to urban core: Zone 4 is separated from the urban core by the Wadi al-Qelt and the extended areas in the eastern part of the zone are remote and secluded. On the other hand, a direct aqueduct from ‘Ayn al-Sultan represents a shared water supply with the city.

5. **Settlement Zone 5:** Byzantine monastic zone.

a. Extents: The boundaries of Zone 5 are the Wadi Nueima (north), the Jordan River (east), the Wadi al-Qelt (south), and the borders of Zones 1 and 6 (west), as determined by the dissipation of water output from ‘Ayn al-Sultan.



b. Hydrology: While one spring, ‘Ayn Yunis, is located

here, the hydrology of Zone 5 is characterized by its relationship to ‘Ayn al-Sultan, the output of which flows through the zone, but at a lower rate due to its distance, especially when factoring in use by settlements closer to the spring. Longer-distance conduits were used to irrigate fields and sustain communities in this zone. Most notably, a major aqueduct from the Byzantine period (referred to in this dissertation as the ‘Baptism Conduit’) ran from ‘Ayn al-Sultan into this zone.

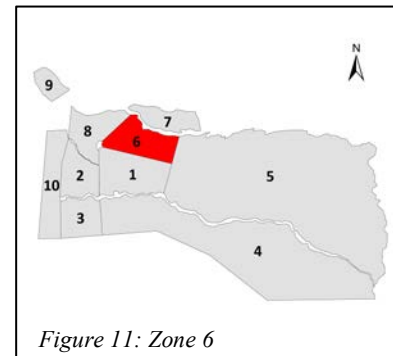
c. Land: Similar to Zone 4, Zone 5 offers wide areas of arable land and the most extensive usable space of all the zones in this landscape model.

d. Routes: Running through Zone 5 is the important road from Jericho across the Jordan Valley to Transjordan. The road heads towards what is likely the easiest place to cross the mixed terrain on either side of the Jordan River in this area; this situation continues today with the Allenby Bridge crossing between the West Bank and Jordan.

e. Link to urban core: Zone 5 maintains a close relationship with the urban core. There are no major wadis separating the two and they share the same water source. The eastern reaches of Zone 5 are distant to the city center, but even here, water brought from ‘Ayn al-Sultan assured a connection between the two.

6. **Settlement Zone 6:** Well-watered area near the urban core.

a. Extents: The borders of Zone 6 are defined by the Wadi Nueima (north), the dissipation of water output from ‘Ayn al-Sultan that determines the border with Zone 5 (east), and the border with Zone 1 determined by the natural flow of ‘Ayn al-Sultan (south). The western



border is formed by a twenty-meter elevation change, which separates it from Zone 8.

West of this line, the elevation is greater than that of ‘Ayn al-Sultan, making water supply a challenge. The lower areas east of this line are more conducive to settlement, watered without use of any technology beyond a basic conduit.

b. Hydrology: Of all the zones, Zone 6 is second only to Zone 1 for ease of irrigation. It does not occupy the same natural downslope position as Zone 1, but no wadis or topographical obstacles break the water flow from ‘Ayn al-Sultan. An aqueduct from ‘Ayn al-Sultan, visible on historical maps, led directly to this zone.

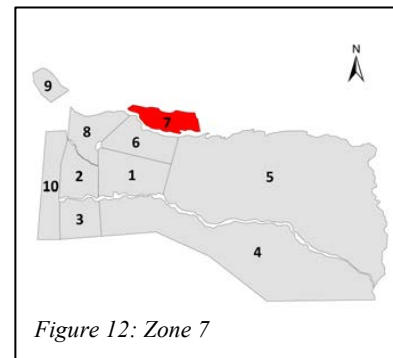
c. Land: Zone 6 offers prime agricultural land as well as flat, open space for settlement.

d. Routes: Running right through the center of Zone 6 is the Jordan Valley road travelling north to the city of Bet Shean / Baysan and on to the Sea of Galilee.

e. Link to the urban core: Zone 6 is the mostly closely connected zone to the urban core, besides of course Zone 1, within which it will be argued that the city center was located. There is no physical barrier between the two zones and they share ‘Ayn al-Sultan as their source of water.

7. **Settlement Zone 7:** Khirbet al-Mafjar and its environs.

a. Extents: Zone 7 is bordered by broken ground and wadi canyons on both the north and east sides. To the northwest sit a series of conical hills, the highest of which, Osh al-Ghurab, rises to 150 meters. The Wadi Nueima, which arrives from the west and turns twice



just before Mafjar and then continues to the Jordan River, forms its southern and eastern boundaries. Zone 7 sits across the Wadi Nueima from Zone 6.

b. Hydrology: No internal water source exists in Zone 7. As such, irrigation of this zone requires a major investment in hydraulic infrastructure similar to that required in Zone 3. This was achieved by the Umayyads, who brought water from the Naaran spring cluster to Zone 7.

c. Land: Zone 7 offers a good amount of space favorable for settlement and agriculture, dependent on the delivery of abundant water to push the limits of cultivable terrain eastward.

d. Routes: The road from Jericho up the Jordan Valley that runs through Zone 6 passes just alongside Zone 7. As the entry point to the Jericho plain from the north, Zone 7 is in a strategic location with regards to movement and access.

- e. Link to the urban core: Zone 7 is separated from the urban core by over two kilometers, a distance which includes the Wadi al-Nueima. This separation, combined with the use of the Naaran springs instead of ‘Ayn al-Sultan creates a gap between the city and Zone 7.

8. **Settlement Zone 8:** Elevated area above ‘Ayn al-Sultan.

- a. Extents: Zone 8 lies upslope and north of ‘Ayn al-Sultan, bordered by the Wadi Nueima (north), the Wadi al-Mafjar (south), and the steep Judean cliffs (west). This zone is comprised of a limestone bedrock shelf rising above Zones 1, 2, and 6. The

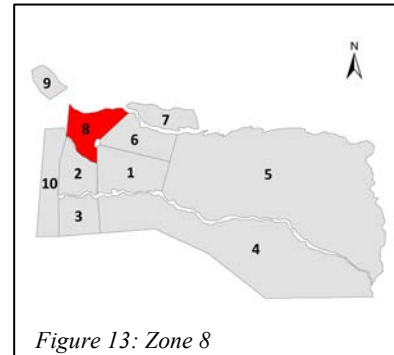


Figure 13: Zone 8

- topographic difference between it and Zones 1 and 6 marks its eastern boundaries.
- b. Hydrology: Being upslope from the spring and thus unable to benefit from the natural flow of drainage paths created by the topography, Zone 8 is at a hydrological disadvantage. Thus, despite its proximity to ‘Ayn al-Sultan, at some point -- the exact period is uncertain -- an offshoot conduit was built to bring water from the Naaran springs.
- c. Land: Zone 8 is not a natural area for agriculture. Old aerial photographs from the early twentieth century show it completely barren, in sharp contrast to Zones 1 and 6.¹⁸ In modern Jericho today there are no agricultural plots in this zone.
- d. Routes: Zone 8 includes the important road heading northwest from Jericho. As a high point, it also offers a strategic vista sweeping across the Jordan Valley.

¹⁸ Gustaf Dalman, *Hundert deutsche Fliegerbilder aus Palästina* (Gütersloh: Bertelsmann, 1925), 81, image 71.

- e. Link to the urban core: With no wadis or broken terrain separating the two, and the proximity of Zone 8 to ‘Ayn al-Sultan -- even though it did not receive water -- probably meant that the relationship between Zone 8 and the urban core was likely close.

9. **Settlement Zone 9:** The area of the Naaran springs.

- a. Extents: Zone 9 is situated around the Naaran springs; its northern and southern borders are determined by proximity to the springs. It is also bordered by a series of hills called Muedhdhan al-Belal (east), and the Judean cliffs (west).

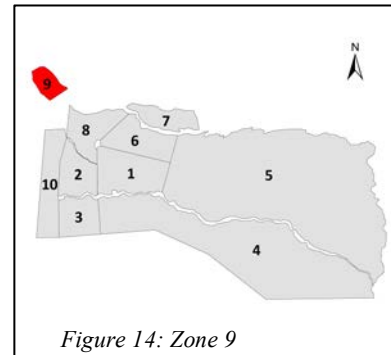


Figure 14: Zone 9

- b. Hydrology: Zone 9 contains three springs: ‘Ayn al-Duyuk, ‘Ayn al-Nueima, and ‘Ayn Shusha. Additional water passed through this area via aqueducts from the large ‘Ayn al-‘Auja to the north out of the Jericho plain.
- c. Land: Zone 9 is a narrow valley running on a northwest-southeast axis, squeezed between hills on either side. The ancient valley was carved by the Wadi Nueima, which enters the Jericho Plain at this point, opening a gap in the hills before turning east and running across the plain to the Jordan River. The land is very fertile, but not extensive. The slopes on either side of the Wadi Nueima were likely terraced to create more room, and some planting likely took place in wide stretches of the wadi itself, both practices seen today.
- d. Routes: Zone 9 is the access point to and from Jericho and the cities of northwest Palestine, including Taibeh, Nablus, and on to Caesarea. A road passed through here from at least the Roman period, but probably much earlier as well.

- e. Link to the urban core: Zone 9 is fully separated from the urban core by distance, the Wadi Nueima, and by virtue of having an abundant internal water supply.

10. **Settlement Zone 10:** Strategic highlands above Jericho.

- a. Extents: Zone 10 is a north-south strip atop the Judean highlands rising west of the Jericho plain.
- b. Hydrology: There are no internal water sources in Zone 10. Water was either brought up by pack animals or through the use of hydraulic pressure systems drawing water from the Wadi al-Qelt spring group.

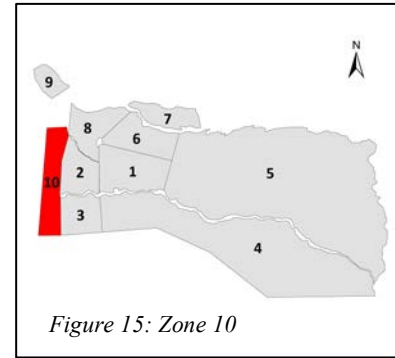


Figure 15: Zone 10

- c. Land: There is no arable land in Zone 10. Space for settlement exists on the various peaks and hilltops.
- d. Routes: The main road from Jerusalem passed through Zone 10. Control of this zone thus offered both a dominant position over the Jericho plain and beyond, and the ability to protect and regulate this route.
- e. Link to the urban core: Separated completely from the urban core, there is no default physical link between the two.

In summary, division of the Jericho plain into separate units reveals some basic patterns related to the natural environment. Zones 1, 5, and 6 are all downslope from ‘Ayn al-Sultan with no intervening wadis. Zone 4 is separated from ‘Ayn al-Sultan by the Wadi al-Qelt, but linking the two hydraulically is aided by the fact that Zone 4 is also downslope of the spring.

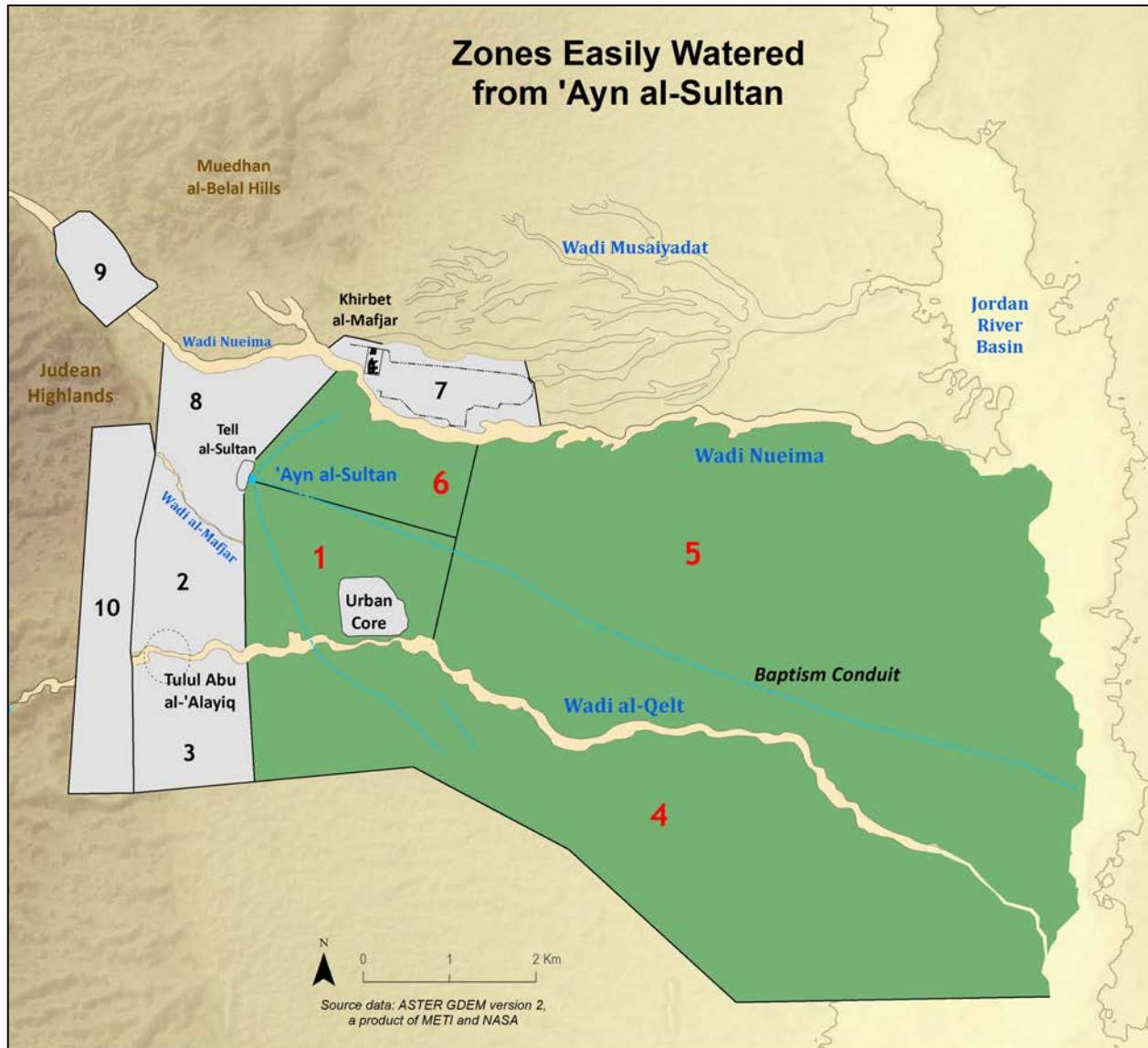


Figure 16: Settlement Zones most watered from 'Ayn al-Sultan; filled green with red zone numbers (GIS plan created by author)

Zones 2, 3, 7, 8, 9, and 10 are all upslope or separated from 'Ayn al-Sultan and all of these areas but Zone 8 are separated from the spring by at least one wadi. Of these, Zone 9 is the only one with its own internal water source. Zone 9, however, suffers from a lack of space. Of the zones without direct access to 'Ayn al-Sultan, Zones 2 and 3 are the most conducive to

larger-scale settlement. With the right hydraulic infrastructure, as was built by the Hasmonean and expanded by Herod, the two can be linked to both the Qelt and Naaran springs, and they offer plenty of cultivable land. Zone 7 also offers a good amount of space, although it is distant from each of the major spring groups.

1.4 Settlement typology

The landscape model just described, which divided the Jericho plain into ten discrete settlement zones, was the first level of analysis of the Jericho plain. It was designed to establish a new framework based on environmental features in order to view the plain with a fresh perspective. Investigation of the structural process by which the settlement profile of the Jericho plain changed over time now requires a second level of analysis: the creation of a settlement typology.

This dissertation identifies three principal types that characterize settlements on the Jericho plain from the Hasmonean to early Islamic periods: urban core, satellite communities, and elite sites. These types are bound to the different social, political, and, religious protagonists who established themselves in Jericho in our period of study. Each of the three settlement classes is defined by a set of topological (the specific arrangement of constituent parts) and functional (civil life and services, palatine, religious, military) features which together form a cultural landscape.

1.4.1 Urban core

The urban core was the center of civic daily life of Jericho's residents and the main concentration of population and public buildings. Examples include the first urban settlement in Jericho, Tell al-Sultan, and the Byzantine / early Islamic city.

When Jericho's urban core moved from Tell al-Sultan is uncertain, but by the Byzantine era, it occupied its current location. Landscape analysis sheds light on the possible reasons for this shift. It seems the site of the earlier urban core at Tell al-Sultan was susceptible to flooding from the Wadi al-Mafjar, especially in earlier periods with wetter climatic conditions. Bar-Yosef reinterprets the function of the walls of ancient Jericho, suggesting that their function was not defense against invaders but as a buffer against flash flooding. He pointed out that the apex of Wadi al-Mafjar's former alluvial fan is only around five hundred meters from Tell al-Sultan and that its small drainage basin of approximately twenty square kilometers puts it at risk of overflowing.¹⁹

Kathleen Kenyon recorded severe flooding of the Wadi al-Mafjar and found evidence of major erosion damage along the northern edge of the tell, including a destroyed Pre-pottery Neolithic A perimeter wall. Moving further east into flatter zones of the Jericho plain put the city outside the immediate danger area of flooding from Wadi al-Mafjar, but still within easy access to the waters of 'Ayn al-Sultan. Bar-Yosef suggests that given all the available data, it is plausible that the Neolithic walls of Jericho were built in stages as a defense against floods, mudflows, and sheetwash from the sloping plain, and in particular the Wadi al-Mafjar.²⁰

¹⁹ O. Bar-Yosef, "The Walls of Jericho: An Alternative Approach," *Current Anthropology* 27, no. 2 (Apr., 1986): 161.

²⁰ Ibid.

Furthermore, position of the settlement of Tell al-Sultan above ‘Ayn al-Sultan meant that only the fields had downslope access to the spring’s output, not the city itself. The ideal settlement location from the point of view of available water is instead Zone 1, which is indeed where the modern city stands today. In order to complete a landscape analysis that usefully informs us about the context in which Khirbet al-Mafjar and other sites were built, it is necessary to have some idea of the history and extent of the post-Tell al -Sultan urban core, available evidence for which will be presented in Chapter Two.

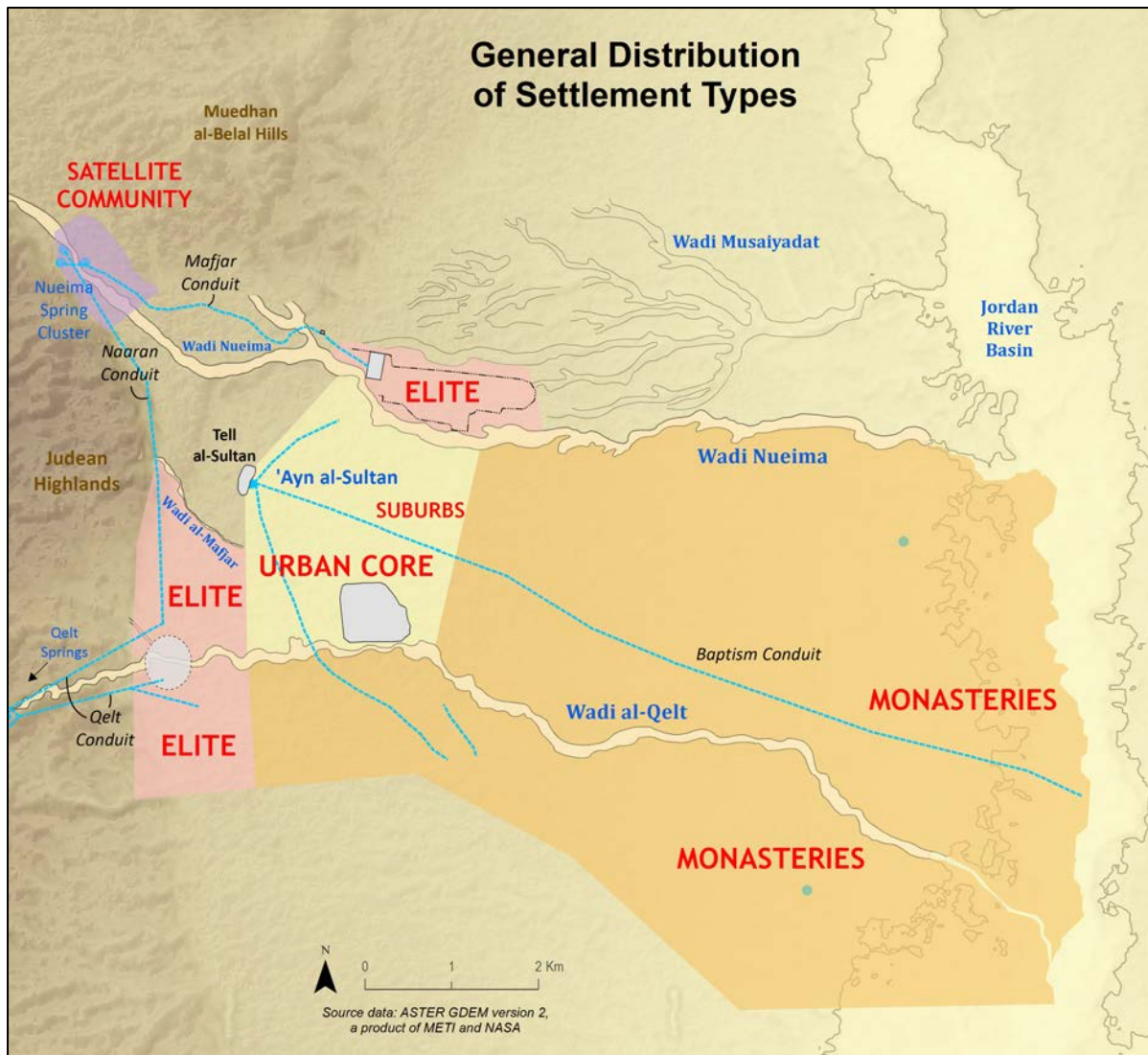


Figure 17: Basic settlement types in hydrological and hydraulic context (GIS plan created by author). Urban core and monasteries watered mainly from ‘Ayn al-Sultan; elite complexes supplied from the Nueima and Qelt springs.

1.4.2 Elite complexes

Elite complexes consist of a group of structures housing the ruler (whether king or caliph) and his entourage. They are distinguished from satellite sites by divergent functions caused by differences in the extent and nature of external patronage and influence. Elite settlements include palaces, gardens, and baths, but also extended structures for housing the array of workers and service providers necessary to keep the complexes running. They also include the infrastructure for agricultural production: water systems, fields, wine and oil presses, etc. In the Jericho plain, there are two significant elite settlements: Tulul Abu al-‘Alayiq and Khirbet al-Mafjar. The understanding we develop concerning Tulul Abu al-‘Alayiq will be instrumental in analyzing Khirbet al-Mafjar.

Elite complexes are examined in this dissertation in terms of objectives and security concerns, and, ultimately, their relationship to the urban core. Herod’s first palace, built around 35 BCE in Zone 3, is an illustrative example. He may have chosen its location for extra security and seclusion; an interpretation strengthened by the architecture, built facing inward, perhaps reflecting Herod’s tenuous political position at the time.²¹ Alternatively, the choice of location may relate to the importance of a link to Jerusalem via the Roman road -- the course of the road perhaps dictated the orientation of the palace.²² Either way, Zone 3 not a zone in which we would expect a city; it is an area of detached settlement, with a physical buffer from the inhabitants of Jericho and instead a direct connection out of the plain.

²¹ Ehud Netzer, "Tulul Abu el-'Alayiq," in *The New Encyclopedia of Archaeological Excavations in the Holy Land*, ed. Ephraim Stern (Jerusalem & New York: Israel Exploration Society & Carta; Simon & Schuster, 1993), 687.

²² Ehud Netzer et al., *Hasmonean and Herodian Palaces at Jericho: Final Reports of the 1973-1987 Excavations*, III vols., vol. I (Jerusalem: Israel Exploration Society: Institute of Archaeology, The Hebrew University of Jerusalem, 2001), 332.

1.4.3 Satellite communities

Satellite settlements come in a variety of forms spread across the oasis. They served a variety of principal purposes -- agricultural, logistic/strategic/military, and religious. Examples include monasteries, suburbs, forts, and strategic sites. For the Jericho plain, satellite communities were composed of Christian, Muslim, and Jewish populations. Many satellite communities were part of a rural system dependent on larger settlements in some way, whether for external capital, workforce, transportation, or markets. These communities were politically and economically aligned either with the urban core or an elite complex.

The archetypical satellite settlement is the monastery, a widespread settlement type in the Byzantine period, especially in Zones 4 and 5. Direct material evidence links these monasteries to the contemporary city of Jericho in the form of the Baptism Conduit, which ran from ‘Ayn al-Sultan to Qasr al-Yahud and other monasteries, mentioned by Procopius as being the work of Justinian. Thus, as in Zones 2 and 3, we see direct intervention at the elite or state level to transport water to Zone 5. Except in this case, the water was not serving an elite complex, but a monastic complex -- similar to Zone 4, monasteries were the dominant settlement type here. Satellite settlement patterns were influenced by palatine sites as well, as in Zone 9, for example, which seems to have expanded in the early Islamic period, a development undoubtedly connected to the construction of Khirbet al-Mafjar and its use of the Zone 9 springs.

1.5 Summary

This chapter has taken the first steps towards approaching the settlement history of the Jericho plain with fresh eyes, moving away from a traditional focus on excavated sites and focusing on the physical landscape. It has described the landscape model used to aid

understanding conditions on the plain, in which zones of settlement are defined by natural conditions that set the stage for how people interacted with both the physical and cultural landscape. This method takes advantage of a broad array of available data that have not been included in previous historical analyses of the Jericho plain. It allows for a variety of ways to approach the problem, always looking for correlations in the structure of the landscape and the structure of the material record.

Landscape analysis demonstrates the comparative disadvantages to urban settlement at Tell al-Sultan, corroborating archaeological evidence from the Byzantine and early Islamic periods. Settlement Zone 1 is the area of the Jericho plain most conducive to large-scale settlement, combining open agricultural land with direct access to 'Ayn al-Sultan along the natural flow of the spring. If the urban core is located in Zone 1, Zones 5 and 6 are likely to have the strongest connections to the urban core, as there are no major topographic obstacles between them. Zones 3 and 7 are the most likely candidates for outsider settlements, combining separation from the urban core by means of the Wadi al-Qelt and Wadi Nueima, with sufficient space and access to water supply alternatives to 'Ayn al-Sultan. While not offering enough space for a major complex, Zone 9 is a critically important area to control because of its combination of water sources and as a pass-way in and out of Jericho.

CHAPTER TWO -- After Tell al-Sultan: A New Urban Signature

2.1 Introduction

A starting point for an examination of the patterns of landscape features that contextualize Khirbet al-Mafjar is the city of Jericho itself. Following Tony Wilkinson's idea of a landscape signature as a set of coherent features belonging to a broad historical phase, this chapter investigates the signature of Jericho's urban core in the Byzantine and early Islamic period.¹ Its aims are two-fold: 1) to describe and analyze the urban topography of Jericho in these periods; and 2) to discuss Jericho's urban signature in the wider context of the cultural landscape of the Jericho plain.

Within the framework of the settlement model proposed in Chapter One, this chapter focuses on the localization and development of the city, investigating the underlying reasons why by the Byzantine period the urban core was positioned in Zone 1, the area that landscape analysis indicates was most suitable for large-scale settlement. It does so through a combined method of presentation of recent excavation results, reinterpretation of published archaeological data, review of historical and epigraphic sources, and archival research. In particular, two different excavations some eighty years apart at the site of Tell al-Hassan have shed light on the civic and religious life of the Byzantine city and the continuity of urban settlement in the early Islamic period.

Further emphasis will be placed on the reasons for the exact location of the urban core within Zone 1, a placement near the Wadi al-Qelt that represents the intersection between the hydrology of 'Ayn al-Sultan and the crossing of the Roman road from Jerusalem; that is, the

¹ T. J. Wilkinson, *Archaeological Landscapes of the Near East* (Tucson: University of Arizona Press, 2003), 11.

meeting of physical and cultural features in the landscape. Attempt is made integrate the variable patterns seen in the material and textual evidence into a coherent picture of the localization and nature of the city of Jericho.

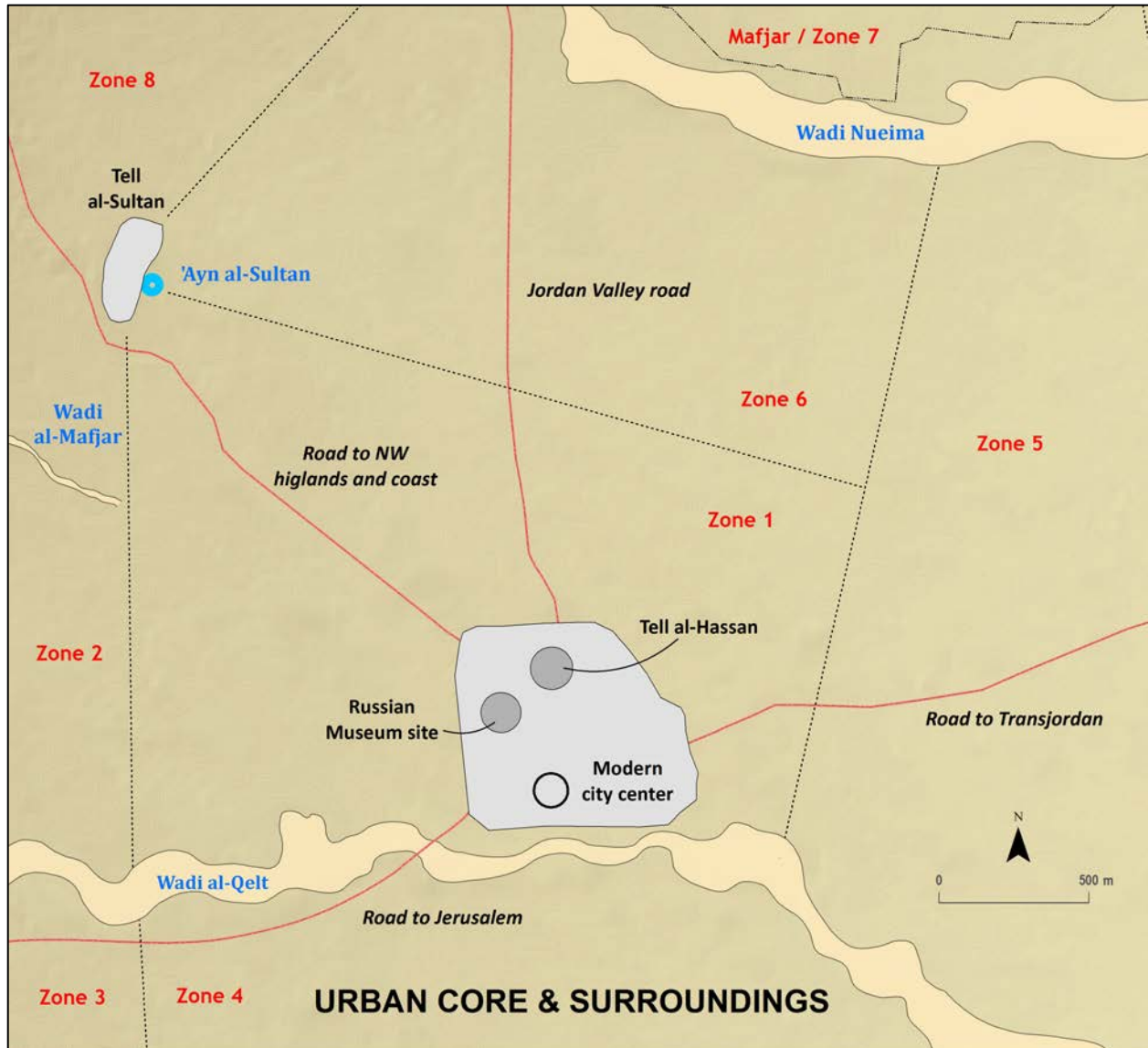


Figure 18: General location of the urban core and surrounding features (GIS plan created by author)

This chapter will also address issues of continuity in the transition from Byzantine to Umayyad rule. In the absence of textual sources, material culture plays a key role in our understanding of political transitions, especially with regard to economic continuity, as well as

continuation of occupation and change of use seen at archaeological sites. And yet, a misguided notion of settlement decline brought about by historical assumptions of the early Islamic conquests endures. Recently, in 2011, the PADIS project at the University of Rome La Sapienza published the most comprehensive catalogue of sites in the Jericho plain, including a print volume accompanied by an online database of site information, maps, and satellite imagery.² The authors made composite satellite maps with archaeological sites separated by historical period. Comparison of the images for the Byzantine and early Islamic periods indicates a significant drop in the number of sites. In the text of the catalogue the authors write: “after the arrival of the Persian army in 614 and the arrival of the Arabs in 638, Jericho fell into decline and much of the Byzantine occupation was abandoned...the Jericho Oasis observed in the seventh century a drastic restriction of inhabited sites...”³ Both evidence from Jericho and regional trends make a compelling archaeological case that this notion of decline is flawed.

Having established the parameters of Jericho’s urban signature, the second theme of this chapter focuses on the broader implications of this knowledge. The process of filling in the gaps in our understanding of Jericho’s urban core permits consideration of the concept of the landscape as palimpsest, of the ways in which some features remain more visible in the landscape based on factors of success, sustainability, and preservation.⁴

² Lorenzo Nigro, Maura Sala, and Hamdan Taha, *Padis I: Archaeological Heritage in the Jericho Oasis: A Systematic Catalogue of Archaeological Sites for the Sake of Their Protection and Cultural Valorisation*. Rome La Sapienza Studies on the Archaeology of Palestine & Transjordan (Rome: La Sapienza Expedition to Palestine & Jordan, 2011).

³ Lorenzo Nigro, "Distributive Analysis and Occupational Study in the Jericho Oasis from the Neolithic up the Ottoman Period," in *Padis I: Archaeological Heritage in the Jericho Oasis: A Systematic Catalogue of Archaeological Sites for the Sake of Their Protection and Cultural Valorisation*, ed. Lorenzo Nigro, Maura Sala, and Hamdan Taha, Rome La Sapienza Studies on the archaeology of Palestine & Transjordan (Rome: La Sapienza Expedition to Palestine & Jordan, 2011), 23.

⁴ Wilkinson, *Archaeological Landscapes of the Near East*, 7.

Jericho has a long and storied association with urban archaeology as a field of research. For the Islamic archaeologist, however, this association is misleading because the bulk of excavation has focused on the ancient city at Tell al-Sultan; very little excavation has taken place in the area of the modern city. Thus, while our knowledge of ancient Jericho comes mostly from archaeology, we have hitherto studied the Byzantine city in large part based on extant historical sources, namely accounts written by pilgrims, along with the depiction of the city on the Madaba Map, a late sixth-century mosaic located in the church of St. George, in Madaba.

Ironically, it is the very success of the urban core that has obscured our understanding of it. In the areas that saw modern development and growth of Jericho in the twentieth century, archaeological sites have been obscured or destroyed. Tell al-Sultan, Tulul Abu al-‘Alayiq, and Khirbet al-Mafjar, being outside the area of the modern city, were spared from this destruction, and thus have endured as archaeological sites. Tell al-Sultan is now one of the most heavily investigated archaeological sites in the region and all three sites have gained prominence in our archaeological understanding through the process of preservation. This prominence, however, may have undue influence on our understanding of the history of the parts of Jericho that have been developed in modern times.

The loser in this dynamic has been the urban core of Jericho itself. We have archaeological data for only a small percentage of the area of the modern city -- the rest either was never investigated or the evidence are now lost. Most of the permanent record of the urban landscape sits trapped under streets and parking lots and buildings, or lying in unexcavated open spaces between them. As such, the Jericho of the first millennium CE remains largely an invisible city. A shortage of archaeological data clouds our ability to propose a model for

interpreting the development of the Byzantine and early Islamic city from the point of view of specific urban layout or spatial relationships within the urban core.

2.2 Jericho's urban core in historical and epigraphic sources

The reports of ancient authors who visited Jericho can be used to help understanding the extent and location of its urban core. Written and epigraphic sources reveal both interesting topographic details about Jericho and the way in which ancient authors thought about the city. For the Byzantine period, the account of the pilgrim Theodosius stands out. We know little about him, but his text entitled “The Layout of the Holy Land (De Situ Terrae Sanctae)” may be dated around 530 CE. The literary works of Gregory of Tours (538-594 CE) rely on Theodosius and the pilgrim discusses Anastasius' buildings while not mentioning those of Justinian.⁵

The Madaba Map, located in the church of St. George in Madaba, is a mosaic representation of ancient Palestine. It dates to the sixth century CE and is an important cartographical depiction of towns and villages of the region in the Byzantine period. The mosaic represents Jericho as a small walled city with a gate flanked by two towers. The fifth and sixth centuries CE saw the construction of walls at many cities. Most settlements in the Byzantine period in Palestine were walled, often reusing parts of earlier Roman walls. According to Josephus, Jericho was walled during the Roman period: “the whole army of the Romans were upon them, they put them into great fear on every side; so they got in great numbers together, and fled to Jericho, for they knew no other place that could afford them any hope of escaping, it being a city that had a strong wall, and a great multitude of inhabitants.”⁶ This confirms the idea

⁵ Palestine Pilgrims' Text Society (London England), *The Library of the Palestine Pilgrims' Text Society*, 36 vols. (London, 1897), 5.

⁶ Josephus, *Josephus: The Complete Works*, trans. William Whiston (Nashville, Tennessee: Thomas Nelson, Inc., 1998), Wars 4.7.5, 281.

that in parallel to the elite settlement at Tulul Abu al-‘Alayiq, Jericho’s urban core developed into a substantial town.

Elisha’s Fountain (‘Ayn al-Sultan) on the Madaba Map stands outside and north of the city, depicted by the symbol of a church and palm tree, with the label “Of St. Elisha.” One of the earliest historical accounts of a Christian pilgrim visiting the Holy Land -- that of the Pilgrim of Bordeaux --



Figure 19: Jericho and Elisha's Fountain depicted on the Madaba Map (adapted from Piccirillo and Alliata 1999, p. 51)

corroborates this separation. He had transferred from the west coast of France to Constantinople and was named consul in the year 333 CE. After traveling to Jericho from Jerusalem, he wrote, “Coming down the mountain range you reach a tomb on the right, and behind it is the Sycamore tree which Zacchaeus climbed in order that he could see Christ. A mile and a half from the city is the spring of the prophet Elisha,” which, the account continues, “was where the city of Jericho used to stand at the time when the children marched round it with the ark of the covenant, and the walls fell down [i.e. ancient Jericho, Tell Sultan].”⁷ Similarly, Theodosius writes that the distance from Jericho to the Fountain of Elisha was two miles.⁸

The episode of Zacchaeus is reported in the Gospel of Luke, which offers topographical information about the city of Jericho: “Jesus entered Jericho and was passing through. A man was there by the name of Zacchaeus; he was a chief tax collector and was wealthy. He wanted to see who Jesus was, but because he was short he could not see over the crowd. So he ran ahead and climbed a sycamore-fig tree to see him, since Jesus was coming that way. When Jesus

⁷ Egeria and John Wilkinson, *Egeria's Travels*, 3rd ed. (Warminster: Aris & Phillips, 1999), 32.

⁸ Palestine Pilgrims' Text Society (London England), *The Library of the Palestine Pilgrims' Text Society*, 7.

reached the spot, he looked up and said to him, ‘Zacchaeus, come down immediately. I must stay at your house today.’ So he came down at once and welcomed him gladly. All the people saw this and began to mutter, ‘He has gone to be the guest of a sinner.’ But Zacchaeus stood up and said to the Lord, ‘Look, Lord! Here and now I give half of my possessions to the poor, and if I have cheated anybody out of anything, I will pay back four times the amount.’ Jesus said to him, ‘Today salvation has come to this house, because this man, too, is a son of Abraham. For the Son of Man came to seek and to save the lost’” (Luke 19:1-9).

There are two important historico-geographical points in this text: the sycamore tree and the house of Zacchaeus were according to the Biblical tradition located in the same place; and both the tree and the house were located inside Jericho, which Jesus had entered.⁹ These points give further support to the idea that the urban core at that time was located somewhere between the later Byzantine city and the ancient city at Tell al-Sultan. This is why the Piacenza pilgrim, who visited the city in 570 CE, writes that “not far from the city of Jericho, is the tree which Zacchaeus climbed in order to see the Lord.”¹⁰

2.3 Locating the new urban core

Archaeological data seem to corroborate the location of Byzantine Jericho south of Elisha’s Fountain/‘Ayn al-Sultan, as depicted by the Madaba Map and described by Theodosius. A large number of remains belonging to the Byzantine and early Islamic period have been found throughout modern Jericho in Settlement Zone 1. Apart from the excavation at the Russian

⁹ A. Augustinovic, *Gerico e dintorni* (Jerusalem: Tipografia dei PP. Francescani, 1951), 63.

¹⁰ John Wilkinson, *Jerusalem Pilgrims before the Crusades*, 2nd ed. (Warminster, England: Aris & Phillips, 2002), 137.

Museum site and Tell al-Hassan, discussed below, we have other indications of urban development in this area.

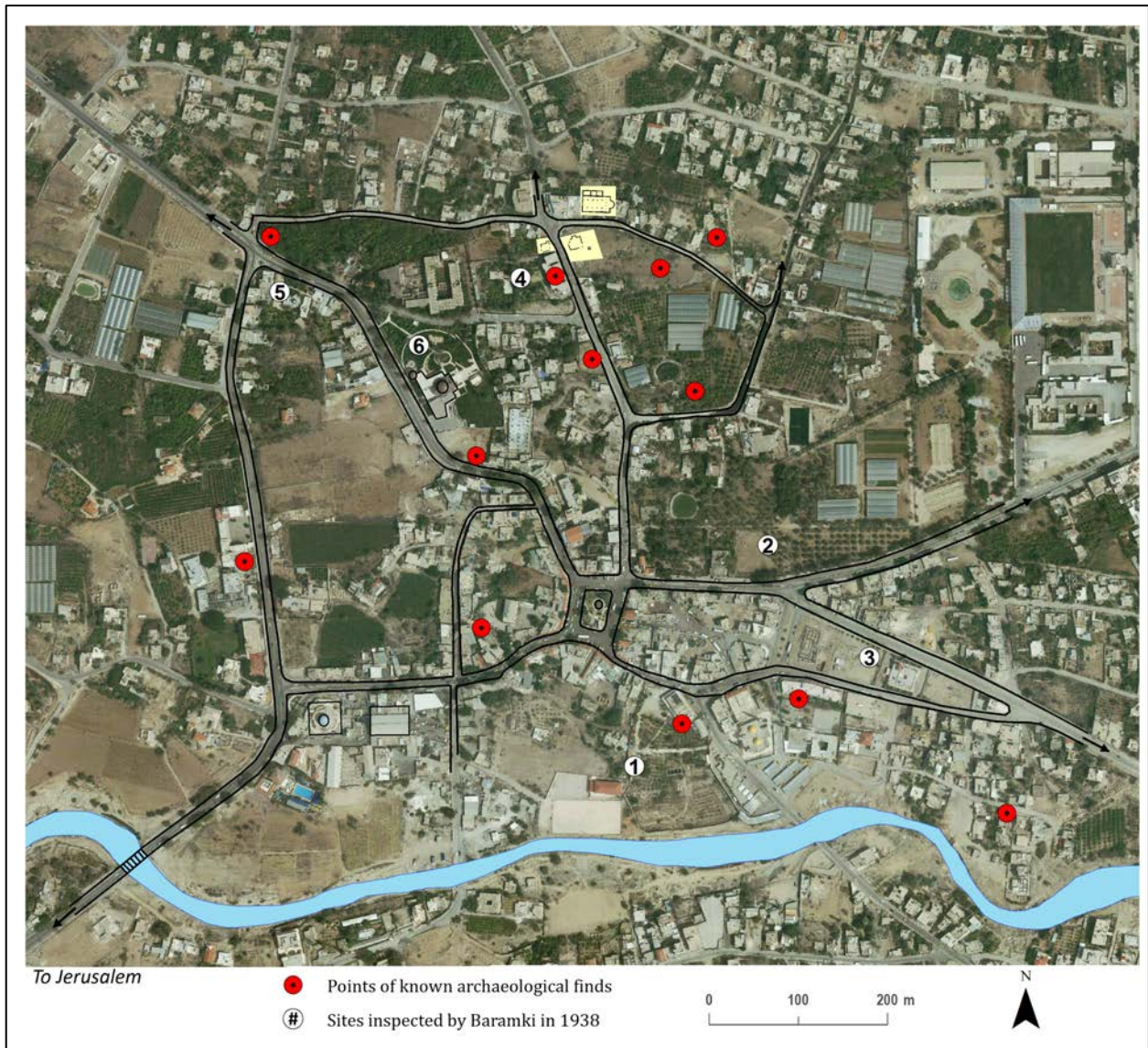


Figure 20: Modern Jericho with material evidences of the Byzantine/early Islamic city (GIS plan created by author)

In July 1938, Dimitri Baramki inspected seven locations near Jericho city center, mapping various architectural materials and mosaic pavements related to the Byzantine period.¹¹ He examined a mosaic pavement at the Russian compound (1), architectural fragments at the

¹¹ “A/Director of Antiquities. Jerusalem, 13th July, 1938.” Reference no. ATQ/722.

Agricultural Station (2), the Coptic Convent (4), and the Franciscan Monastery (7). He also checked on the registered sites of Tell Derb al-Habash (5) and Tell al-Mahfuriyah (6). Besides the Russian compound and the Coptic Convent, the most substantial site was Tell al-Qos (3), situated directly east of the main square along the southern route to Jordan. Already by this time, workers built a government school and road over most of the site. Tell al-Qos was never excavated, but archaeologists have found two cisterns and a nearby plastered basin containing ceramics and mosaic tesserae indicating Byzantine occupation.

For his part, Augustin Augustinovic (1917-98), a Croatian priest who lived and worked in Jerusalem, investigated an abandoned area known as Sheikh Ameri on the south bank of the Wadi al-Qelt directly opposite the oratory of St. George. His description of the site is intriguing. He writes of finding many Byzantine and early Islamic surface sherds, numerous white tesserae pieces, and the foundations of what he believed to be a mosque with the tomb of Sheikh Ameri.¹² Unfortunately, we do not know the exact location of the site today.

The map made by Baramki during his 1938 inspections is the only type of this evidence that exists. In the absence of further historical evidence, structural analysis of the current town plan of Jericho adds new clues, revealing some curious features of the urban core. The first is located on the road into Jericho from Jerusalem, shortly after one crosses the Wadi al-Qelt heading north. Suddenly, this road takes a sharp, ninety-degree angle heading east. We could imagine that this turn relates to the southern limit of the city wall, and perhaps the angle itself was once the position of a city gate. Interestingly, old Survey of Western Palestine maps show a cemetery located here, although there is no evidence at present indicating to what period it dates. Today Jericho's main congregational mosque and market cover the area. In any event, if it does

¹² Augustinovic, *Gerico e dintorni*, 88-9.

date back to the Roman or Byzantine period, this area was probably outside the city walls, as cemeteries tended to be, usually opposite the city gate. Continuing east along this road, we see another distinctive feature, a semi-circular curve around the area of the modern town square. At present, the significance of this characteristic is difficult to say, it could relate to a now lost defensive structure.

Allowing for the possibility that the modern city square was also the ancient center of administration and civic life draws attention to its central position on the intersection of the principal path of the two main road directions traversing the Jericho plain. One road ran on a southwest-northeast axis coming from Jerusalem and headed towards the easiest place to cross the Jordan River. This is the area of the Allenby Bridge crossing today. The other road ran on a northwest-southeast axis connecting Jericho to the north and south. The location of the urban core in this way reflects the idea of the city as a regional administrative and commercial hub for the Jordan Valley.

Landscape, Tony Wilkinson argues, should be understood as both influencing settlement and being, in turn, influenced by settlement.¹³ Put another way, a cultural landscape constitutes the interplay and tension between physical and settlement features. This relationship is exemplified in the Jericho plain by the location of the urban core. The landscape model serving as a framework for this dissertation generates an explanation for urban settlement in Zone 1 based on physical factors: the most abundant and continuous water source in the Jericho plain is 'Ayn al-Sultan, which flows with no obstacles into Zone 1. In order to understand the exact location of the urban core within Zone 1, however, environmental explanations must be augmented by human agency. The explanation presented here is that this location represents the

¹³ Wilkinson, *Archaeological Landscapes of the Near East*, 6.

invisible intersection of two axes: the natural hydrology of ‘Ayn al-Sultan and a manageable crossing point of the Roman road traveling down from Jerusalem, which must cross the Wadi al-Qelt to reach Jericho.

2.4 Archaeology of the Urban Core -- the Russian Museum site

The evidence presented above is complemented by two major archaeological investigations in the area of the proposed Byzantine/Umayyad urban core: (1) the Russian Museum site and (2) Tell al-Hassan. Excavations at these two sites represent the most comprehensive archaeological explorations of post-Tell al-Sultan urban contexts in Jericho.

The Palestinian Department of Antiquities and the Institute of Archaeology of the Russian Academy of Sciences have an ongoing joint project to systematically examine Byzantine Jericho. The program of scientific excavations runs alongside the building of a major new museum. The plot of land at the Russian Museum has long been a known archaeological site. The land belonged to the Russian monk Archimandrite Antonin Kapustin, who in 1883 dug on the land and discovered mosaics dated to the Byzantine period. Later, in 1894, F. J. Bliss conducted a topographical survey of the Jericho plain. He noted an extensive mound on “Russian property north-west of the hotel,”¹⁴ presumably a reference to the site of the present-day Russian Museum. He posits that the ruins belong to the same date as Khirbet al-Mafjar, reflecting the common perception of the time that the Umayyad palace was actually a Roman or Byzantine construction.

The current Russian-Palestinian excavations were first conducted June through September 2010. A final report is forthcoming, but two separate summaries by the project’s co-

¹⁴ F.J. Bliss, "Notes on the Plain of Jericho," *Palestine Exploration Quarterly* Quarterly Statement 26(1894): 181.

directors are now available: an article by L. A. Beliaev published in Russian, with an English summary,¹⁵ and a book section by Hamdan Taha.¹⁶ For his part, Beliaev reports the excavations revealed a series of buildings and mosaics, with finds dating from the Roman period through the Ottoman period. The excavators offered a preliminary interpretation that the site was an important area of occupation especially from the late fifth to early eighth century CE. It was a place of some wealth, as indicated by a polychrome mosaic; various excavated decorated capitals and bases; columns; and a ceremonial bronze lamp with a high decorated handle and elongated body and nozzle. Excavators unearthed a similar lamp at Bet Shean. It likely dates to the sixth century, but evidence suggests it was still in use at the time of the earthquake of 749 C.E.¹⁷

2.5 Archaeology of the Urban Core -- Tell al-Hassan¹⁸

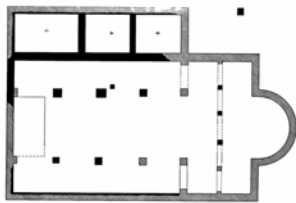


Figure 21: Tell al-Hassan basilica (from Baramki 1936, p. 82 fig. 1)

In 1934, a farmer accidentally discovered a mosaic pavement while digging a drainage canal in an area of Jericho known as Tell al-Hassan, located around five hundred meters north of the central square of the modern city. This led to excavations directed by Baramki, under the aegis of the British Mandatory Department of Antiquities.

¹⁵ L. A. Beliaev, "Byzantine Jericho Project: 2010: recent excavations and new perspectives," *Rossijskaâ arheologiâ* 3(2011): 71-85.

¹⁶ Hamdan Taha, "Archaeological Excavations in Jericho, 1995-2010," in *Padis I: Archaeological Heritage in the Jericho Oasis: A Systematic Catalogue of Archaeological Sites for the Sake of Their Protection and Cultural Valorisation*, ed. Lorenzo Nigro, Maura Sala, and Hamdan Taha, Rome La Sapienza Studies on the archaeology of Palestine & Transjordan (Rome: La Sapienza Expedition to Palestine & Jordan, 2011), 269-304.

¹⁷ Shulamit Hadad, "Oil Lamps from the Third to the Eighth Century C.E. at Scythopolis-Bet Shean," *Dumbarton Oaks Papers* 51(1997): 182.

¹⁸ Note that Baramki refers to the site as Tell al-Hassan, as opposed to Tell al-Hassan, as the area is known today. This is typical of sites in Jericho, which in recent centuries have often switched names or pronunciations; in referring to Qasr Hisham, Bliss states: "I was first told that its name was Khurbet el Nuwei'meh...later I heard the name el Mefjir applied to it...Warren called it Khurbet es Sumrah (or the Dark Ruin)."

F.J. Bliss, "Notes on the Plain of Jericho," 177.

These excavations were the first of their kind in the urban core of Jericho: a stratigraphic investigation over an extended area by a professional archaeologist. The site is especially important because there is otherwise a lack of significant archaeological or historical information related to the identification and location of important public structures and infrastructures, including streets and city walls.

In an article published in 1936, Baramki discusses two strata of occupation, Byzantine and early Islamic.¹⁹ The main structure he found was a Byzantine basilica twenty-five meters long by twenty meters wide, with a central nave and two lateral aisles. Much of the plan is conjectural,²⁰ as most of the walls were completely robbed out, but it seems clear that a set of rooms and a portico stood along the north side of the basilica. Baramki found mosaic floors throughout the basilica, including the attached chambers. The decorations consisted mostly of geometric patterns in white, black, and red tesserae. The excavators hypothesized the courses of the walls by following either the edges of mosaics or, if the mosaic no longer remained, the edges of the cement preparation layer below.²¹ They did not excavate the area south of the basilica.

Baramki, and subsequent researchers following him, have identified the basilica at Tell al-Hassan as the Church of the Holy Virgin. Procopius relates the emperor Justinian restored this church, located somewhere in Jericho, in the sixth century. Justinian was effectively in power from 518 to 565 CE and in many ways shaped the sixth century, a time for which a wealth of written sources exist. It is possible that the church mentioned by Procopius dates to an earlier

¹⁹ Dimitri C. Baramki, "An Early Byzantine Basilica at Tell Hassan, Jericho," *Quarterly of the Department of Antiquities of Palestine* 5(1936): 82.

²⁰ Note that there is a discrepancy in the plan labeling of "existing" and "conjectural" in Baramki's article and the *The New Encyclopedia of Archaeological Excavations in the Holy Land* entry on the site. Based on the original plan in the archives of the Rockefeller Museum, the plan in Baramki's article is the correct one.

²¹ Baramki, "An Early Byzantine Basilica at Tell Hassan, Jericho," 85.

period – some sections of the mosaic resemble mosaics from the fourth and fifth centuries found in the Church of the Nativity in Bethlehem.²² In any event, the Tell al-Hassan basilica is the most impressive known structure of the Byzantine period in Jericho and likely played a central role in the vitality of the town.

Baramki devotes only two brief paragraphs to post-Byzantine occupation at Tell al-Hassan, stating, “the Arab period includes miscellaneous rooms not built on any specific plan, and the only interest attaching to them is the fact that a large amount of the Early Byzantine material was reused in their construction.”²³ Builders reused well-dressed stone blocks reused to new walls or extend existing walls of the basilica. No detailed stratigraphy of the excavations has been published, but from Baramki’s description it is evident that floor levels remained the same, with instances of continued use of the mosaics. This indicates no long intermediary transition period of destruction, collapse, or abandonment between the basilica and later structures. From the photos and report, it is difficult to determine the function of the early Islamic structures. Baramki describes the walls as “intrusive” and “crudely built,” but there is a pavement composed of flagstones and a doorway paved with marble slabs.²⁴ That there is substantial use of spolia from earlier structures does not preclude substantial occupation and investment in new building.²⁵

Baramki published a series of storage vessel caps he called “Arab stoppers,”²⁶ but only an examination of the Rockefeller storerooms reveals the large number he found -- over forty.

²² Gideon Foerster, "Tell el-Hassan," in *The New Encyclopedia of Archaeological Excavations in the Holy Land*, ed. Ephraim Stern (Jerusalem & New York: Israel Exploration Society & Carta; Simon & Schuster, 1993), 696.

²³ Baramki, "An Early Byzantine Basilica at Tell Hassan, Jericho," 82.

²⁴ *Ibid.*, 85.

²⁵ For an illustrative example in Jericho, see recent results of excavations at Khirbet al-Mafjar: www.jerichomafjarproject.org/site-setting/area-5

²⁶ Baramki, "An Early Byzantine Basilica at Tell Ḥassān, Jericho," Pl. LVIII.

Clearly, after its abandonment as a church, this structure underwent a major change in use. Other published ceramics include jugs with trefoil rims, basins, Byzantine fine ware, and early Islamic wares with finger-molded decorations.²⁷ A handful of coins were excavated, with several sixth century issues and six illegible coins dating to the Umayyad period. The finds taken together are compelling evidence for continued occupation into the early Islamic period.

Unfortunately, Baramki's 1936 report does not detail the exact location of his excavations. In Augustinovic's *Gerico e dintorni*,²⁸ a systematic description of sites and historical topography of Jericho published in 1951, the author places the basilica on his map of Jericho, although the map is at a large scale and the location is more schematic than precise. Augustinovic's written account offers more detail, placing the church – which by the time of his visit had been reburied – along the eastern side of the road to Khirbet al-Mafjar.

Retracing Augustinovic's account yields further detail. Across the street to the west, he visited a modern house with ancient stones in its courtyard, including a column, five bases, and three capitals, presumably once part of the Tell al-Hassan basilica. He writes that immediately south of this house, “a short distance southwest of Tell al-Hassan,” is the Coptic Church.²⁹ This would put the basilica excavated by Baramki just north of THP' 12 Area 1, discussed below in section 2.6.

²⁷ *Ibid.*, 87, Pl. LVII 1.

²⁸ Augustinovic, *Gerico e dintorni*.

²⁹ *Ibid.*, 84.

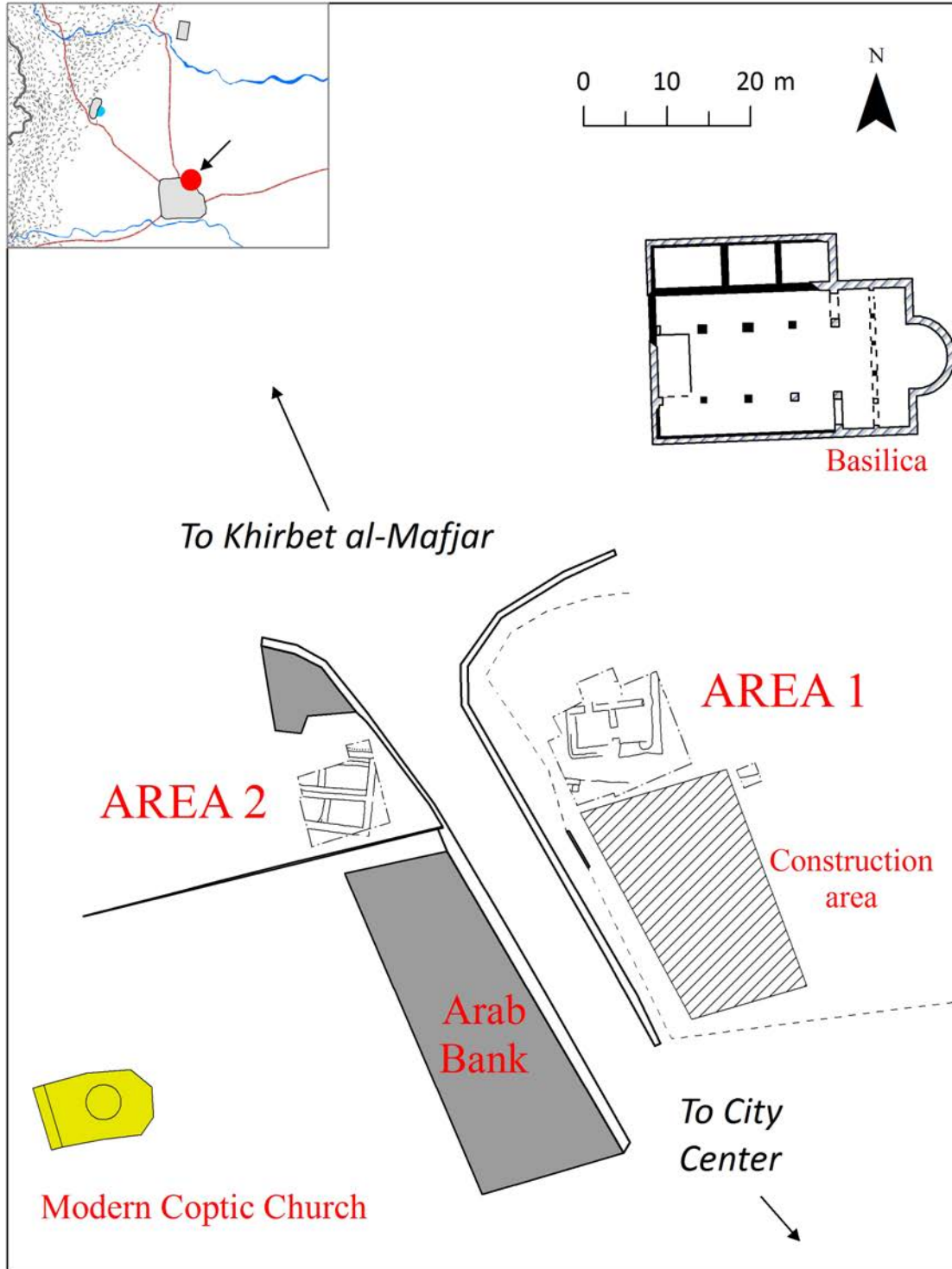


Figure 22: Retracing of Augustinovic's (1951) account indicates the likely location of the now covered Tell al-Hassan basilica north of the Tell al-Hassan Project 2012 excavation area (GIS plan created by author)

The first indications that the basilica was part of a substantial extended archaeological site exist in files from the British Mandate period in Palestine located in the Rockefeller Museum in Jerusalem. Examination of reports from inspectors of antiquities in Jericho from 1922 to 1943 reveals repeated mention of ancient materials in the land around the Coptic Church. In a typical report, filed on June 23, 1922, Junior Inspector J. Lederman states: “The court of the convent was extensively dug up...with the intention of clearing the ground for planting trees. The place seems to be an ancient site of some importance; foundations of cut stones, shafts of columns, ornamental stones, etc., were discovered and a mosaic is also said to exist in the same court.”³⁰ In another report filed in May 1933, S.A.S. Hussein, inspector of antiquities, writes: “I inspected the site, which lies North East of the Copt Convent, known as Tell Hassan. I found that the proprietor was digging in his land, to render it fit for the plantation of trees. I understood from the guard that about five months ago the above mentioned was digging at another place in his plot of land, he struck old ruins, he was then stopped by Mr. Baramki from proceeding any further. This suggests that the ruins run extensively.”³¹

Lederman mentions stone slabs with Greek epigraphy, some of which were been taken to the “Museum in Jerusalem,” undoubtedly the Palestine Archaeological Museum (now the Rockefeller Museum).³² In another report, from May 21, 1933, Inspector S.A.S. Hussein writes that he inspected land north of the Coptic Convent, belonging to one Dawood Eff. El Taher. He found that much old masonry had been removed, including column bases and door elements.³³

³⁰ “Report. Chief Inspector of Antiquities, Jerusalem. June 23rd, 1922.”

³¹ “Extract from Inspectors’ report. 21-5-33.” Reference no. ATQ/207.

³² “A/Director of Antiquities. Jerusalem, 13th July, 1938.” Reference no. ATQ/722.

³³ “Extract from Inspectors’ report. 21-5-33.” Reference no. ATQ/207.

The emerging picture painted by the reports is that of a major archaeological site. Any excavation in the area around the church revealed ancient ruins. We learn from a report filed by Inspector Salem on January 14, 1937, that recent digging by the Coptic Priest Philippus had uncovered a six by four meter reservoir with steps and an adjacent well six meters deep, along with ceramic tubing, pottery, and marble columns.³⁴ Baramki adds that further digging in the same month revealed a second cistern and various architectural fragments, including a capital decorated with lotus leaves, a small Corinthian capital, small broken columns, and pieces of mosaic.³⁵

2.6 Tell al-Hassan Project (THP) 2012 excavations

In order to further investigate the settlement context of the Tell al-Hassan basilica, the Palestinian Department of Antiquities and Cultural Heritage (DACH) conducted four weeks of excavations in September 2012. These excavations were called the Tell al-Hassan Project (THP), directed by the author and Anthony Lauricella, with numismatic study done Tasha Vorderstrasse of the University of Chicago. The excavation consisted of two areas located on opposite sides of Qasr Hisham Street.

The ceramic and numismatic assemblages from the excavations offer strong evidence that this was an active part of Jericho, with continuous occupation in the Byzantine and early Islamic periods. The ceramic corpus, in particular, indicates that Jericho was part of a wider commercial network that brought products from around Syria-Palestine and the Mediterranean. Taken as a whole, the combined excavations by Baramki and the THP offer a glimpse of Jericho's urban layout, with commercial structures and finds in the area of the basilica. The chronology of the

³⁴ "Inspector of Antiquities report. Jericho, 14th January. 1937." Reference no. ATQ/207.

³⁵ "Report from 28th October, 1940" Reference no. ATQ/207.

commercial element is uncertain, but there is a possibility that we have a process mirroring that of Ramla. Here we see a new concept of urban core, no longer the formal separation between residential and industrial districts of the Roman city. Now the early Islamic city freely mixes commercial and industrial elements with residential areas.³⁶

2.6.1 THP'12 -- Excavation results

Area 1 is located on the east side of the street, across from the Arab Bank and Area 2. Excavations covered one hundred and ninety square meters and yielded extensive architectural, ceramic, and coin finds. The area, after the end of one season of excavation, consists of three main elements: a large, multi-room structure (presumably square) oriented to the cardinal points, a water delivery system running roughly east-west, and a street separating the two. A small sounding made to the east indicates more unexposed architecture maintaining the same general orientation.

The location and nature of the finds and architecture suggest that we are dealing with a

public, commercial area of Jericho. Because the water-channel passes close to the building but does not appear to serve it, this segment of the channel is likely one part of a larger network and

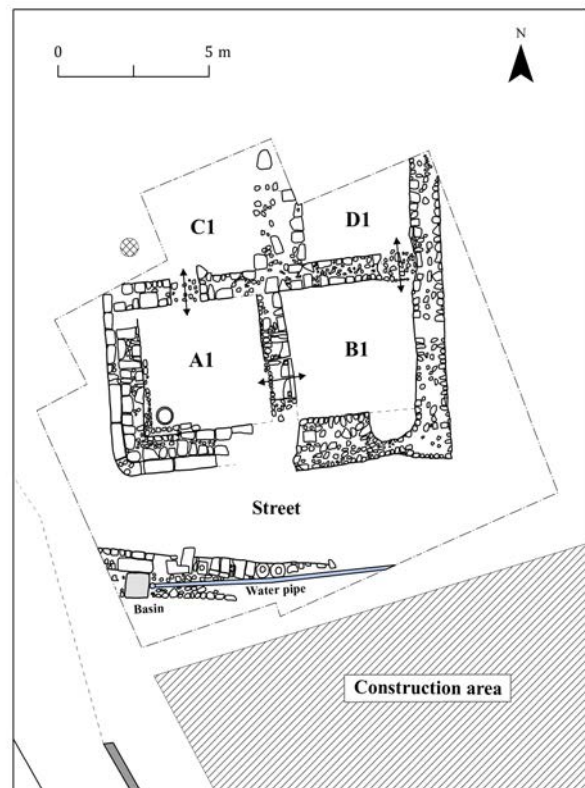


Figure 23: THP'12 Area 1 excavation results (GIS plan created by author)

³⁶ Gideon Avni, *The Byzantine-Islamic Transition in Palestine: An Archaeological Approach*, 1st ed., Oxford Studies in Byzantium (Oxford: Oxford University Press, 2014), 178.

not specific to the building. The wide street, kept clear of debris, was likely a pedestrian thoroughfare. The open space outside the building to the east (possibly another north-south street) was completely free of stones, debris, and trash.

While there was little patterning of finds within the building, storage vessels dominate the ceramic finds. Excavators found two large, nearly complete dolia in the southern half of the large building. Digging also yielded a well-preserved red ware oil lamp (Magness's Form 3C) with the familiar inscription "the light of Christ shines for all."³⁷ This type is found throughout Palestine at Byzantine and early Islamic sites, including in Jericho at the nearby Russian Museum site. The most intriguing small find, however, was a small lead disk stamped with Arabic letters reading "Muhammad rasul Allah," perhaps a merchant's weight. If so, the weight represents direct material evidence of early Islamic commercial activity in the area adjacent the former Christian basilica.

Area 2 is located across the street from Area 1, adjacent north of the Arab Bank and Coptic Church. The distinctive archaeological features that emerged in Area 2 include a structure comprised of at least three rooms, with a small basin. As in Area 1, the upper layers of Area 2 have been disturbed and re-deposited.

Unlike Area 1, however, structural features were deeper because these upper layers are thicker and a series of floor surfaces allowed for some

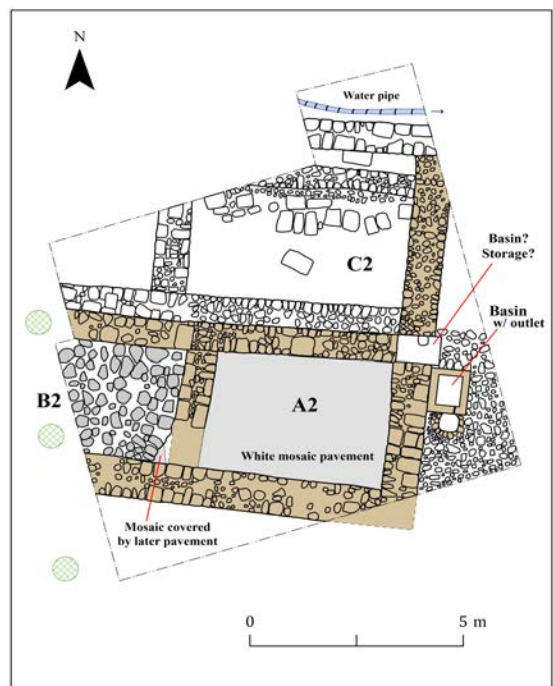


Figure 24: THP'12 Area 2 excavation results (GIS plan created by author)

³⁷ Jodi Magness, *Jerusalem Ceramic Chronology: Circa 200-800 CE*, JSOT/ASOR monograph series (Sheffield: JSOT Press, 1993), 253.

stratified contexts. The ceramic corpus, together with a large quantity of coins, point to a residential or small-scale industrial context: the majority can be classified under the category of food conservation (e.g., jars, basins, and jugs) and table wares (e.g., plates, cups, dishes, and small bowls). Most of the ceramic and numismatic finds suggest are Byzantine and early Islamic phases. Besides coins, the principal object excavated was a small Byzantine lamp corresponding to Magness's Form 2, "Small Candlestick Lamps," which she dates to the first half of the sixth century.³⁸ It is molded without a handle, decorated with raised strokes that radiate out from the filling hole and displays a Byzantine cross between the filling and wick openings. A ceramic sherd with Arabic writing in Kufic style also surfaced.

2.6.2 THP'12 -- Discussion of ceramic evidence (see: Appendix 1)

As there is no discernible difference between the materials of Area 1 and Area 2, here we present the ceramic finds from both areas. The key studies aiding our analysis are Jodi Magness's comprehensive examination of pottery from Jerusalem,³⁹ Pamela Watson's important work at Pella,⁴⁰ John Hayes's catalogue of African Red Slip vessels,⁴¹ and reports from excavations at sites in the region. Analyzed as a whole, the pottery is similar to Byzantine and early Islamic assemblages from other sites in Syria-Palestine.

³⁸ Ibid., 251.

³⁹ Ibid.

⁴⁰ Especially: Pamela Watson, "Change in Foreign and Regional Economic Links with Pella in the Seventh Century A.D.: The Ceramic Evidence," in *La Syrie de Byzance à l'Islam : VIIe-VIIIe siècles: Actes du colloque international Lyon - Maison de l'Orient méditerranéen, Paris - Institut du monde arabe, 11-15 Septembre 1990*, ed. Pierre Canivet and Jean-Paul Rey-Coquais (Damas: Institut français de Damas, 1992); "The Byzantine Period: Byzantine Domestic Occupation in Areas III and IV," in *Pella in Jordan 2: The Second Interim Report of the Joint University of Sydney and the College of Wooster Excavations at Pella, 1982-1985*, ed. A. W. McNicoll, et al. (Sydney: Mediterranean Archaeology, 1992).

⁴¹ John Hayes, *Late Roman Pottery* (Rome: British School at Rome, 1972).

The THP'12 ceramic corpus includes a large quantity of amphorae, containers used primarily for the transport of wine or as domestic containers for water or storage, along with a range of other products such as oil, figs, salted fish, wheat, beans, nuts, barley, and olives. Among these containers, the most common type excavated in the THP'12 season was the so-called "bag-shaped" amphora -- a batch term for vessels with wide ribbed globular bodies -- especially Late Roman 5/6, which were produced locally in northern Palestine and exported all over the Mediterranean. Excavators also found examples of tall cylindrical Gaza amphora of gritty dark-brown ware with no neck.

Palestinian bag-shaped jars have an extensive chronological range, from the fifth century CE into the early Islamic period. In the deepest sounding in Area 2, we excavated a thin-walled example (1; Plate 1) of coarse red-brown ware with a parallel from Pella, which Watson identifies as an early form in its evolution.⁴² One piece with a folded collar rim (2; Plate 1) found in fill between two surface layers is similar to a form found at Pella described by Watson as the most characteristic sixth century form.⁴³ Found in the same locus was a jar of hard-fired coarse dark brown ware (3; Plate 1) that corresponds to Magness Form 7, dated to the seventh century.⁴⁴

The general evolution of bag-shaped jars sees longer necks as time goes by. The most common form associated with sites in Jerusalem is Magness Form 4. One example (4; Plate 1) excavated at Tell al-Hassan made of hard-fired brown fabric with a ridge at the base of the neck

⁴² Watson, "Change in Foreign and Regional Economic Links with Pella," Fig. 8:62.

⁴³ *Ibid.*, 239 & Fig. 9:64.

⁴⁴ Magness, *Jerusalem Ceramic Chronology*, 231 #1.

matches Form 4 variant C, with a suggested date from the late sixth into the seventh century.⁴⁵ Similar forms are also present in the pottery assemblages from Ramla and Tiberias.

Many storage jars from Tell al-Hassan find parallels excavated at Pella. One example (5; Plate 1) similar to an example that Watson dates from the mid-sixth century to the beginning of the seventh century.⁴⁶ Archaeologists also recovered forms typical of the eighth century. Jars with tall solid necks without any basal ridge, and simple, tapered rims (6 & 7; Plate 1) have a parallel from Pella dated from the second half of the seventh century into the 'Abbasid period.⁴⁷ Another eighth century type of red-brown ware (8; Plate 1) has a wide body and a ridge at base of the neck; Magness Form 6 variant B.⁴⁸

Finally, there are several examples (e.g. 9; Plate 1) of Late Roman 1 amphora, with a moderately gritty fabric hard-fired to a pale pinkish-brown color. This type has widespread diffusion, including at Jerash and Pella.⁴⁹ It is common in sixth and early seventh century contexts. It is believed to have originated from either northern Syria (Antioch⁵⁰), or Cyprus, where many Late Roman 1 kilns have been discovered. Excavators also recovered rim sherds of vessels imported from North Africa (e.g. 10; Plate 1).

The repertoire of pottery from the THP'12 season includes a substantial collection of cooking vessels. They are generally of a coarse red ware burnt to dark grey, with many medium sized quartz inclusions, some small lime grits, and pebbles. The principal forms include lids, casseroles, and pots.

⁴⁵ Ibid., 223-6.

⁴⁶ Watson, "Change in Foreign and Regional Economic Links with Pella," Fig. 9:67.

⁴⁷ Ibid., Fig. 9:74.

⁴⁸ Magness, *Jerusalem Ceramic Chronology*, 230, #1.

⁴⁹ Watson, "Change in Foreign and Regional Economic Links with Pella," Fig. 10:78.

⁵⁰ Initial examination of the coin finds reveals that some were minted in Antioch as well.

The lid forms are very common from the Byzantine and early Islamic periods. They likely had button handles with a steam hole. One ribbed, flaring form (11 & 12; Plate 2) is found throughout the region, for example at Nevé Ur,⁵¹ Capernaum,⁵² and Pella.⁵³ The lids were generally used to cover casseroles; one example from THP'12 (13; Plate 2) of coarse terracotta fabric has a parallel at Pella, but, like the lids, there is a broad chronology.⁵⁴

Excavators found many examples of cooking pots made of a thin, brittle, gritty red-brown ware, with globular bodies, curved bases, and usually a pair of loop handles. The corpus includes both forms with flaring necks and neckless forms. Of the necked forms, one example (14; Plate 2) has a triangular rim and a carinated transition from neck to shoulder. Many examples of Magness's Form 4C were excavated, common for the seventh century.⁵⁵ The neckless forms have many regional comparanda. Two examples of coarse terracotta ware are similar to cooking pots found at Pella: one (15; Plate 2) has a parallel from Watson's Phase II, 500-525 C.E.,⁵⁶ and another (16; Plate 2) has a parallel from Phase IIIa, 525-551 C.E.⁵⁷

The majority of basins recovered were deep, flat-based vessels, many decorated with bands of either combing or incised wavy lines on the exterior. The majority are buff ware, with fine grits and some medium white grits and small to medium voids. Body shapes are either straight or flaring. They comprised a variety of rim forms, including flattened rims (e.g. 17;

⁵¹ Dina Shalem, "Nevé Ur - An Early Islamic Period Village in the Bet She'an Valley," *'Atiqot* XLIII(2002): 160 Fig. 9:4.

⁵² J.P. Sodini and E. Villeneuve, "Le passage de la céramique byzantine a la céramique omeyyade," in *La Syrie de Byzance à l'Islam : VIIe-VIIIe siècles: actes du colloque international Lyon - Maison de l'Orient méditerranéen, Paris - Institut du monde arabe, 11-15 Septembre 1990*, ed. Pierre Canivet and Jean-Paul Rey-Coquais (Damas: Institut français de Damas, 1992), Fig. 11:1.

⁵³ Watson, "Change in Foreign and Regional Economic Links with Pella," Fig. 1:1.

⁵⁴ "The Byzantine Period: Byzantine Domestic Occupation in Areas III and IV," Pl. 109:8.

⁵⁵ Magness, *Jerusalem Ceramic Chronology*, 220.

⁵⁶ Watson, "Change in Foreign and Regional Economic Links with Pella," Fig. 1:9.

⁵⁷ "The Byzantine Period: Byzantine Domestic Occupation in Areas III and IV," Pl. 111:1.

THP12.2103.C2), in-turned rounded rims (e.g. 18; Plate 2), and out-turned rims (e.g. 19; Plate 2 & 20; Plate 3).

Many of the basins are hard to date because they continue without major changes in form from the Byzantine period to the tenth/eleventh century CE. One large bowl (21; Plate 3) with a single wavy incised line, comprised of buff ware with fine grits, is similar to an example Pritchard excavated in Jericho at Tulul Abu al-‘Alayiq.⁵⁸ This type of decoration appears in the sixth century and continues well into the early Islamic period.⁵⁹ Finger impressions or “pie-crusts” are another frequent decoration type found in the corpus of basins. One example (22; THP12.2301.C1) with pinkish fabric and many small dark grits has a flat rim with a band of ridges on the exterior wall, below which is a horizontal strip of clay with finger impressions.

Some examples can be provisionally dated based on similar pieces excavated in Syria-Palestine. For example, the deepest sounding conducted in Area 2 yielded a hard-fired basin fragment (23; Plate 3) with a greyish-core and light yellow-brown exterior slip corresponding to Magness’s “Rilled-Rim Basins” example #4, dated to before the mid-sixth century.⁶⁰ One basin with an indented triangular rim is similar to a form that is common at Pella in the second half of the sixth to the early seventh century.⁶¹ Finally, the THP’12 corpus includes numerous examples of Magness’s “Arched-Rim Basins” Form 3 dated from the mid-sixth century to the late seventh or early eighth century, including pieces (e.g. 24; Plate 3) similar to her illustrated example #4.⁶²

⁵⁸ James B. Pritchard, *The Excavation at Herodian Jericho, 1951, The Annual of the American Schools of Oriental Research* (New Haven: American Schools of Oriental Research, 1958), Pl. 51:6.

⁵⁹ Sodini and Villeneuve, "Le passage de la céramique byzantine a la céramique omeyyade," 205.

⁶⁰ Magness, *Jerusalem Ceramic Chronology*, 203.

⁶¹ Watson, "Change in Foreign and Regional Economic Links with Pella," 241 & Fig. 11:91.

⁶² Magness, *Jerusalem Ceramic Chronology*, 209.

We found many lids and stoppers, predominantly of yellow-buff but also of pinkish-red ware. These include both Form 1 (e.g. 25; Plate 3) and Form 2 (e.g. 26 & 27; Plate 3) from Magness, both of which she dates to the mid-sixth through mid-eighth centuries.⁶³ They have everted flaring rims, and either flat or disc bases. More common in the THP'12 corpus is Form 2, which has high central knob handle; Baramki published an example in his Tell al-Hassan report.⁶⁴ Regional parallels of this form are numerous, including many cream ware examples in 750-850 C.E. layers at Pella, contexts in Syria dating to the second half of the seventh century (Dehes and Dibs Faraj),⁶⁵ and as far as Istanbul and Egypt.

The two largely intact dolia excavated in Area 1 (e.g. 28; Plate 4) with base (29; Plate 4) are red-orange ware with medium grit and a cream slip on the exterior. They have a zigzag incised decoration below the rim. Regional comparanda come from near and far; from Jericho at Tulul Abu al-'Alayiq,⁶⁶ and from Capernaum on the Sea of Galilee.⁶⁷ This type of dolium is often decorated with red painted lines, but ours are not.

Excavations yielded several examples of a well-known light red ware jug (30; Plate 5). This form is has a single spout and handle, with an omphalos base (similar to 31; Plate 5) and sometimes a filter. Parallels have been excavated near Bet Shean at Nevé Ur⁶⁸ and Mesillot,⁶⁹ and at Jerash.⁷⁰

⁶³ Ibid., 247-8.

⁶⁴ Baramki, "An Early Byzantine Basilica at Tell Hassan, Jericho," 87, Fig. 3:6.

⁶⁵ Sodini and Villeneuve, "Le passage de la céramique byzantine a la céramique omeyyade," Fig. 11:4-6.

⁶⁶ Pritchard, *The Excavation at Herodian Jericho, 1951*, Pl. 51:2.

⁶⁷ Sodini and Villeneuve, "Le passage de la céramique byzantine a la céramique omeyyade," Fig. 1:4.

⁶⁸ Shalem, "Nevé Ur - An early Islamic period village in the Bet She'an Valley," 168, Fig. 15:4.

⁶⁹ Pinhas Porat, "A Late Byzantine-Early Islamic-Period Farmhouse at Mesillot in the Bet She'an Valley," *'Atiqot* 53(2006): 188, Fig. 7:4.

⁷⁰ Sodini and Villeneuve, "Le passage de la céramique byzantine a la céramique omeyyade," Figs. 5:2 & 5:3.

Excavators found other jugs and juglets in a variety of forms, including an example of grey-buff ware juglet with a narrow neck and trefoil rim (32; Plate 5), jugs of buff ware with medium sized grits with either one or two handles at the neck (33 & 34; Plate 5), and jars in a variety of wares with two handles at the top of the rim itself. Baramki published similar juglets from his excavation at the site.⁷¹ Also excavated were several examples of what may be termed ‘ungentaria’ of both reddish brown and buff wares, thick-walled with medium to large grits and exterior ridges (e.g. 35; Plate 5). These were small containers for special purposes such as to contain perfumes or medicines produced and diffused in the eastern Mediterranean between the sixth and seventh centuries.

Fine Byzantine ware cups were less common than African Red Slip ware bowls (see below), but still present. One example (36; Plate 5) is hard-fired and thin-walled, with a greyish core and reddish brown exterior with burnished bands. It is similar to Magness’s “FBW Bowls” Form 1F, which she dates to the second half of the sixth century through the seventh century.⁷² Baramki published one example of Fine Byzantine ware from his own excavations at Tell al-Hassan, similar to examples found in 2012 (e.g. 37; Plate 5).⁷³

Archaeologists excavated a good quantity of tableware bowls in both areas. Some were likely produced locally, but there is a large collection of African Red Slip ware. African Red Slip ware was produced in northern parts of Tunisia but had a widespread diffusion throughout the Mediterranean. It is found in quantity from the sixth century on. Comparanda from Hayes in his study of Late Roman pottery give a chronological range for the examples excavated at Tell al-Hassan from the second half of the fifth century to the mid-seventh century.

⁷¹ Baramki, "An Early Byzantine Basilica at Tell Ḥassān, Jericho," 87, Fig. 3:2 & 3:4.

⁷² Magness, *Jerusalem Ceramic Chronology*, 197 #3.

⁷³ Baramki, "An Early Byzantine Basilica at Tell Ḥassān, Jericho," 87, Fig. 3:5.

Excavations yielded several examples of both Hayes Form 91 and Form 104, both common later forms found throughout Syria-Palestine. In her study of the ceramic corpus from Pella, Watson follows Hayes's descriptions and classifications. Hayes Form 104C, a large dish type which dates to the period 550-625 C.E. and was found in abundance at Pella,⁷⁴ is also represented at Tell al-Hassan (e.g. 38; Plate 6). Excavators found Hayes flanged bowls Form 91D, dated 600-650 C.E., in both Area 1 and Area 2 (39 & 40; Plate 6), along with various other forms (e.g. 41-43; Plate 6).

2.6.3 THP'12 -- Numismatic evidence (see: Appendix 2)

Gideon Avni has argued that any abatement in settlement attached to a weaker seventh century CE economy was temporary. For cities and towns of Palestine, the second half of the seventh century and the first half of the eighth century were years of recovery.⁷⁵ The numismatic data from the THP excavations are consistent with this notion.

The general coinage system of Byzantium – namely the combination of the gold solidus, silver and debased silver (bullion), along with bronze – evolved for the most part under Diocletian (r. 284-305 CE) and Constantine I (r. 306-337 CE). This type followed the disappearance of the early Roman coinage during the economic crises of the later third century CE.⁷⁶

In turn, this coinage collapsed in the early fifth century during the barbarian invasions. The fifth century was marked by monetary instability until the reign of Anastasius I (r. 491-518 CE), who, in 498 CE, introduced a series of small copper coins (known as a nummus, pl. nummi)

⁷⁴ Watson, "Change in Foreign and Regional Economic Links with Pella," Fig. 13:105.

⁷⁵ *Ibid.*, 339.

⁷⁶ Philip Grierson, *Byzantine Coinage*, 2nd. ed. (Washington, D.C.: Dumbarton Oaks Research Library and Collection, 1999), 1.

at various fractions to serve as the base of the accounting system. The most important of these denominations was a follis (pl. folles) and was worth forty nummi. The follis became “one of the most conspicuous features of Byzantine coinage for the next six centuries, and since only the solidus and its fractions are earlier in date, it is with the creation of the follis that a history of Byzantine coinage can most conveniently be begun.”⁷⁷

After the Arab conquest, the monetary economy of Palestine continued. Instead of abolishing the Byzantine monetary system they inherited, the new regime would have found it natural to begin by minting coins resembling those already in circulation. Money, especially copper, which has a low nominal value, needs to look like money in order for it to maintain its legitimacy. From the beginning of Islamic history, Arabic terms for coin denominations derived from foreign words: copper (fals, pl. fulus) from the Latin folles; silver (dirham, pl. darahim) from the Greek drachma; and gold (dinar, pl. dananir) from the Latin denarius.⁷⁸ Older coins still in use -- we commonly find coins from the fourth and fifth century CE associated with later ceramics - existed alongside new types of coinage.

Arab-Byzantine⁷⁹ coins incorporated images and themes relying on Byzantine precedents.

Clive Foss summarizes three principal types of the coinage: (1) “coins that imitate Byzantine

⁷⁷ Ibid., 2.

⁷⁸ Alan Walmsley, *Early Islamic Syria: An Archaeological Assessment*. Duckworth Debates in Archaeology (London: Duckworth, 2007), 42-3.

⁷⁹ On the use of this term, C. Foss writes: “It might be more accurate to call this whole series ‘transitional coinage of Syria and Egypt under early Islamic rule,’ ‘Byzantine-Muslim transitional coinage,’ or something similar, but the term ‘Arab-Byzantine’ is convenient and rooted in the literature.”

Clive Foss, *Arab-Byzantine Coins: An Introduction, With a Catalogue of the Dumbarton Oaks Collection*, Dumbarton Oaks Byzantine Collection publications (Washington, D.C.; Cambridge, Mass.: Published by Dumbarton Oaks Research Library and Collection; Distributed by Harvard University Press, 2008), ix.

See also: Robert G. Hoyland, *In God's Path: The Arab Conquests and the Creation of an Islamic Empire, Ancient Warfare and Civilization* (New York, NY: Oxford University Press, 2015).

prototypes more or less carefully;" (2) "types that have mintmarks and inscriptions in Greek and/or Arabic, but still feature the image of an emperor;" and (3) "those that show an Arab figure, with or without the name of the caliph, and inscriptions in Arabic."⁸⁰

Despite much scholarly focus and a growing corpus of literature on Arab-Byzantine coins, they remain enigmatic in large part because none contain a precise date of issue. This lack of chronological clarity has been at the center of debate. However, most scholars follow the numismatist S. Qedar in his view that the coins were struck in the period from circa 640 CE until the end of the seventh century; that is, from the time around the Arab conquest until the coinage reforms under 'Abd al-Malik.⁸¹ Islamic coinage after these numismatic reforms is notable for its lack of images. It displays solely Arabic epigraphy for decoration, the theme of which is often religious. In the eighth century CE, there were ten known mints in the Syria-Palestine region: Damascus, Ba'albak, and 'Amman in Jund Dimashq; Tabariyya in Jund al-Urdun; Hims and Tartos in Jund Hims; Iliyya (Jerusalem) and Ludd in Jund al-Filastin; as well as Baysan and Jerash.⁸² The reign of 'Abd al-Malik saw the transition from regionally constrained coinage to a unified and empire-wide accepted monetary supply.⁸³

During the THP'12 excavations, excavators recovered over three hundred coins, around one hundred in Area 1 and two hundred in Area 2. Tasha Vorderstrasse of the Oriental Institute at the University of Chicago studied the collection. As with the ceramic corpus, there is no significant difference between the numismatic profiles of Area 1 and Area 2, although Area 1 does seem to have a slightly higher concentration of early Islamic coins. Further cleaning is

⁸⁰ Foss, *Arab-Byzantine Coins*, ix.

⁸¹ *Ibid.*, viii.

⁸² Michael Lawrence Bates, "Byzantine Coinage and Its Imitations, Arab Coinage and Its Imitations: Arab-Byzantine Coinage," *Aram* 6(1994): 385.

⁸³ Alan Walmsley, "Economic Developments and the Nature of Settlement in the Town and Countryside of Syria-Palestine, ca. 565-800," *Dumbarton Oaks Papers* 61(2007): 340.

required, but initial examination reveals that the large proportion of the coins are either Late Roman or Post-Reform Umayyad/‘Abbasid coins, with some early Byzantine and only one Arab-Byzantine coin, a standing caliph type minted in Amman. The early Byzantine coins all date before the Islamic conquest, although, as mentioned above, they probably continued to circulate later. We are still determining the mints, but the early Byzantine coins come from a variety of eastern Mediterranean mints, Constantinople being predominant, while the Post-Reform Umayyad/‘Abbasid coins seem to be primarily from local mints. This change is not surprising given that there were no local mints in Palestine in the Early Byzantine period.

The coin finds from the THP’12 excavations are not a chance occurrence in a single context. Not only do they spread throughout the site in different historical layers, but over two hundred coins were excavated from the nearby Russian Museum site as well, including a significant number of Byzantine small copper coins, folles of the sixth to early seventh century, seventh century Arab-Byzantine coins, and some early Islamic Umayyad issues. Many of the finds are already on display in the museum and there are many observable parallels. Thus, we have a very significant corpus of coinage from the heart of Jericho’s urban core. This is complemented by the assemblage from Tulul Abu al-‘Alayiq: Pritchard’s excavations there discovered a large quantity of post-reform early Islamic issues, which will be discussed in Chapter Four in connection with early Islamic resettlement there.

2.7 Tell al-Hassan Conclusions

The weight of evidence from Tell al-Hassan suggests continuity of the central role of Jericho as a small regional economic power through the transition from the Byzantine to early Islamic period. We need to be careful not to conflate evidence and notions of transformation

with those of decline. It is clear that despite the general political and economic ebbs and flows of the seventh century CE, Jericho in the early Islamic period was an important center of agricultural production and commercial exchange. Excavated ceramic and numismatic evidence offers a significant indication of economic continuity through the Byzantine/early Islamic transition. It is through this evidence that the archaeological excavations at the Russian Museum site and the area of Tell al-Hassan reveal their true significance, demonstrating the activity of the residents of Jericho and the circulation of money between Jericho's urban core in its broad regional context. These excavations, along with evidence of reduced occupation at Tell al-Sultan, are our only archaeological evidence for the reconstruction of Jericho's urban topographical layout and chronological sequence.

The limited historical and archaeological data together create a compatible picture that the urban core of Jericho continued to develop in the early Islamic period. After the Islamic conquest of Jericho, many aspects of life would continue, and many people would remain in their same roles in urban society and economy; continuities existed even in administration and local bureaucracy. Furthermore, cities were central to the regional road system. A concerted program of expansion and maintenance in road systems by rulers in the early Islamic period fostered the continuity of these settlements. This continuity was likely enhanced because there was no city that took its place. Contrast this with, for example, what happened to Caesarea, which lost its political and administrative status to Ramla; or Bet Shean losing out to Tabariyya, which became the administrative center of Jund al-Urdun.⁸⁴ The permanence of Jericho's standing in the

⁸⁴ Although Baysan nevertheless continued to prosper throughout the early Islamic period as an important medium-sized town.

Jordan Valley was ensured because of the unique ability of its springs to sustain urban settlement.

2.8 Early Islamic Jericho -- continuity and continuation

The two major political events of the first half of the seventh century CE, the Sassanid invasion and Islamic conquest, left urban centers in Palestine largely intact. The Sassanid invasion of 614 and subsequent occupation was undoubtedly disruptive to the economic vitality of the region, but the destruction was uneven and the situation was not hopeless. The long-term effects of the invasion and subsequent occupation are debatable.⁸⁵

Heraclius' campaigns in the east culminated in the triumph over Emperor Chosroes in 628. The 630s started auspiciously for Byzantium with Heraclius' triumphant return of the True Cross to Jerusalem. But the decade would consist of back and forth warfare with Muslim forces and by 641 Heraclius was dead. This must have been a difficult time in Jericho as well. Throughout Palestine, insecurity and fear grew. In his Christmas 634 sermon, the Patriarch Sophronius of Jerusalem mentions civilians seeking refuge in Jerusalem and the blocking of the road to Bethlehem.⁸⁶

However, despite an initial impact characterized by devastation and plundering recounted in hostile Greek historical sources, the archaeological record reflects a distinct lack of evidence of destruction caused during the Muslim conquest of Palestine.⁸⁷ Two churches at Rihab in

⁸⁵ "The Persian Conquest of Jerusalem (614 c.c.) - An Archaeological Assessment," *Bulletin of the American Schools of Oriental Research* 357(February 2010).

Clive Foss, "Syria in Transition, A. D. 550-750: An Archaeological Approach," *Dumbarton Oaks Papers* 51(1997).

⁸⁶ Walter Emil Kaegi, *Byzantium and the Early Islamic Conquests*, 1st paperback ed. (Cambridge; New York: Cambridge University Press, 1995), 101.

⁸⁷ Robert Schick, "Archaeological Sources for the History of Palestine: Palestine in the Early Islamic Period: Luxuriant Legacy," *Near Eastern Archaeology* 61, no. 2 (June 1998): 76.

northern Jordan have mosaic floors dating to 635 and two churches at Khirbet al-Samra have mosaic floors that date to 637 and 639. Construction of these churches would have started before the conquest, but “their continued construction and completion prior to the battle of the Yarmuk in the summer of 636 indicates that the inhabitants neither fled as refugees nor were killed off by the Muslims.”⁸⁸

The written account of Arculf, a Christian bishop from Gaul who visited the Holy Land around 670 CE, frequently serves as evidence for the decline of Jericho after the Muslim conquest. Bagatti, for example, writes “after the passing of the Persian army in 614 and the arrival of the Arabs in 638, Jericho fell into decline, so that in 670 the French pilgrim Arculf saw nothing but ruins there.”⁸⁹ Likewise, Meinardus, in his presentation of the Church of St. Andrew, describes the churches of Jericho and then says, “all these churches and monasteries were destroyed by the Persians in 614 A.D.”⁹⁰

The link between the Arculf report and decline stems from an incomplete reading of the account. Arculf does describe a ruined city, but he is referring to ancient Jericho in the area of the house of Rahab, that is, Tell al-Sultan. Yet, between it and the Jordan River, the area of Byzantine Jericho, Arculf describes a heavily cultivated area of corn, grape vines, palm groves “interspersed with open spaces, in which are almost innumerable houses, inhabited by a diminutive sort of men of the race of Canaan.”⁹¹ Clearly, Arculf holds bias against the new Arab

⁸⁸ Ibid.

⁸⁹ Bellarmino Bagatti, *Ancient Christian Villages of Samaria*, Studium Biblicum Franciscanum Collectio minor (Jerusalem: Franciscan Printing Press, 2002), 99.

⁹⁰ Otto Meinardus, "The Byzantine Church of St. Andrew in Jericho," *Bulletin de la Société d'archéologie copte* 18(1966): 184.

⁹¹ Thomas Wright et al., *Early Travels in Palestine: Comprising the Narratives of Arculf [and others]*, Bohn's antiquarian library (London: Henry G. Bohn, 1848), 7.

Muslim inhabitants in Jericho. In actuality, this bias makes his account stronger; in spite of it, he still describes an agrarian economy that is continuing in the seventh century.

Examination of archaeological data shows that despite dramatic political changes, seventh century Jericho experienced a continuation of commercial activity and continuity of settlement, although sometimes with changes in use. As in the Byzantine period, the strength of the economy of Jericho in the early Islamic period revolved around two factors: agriculture and regional position. Large-scale irrigation agriculture and exploitation of natural resources continued throughout the seventh century into the Umayyad period. This continuity mirrors the region of Syria-Palestine in general; archaeological evidence points to “an ongoing commercial role for towns, without doubt accompanied by structural changes but not characterized by major economic and organizational failure.”⁹² Even as the Rashidun and Sufyanid Umayyads consolidated rule over Syria-Palestine in the seventh century, there were “significant continuities in the monetary economy, production, and trade.”⁹³

When conceptualizing the seventh century, we should view the Islamic conquest of Palestine within the framework of continuity of economic activity. At Jerash, notes Alan Walmsley, streets and plazas were in-filled in the seventh century with commercial structures, reflecting overall pattern of “changes, not decay, to essential urban structures, especially a focusing of economic activity.”⁹⁴ Towns like Jericho continued to serve as nodes of economic activity.

The tools for understanding evidence of continued occupation into and throughout the early Islamic period need refinement. It is difficult to estimate demographic figures, but a

⁹² Walmsley, "Economic Developments," 332.

⁹³ *Ibid.*, 339.

⁹⁴ *Ibid.*, 334.

conservative estimate of Palestine's population on the eve of the Islamic conquests is one million.⁹⁵ Jericho likely reached its maximum size and population in the sixth century CE. Immigrants from the Arabian peninsula settled in Palestine after the conquests, but Jericho would still have been predominantly populated by culturally Byzantine residents and their descendants, who were predominantly Christian for many centuries after the conquest.

There is a mistaken tendency to seek a dramatic change in the archeological record when conceptualizing the transition from Byzantine to early Islamic Jericho. Muslims did not settle Jericho en masse immediately -- or ever, perhaps; there is no way to know from current available evidence, but it is likely that most Muslims of later periods were converts from the local population. In Jerusalem, the transition from Christian to Muslim majority took more than four centuries. Furthermore, those newcomers to Jericho did not necessarily change existing architectural styles and tastes in material culture. A better understanding of Byzantine and early Islamic pottery types has suggested a continuity of occupation in major urban centers and many towns and villages as well. Life in early Islamic society, as in Byzantine before it, revolved around urban centers.

Both archaeological and historical sources reflect evidence for the ongoing commercial vitality of seventh century Palestine. We know from historical sources that the early caliphs, for example 'Umar and 'Uthman, granted large amounts of land for agricultural estates.⁹⁶ Previously, many thought that cities in Palestine experienced lackluster urban development after the Muslim conquest, but new archaeological investigations are challenging this idea. For example, Walmsley argues that the discovery of a congregational mosque at Jerash, "has

⁹⁵ Kaegi, *Byzantium and the Early Islamic Conquests*, 30.

⁹⁶ Michael Lecker, "The Estates of 'Amr b. al-'Āṣ in Palestine: Notes on a New Negev Arabic Inscription," *Bulletin of the School of Oriental and African Studies, University of London* 52, no. 1 (1989).

required the outright rejection of such impressionistic and obsolete perceptions, and necessitated a completely new approach to describing and explaining urban transformations during the first Islamic centuries in Syria-Palestine.”⁹⁷

New technology is adding to our understanding of the seventh century. Cluster analysis of XRF data suggests continued local and regional trade throughout the seventh century in southern Palestine.⁹⁸ Coring techniques help analyze and date agricultural terraces, long a difficult feature to date because of their mixture or lack of artifactual materials; around Jerusalem, new evidence indicates a substantial agricultural infrastructure building program dates to the early Islamic period.⁹⁹ Similarly, optically simulated luminescence (OSL) analysis has shown that terracing techniques were a key feature of the agricultural system of the Negev into the tenth century, thus contradicting ideas of an early Islamic decline.¹⁰⁰

We can observe ongoing commercial activity and continuity of settlement in the archaeological records from other towns in the region. In Palaestina Tertia to the north and Provincia Arabia to the east, material cultural evidence portrays a common theme of economic prosperity from the fourth to the eighth centuries.¹⁰¹ To the southwest of Jericho, archeologists have collected abundant data from sites in the Negev desert. Magness challenges the idea that the seventh century was a period of decline for the Negev, writing that the archaeological data

⁹⁷ Walmsley, *Early Islamic Syria*, 87.

⁹⁸ V. E. Holmqvist and M. Martinon-Torres, "Many Potters - One Style: Pottery production and distribution in transitional late Byzantine-early Islamic Palaestina Tertia," in *Proceedings of the 37th International Symposium on Archaeometry*, 13th - 16th May 2008, Siena, Italy, ed. Isabella Turbanti-Memmi (Berlin Heidelberg: Springer, 2011), 71.

⁹⁹ U. Davidovich et al., "Archaeological Investigations and OSL Dating of Terraces at Ramat Rahel, Israel," *Journal of Field Archaeology* 37.

¹⁰⁰ Avni, *The Byzantine-Islamic Transition in Palestine*, 274.

¹⁰¹ Basema Hamarneh, "Dynamics and Transformation of the Rural Settlements of Provincia Arabia and Palaestina Tertia in the Omayyad and Early Abbasid periods. Archaeological Evidence" (paper presented at the ICAANE 6, Rome, 2008), 91.

does not support this theory. Pottery and coins from surveys and excavations of Negev farms and settlements indicate significant early Islamic occupation.¹⁰²

Evidence contradicting the regional decline model indicates that Jericho specifically did not see such a decline. The Negev settlement landscape was likely similar to the Jericho plain, which would have been dotted with small farms reliant on the urban center. The material record provides a variety of indications of large-scale grape and olive cultivation in the Negev during the Byzantine period, including papyri found in Nessana, the industrial-scale wine presses with large storage vats at Shivta, Halutza (Elusa), and Avdat, along with the large distribution throughout the Mediterranean of local wine amphoras, or “Gaza amphoras.”¹⁰³ South Palestine exported wine to other parts of Palestine and Egypt,¹⁰⁴ as well as France and Italy, including Naples, for example.¹⁰⁵ Wine production is attested at both Tulul Abu al-‘Alayiq and Khirbet al-Mafjar, the latter a significant place of production in the early Islamic period.

As is discussed in detail in Chapter Three, the Hasmonean period ushered in a shift in Jericho’s agricultural landscape from a means of sustainability for a local population to cash crop production controlled by elites not originally from Jericho and who did not spend the entire year in Jericho. In this process, it is likely that the local population saw an opportunity to cultivate these crops on smaller, private plots of land. In the first two centuries BCE, we see roots that help us understand Jericho in later periods. For the early Islamic period, it is clear from

¹⁰² Jodi Magness, *The Archaeology of the Early Islamic Settlement in Palestine* (Winona Lake, Ind.: Eisenbrauns, 2003), 134.

¹⁰³ *Ibid.*, 91.

¹⁰⁴ Sean A. Kingsley, "The Economic Impact of the Palestine Wine Trade in Late Antiquity," in *Economy and Exchange in the East Mediterranean During Late Antiquity: Proceedings of a Conference at Somerville College, Oxford, 29th May, 1999*, ed. Michael Decker (Oxford: Oxbow, 2001).

¹⁰⁵ Paul Arthur, *Naples, from Roman Town to City-State: An Archaeological Perspective*, Archaeological monographs of the British School at Rome (London: Published by the British School at Rome, London in association with the Dipartimento di Beni Culturali, Università degli Studi di Lecce, 2002), 130.

archaeological evidence from Khirbet al-Mafjar itself that the trend of agricultural surplus production continued to shape the history of the city and its urban physical and cultural landscape.

2.9 Suburbs

In addition to the core, Jericho's urban signature includes two main clusters of suburbs, the Hindi cluster in Zone 1 and the Matlab cluster in Zone 6, discussed in turn below.

Before doing so, this is an appropriate place to discuss the fate of Tell al-Sultan itself. Archaeological evidence indicates that Tell al-Sultan was reduced in size and importance during the Byzantine period and early Islamic periods. Although settlement did continue, the site was clearly not part of Jericho's urban core. Francesca Zagari evaluates Byzantine archaeological finds from Tell al-Sultan unearthed almost a century apart by a German expedition at the beginning of the twentieth century and by Italian excavations in 1998. A variety of remains surfaced pointing to scattered rural occupation. These remains include bread ovens, water tanks, canals, basins likely for oil, corn silos, and lime furnaces.¹⁰⁶ Small family plots near houses, rather than a collective large cemetery, hosted burials at Tell al-Sultan. This is common for rural settlements in Byzantine Palestine.¹⁰⁷

While no longer the site of Jericho city center, some type of community occupation continued. Recent excavations at the site unearthed ceramics from the Roman and Byzantine periods, as well as the early Islamic period. Byzantine and early Islamic pottery from Tell al-Sultan includes coarse wares, sometimes decorated with red or white paint, red slip ware, bag-

¹⁰⁶ Enrico Cirelli and Francesca Zagari, "L' oasi di Gerico in eta bizantina e islamica. Problemi e proposte di ricerca," *Archeologia Medievale* 27(2000): 358-9.

¹⁰⁷ *Ibid.*, 360.

shaped ribbed amphorae (L.R. 5/6 type), cooking vessels, and ceramic lamps -- all of which conform to the general ceramic horizon one would expect for the fifth through seventh century Near East, a horizon shaped predominantly by local production.¹⁰⁸

Both the Italian team and Ernst Sellin excavated simple houses and other structures, such as basins and oil production assemblies, from the Byzantine period on Tell al-Sultan.¹⁰⁹

Byzantine occupation of Tell al-Sultan seems to concentrate in the center of the tell, and also particularly on the east slope near 'Ayn al-Sultan. The Byzantine remains may rest on a Roman villa associated with the spring, but this needs to be further investigated. There is little evidence of significant occupation of Tell al-Sultan in the Islamic period, yet certainly some continuity of settlement exists there. Materials gathered from surface surveys and some excavation attest to sporadic occupation, probably connected to the nearby sugar production site of Tawahin al-Sukkar.¹¹⁰ In her quadrant H-IV, near the spring, Kathleen Kenyon excavated modest structures she dated to the Umayyad period, although she published little about them.¹¹¹

In current excavations at Tell al-Sultan in a joint project by the Department of Antiquities and La Sapienza (Universita di Roma), few evidences of early Islamic occupation have been reported.

¹⁰⁸ Ibid., 364.

¹⁰⁹ Ernst Sellin and Carl Watzinger, *Jericho, Wissenschaftliche Veröffentlichung der Deutschen Orient-Gesellschaft* (Leipzig: J.C. Hinrichs, 1913), 83-4.

¹¹⁰ Cirelli and Zagari, "L' oasi di Gerico in eta bizantina e islamica. Problemi e proposte di ricerca," 372.

¹¹¹ Kathleen M. Kenyon, "Excavations at Jericho," *Palestine Exploration Quarterly* LXXXVIII(1956): 82.



Figure 25: Aerial photo showing Tell al-Sultan with modern Jericho – the area of the Byzantine/early Islamic urban core – in the background, downslope from ‘Ayn al-Sultan (looking east; taken by the author)

2.9.1 The Hindi cluster

The Hindi cluster is located around six hundred meters south of ‘Ayn al-Sultan in Zone 1 on the border with Zone 2. It includes the known sites of Tell Abu Hindi¹¹² and Tell al-Arayis¹¹³. This area saw significant development beginning in the Roman period and was possibly part of Jericho’s urban core in an intermediary stage as the city shifted from Tell al-Sultan to its current location. The Roman road descending from Neapoli/Nablus and Efraim/Taiybeh, running through Zone 9 into the Jericho plain, continued to Elisha’s Fountain/‘Ayn al-Sultan and past this cluster.¹¹⁴ Advantages and incentives for settlement were

¹¹² Augustinovic, *Gerico e dintorni*, 50, 55, 56; C. C. Conder and H. H. Kitchener, *The Survey of Western Palestine: Memoirs of the Topography, Orography, Hydrography, and Archaeology*. Volume III. Sheets XVII-XXVI (Judea, London 1883), 221; Nigro, Sala, and Taha, *Padis I*, 106.

¹¹³ Augustinovic, *Gerico e dintorni*, 77; Conder and Kitchener, *The Survey of Western Palestine*, 221; Nigro, Sala, and Taha, *Padis I*, 118-9.

¹¹⁴ Augustinovic, *Gerico e dintorni*, 55.

thus numerous in this area, including both the road and easy downslope irrigation from the spring, which naturally drains in a southeast direction.

In the Byzantine and early Islamic period, the cluster was a dispersed suburb between the urban core of Jericho and its main water supply. Although today this area of Jericho is densely planted with banana trees and palms, tells are still visible at Tell Abu Hindi and Tell al-Arayis. Tell Abu Hindi seems to have been a major archaeological site. Wael Hamamra was the director of the Jericho office of the Department of Antiquities in the late 1990s and early 2000s, a time that included the Second Intifada (2000-2005). There was a collapse of internal security in the West Bank during this period, including Jericho. Hamamra indicated that one day a team of local robbers looted Tell Abu Hindi with a bulldozer. He tried to stop them, but, threatened with a gun, was powerless. The result, sadly familiar for Jericho, where sites have been destroyed and looted by the British, Jordanians, Israelis, and locals, was the loss of much of the site. The story does have a postscript: in 2014 the head robber was arrested by Palestinian police on a different charge. At his house authorities found fifteen stone hypocausts believed to be from Tell Abu Hindi. The hypocausts suggest a bath, although their date is uncertain. My own guess is that there was a bath at Tell Abu Hindi in at least the Byzantine period, probably the early Islamic period as well. It is a suitable place for such a structure, outside the urban core with good water supply and drainage.

This Byzantine and early Islamic suburb likely grew as an agricultural community connected to the fertile land around 'Ayn al-Sultan. We can imagine that it was an area of some wealth. In addition to the possible bath complex, an array of architectural fragments are still visible today in bulldozed stone piles. A team of researchers from Birzeit University and the University of Bergen conducted a walking survey of the Jericho plain in 1999. Their work is

particularly important because it took place before the Second Intifada. In a quadrangle south of Tell al-Araxis the team discovered equal numbers Byzantine and early Islamic pottery, a basalt grinding stone, stone piles, and part of a mosaic pavement.¹¹⁵ Nearby, they recorded some eighty sherds of early Islamic pottery.¹¹⁶ No doubt the numbers would be even higher if not obscured by dense modern cultivation.

Archaeological evidence suggests that in the Byzantine period this was an area of Christian settlement. The Church of Antimos¹¹⁷ sits south of Tell Abu Hindi just off the main road between modern Jericho and Tell Sultan. It was never formally excavated, but a mosaic pavement with geometric designs and various animal figures -- including birds, fish, and a jackal eating grapes -- was exposed. An undated mosaic inscription reads "The tomb of the deacons Daniel, Macarius, and John."¹¹⁸ This inscription, the style of the mosaic, and some material finds -- including worked marble with Maltese crosses similar to those found at Tell al-Hassan, and possible altar fragments -- all point to a fifth-sixth century date for the church. Without more information, however, it is impossible to judge whether occupation continued into the early Islamic period.

About one kilometer south of the ruins of the Church of Antimos lies another Byzantine era church, the Church of St. Andrew¹¹⁹. It rests on the northern banks of the Wadi Qelt, near the Roman road entering Jericho from Jerusalem and approximately two miles southwest of the

¹¹⁵ Ghattas Sayej, "Tell es-Samrat (Jericho Region) The Result of the 1999 Survey Campaign: a preliminary report," (Birzeit University, 1999), 4-5.

¹¹⁶ Ibid., 16.

¹¹⁷ Augustinovic, *Gerico e dintorni*, 66-77; Bagatti, *Ancient Christian Villages of Samaria*, 94-104; Nigro, Sala, and Taha, *Padis I*, 106-7; Asher Ovadia, *Corpus of the Byzantine churches in the Holy Land, Theophaneia Beiträge zur Religions- und Kirchengeschichte des Altertums* (Bonn,: P. Hanstein, 1970), 72-3.

¹¹⁸ Augustinovic, *Gerico e dintorni*, 75.

¹¹⁹ Ibid., 77-83; Bagatti, *Ancient Christian Villages of Samaria*, 94-104; Meinardus, "The Byzantine Church of St. Andrew in Jericho."; Nigro, Sala, and Taha, *Padis I*, 107-8; Ovadia, *Corpus of the Byzantine Churches in the Holy Land*, 73-4.

basilica at Tell al-Hassan. The story of the digging of the site illustrates the powerful role the memory of holy sites in Jericho still plays a role in shaping the history of the city even today.

Around 1935, the ruins of the site, buried under a tell, were purchased by the Coptic priest Abuna Filibus, who believed it to be the ruins of the house of Zacchaeus. The site shows evidence of initial occupation in the first century CE period, with a fishpond, several cisterns, and drains dated by Meinardus to the Herodian period.¹²⁰ But the main phase of the site seems to have been a Byzantine church. Excavators uncovered a geometric mosaic floor with two inscriptions in Greek. Both inscriptions give details about the church. The first mentions that a soldier named Magnianos built it in dedication to St. Andrew. The other inscription, an epitaph, is more enigmatic. It reads: "Here reposeth the blessed Tryphon, Servant of Christ, who fell asleep on the 20th of the month of February, on the fifth day [i.e. Thursday], Indiction Ten."¹²¹ Which year this date represents is unclear. Based on the criteria in the inscription, scholars have proposed three years: 592, 637, and 682 CE. Meinardus believed the date to be 592 CE, but his analysis was affected by his belief that the Persians destroyed all churches of Jericho in 614 and Di Segni points out in 592, February 20th was a Wednesday.¹²² The most plausible date is 637, right before the Muslim conquest, a time of other known inscription dates from churches in the region. No evidence of damage further indicates the lack of destruction associated with the Muslim conquest of Jericho.

The site was most certainly occupied after the Byzantine period. Plate X from Meinardus shows hand-painted geometric wares similar to those found at the site of the Russian Museum. We also see Mamluk glazed wares similar to a complete base found at the monastic compound of

¹²⁰ Meinardus, "The Byzantine Church of St. Andrew in Jericho," 183-4.

¹²¹ Ibid., 189.

¹²² Bagatti, *Ancient Christian Villages of Samaria*, 99, Note '***'.

Tell Abu Ghannam.¹²³ Still, as in most of the archaeological work in Jericho in the late nineteenth and first half of the twentieth century, the reports offer little or no information on stratigraphic or ceramic sequences. Without systematic excavation, it is impossible to know the extent of occupation at the site in the early Islamic period.

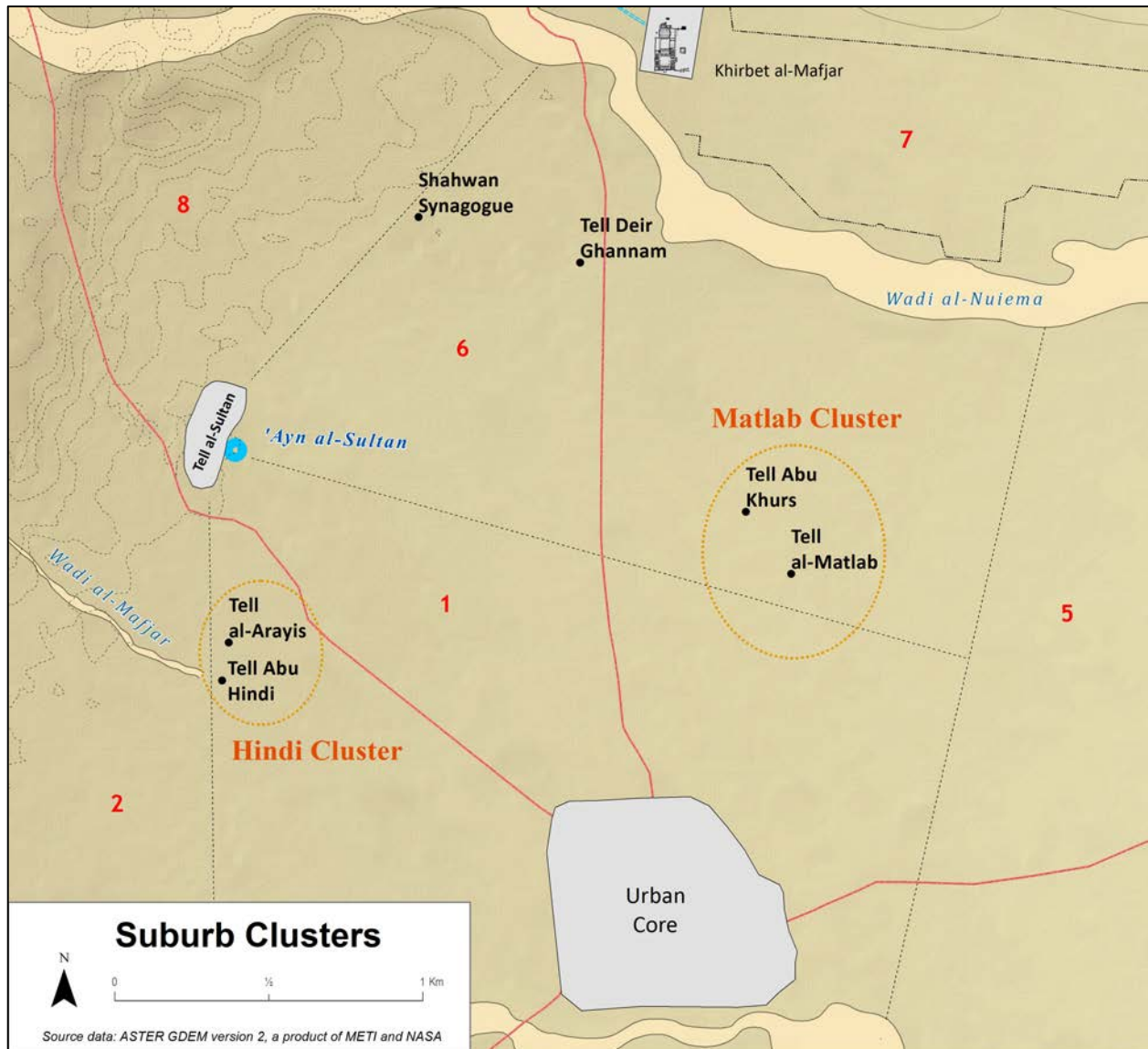


Figure 26: Sites around the urban core in Zones 1 & 6 (GIS plan created by author)

¹²³ Meinardus, "The Byzantine Church of St. Andrew in Jericho," Pl. X.

2.9.2 The Matlab cluster

The Matlab cluster is positioned in Zone 6 about halfway between the city center and Khirbet al-Mafjar and includes the known archaeological sites of Tell Matlab¹²⁴ and Tell Abu Khurs¹²⁵. The numerous archaeological indications in this area point to a sizable Christian community beginning in the Byzantine period. Like the suburban cluster in Zone 1, this cluster probably sat along an ancient road, the road leaving north from Jericho, past Khirbet al-Mafjar and up the Jordan Valley to Bet Shean/Baysan and beyond. It is also situated in a favorable water supply position, farther from ‘Ayn al-Sultan than some sites, but as seen in our hydrological analysis, in a favorable flow path of the output of the spring. One could expect Jericho’s urban core to be located here if not for Zone 1’s connection to the all-important route to Jerusalem, which tipped the balance in its favor.

The ruins of Tell Matlab (also written Tell Mitlib or Tell Matleb) are located approximately eight hundred meters north of Tell al-Hassan. Unfortunately, we know very little about the site, which comprises three tells. Clermont-Ganneau first mentioned it after he found worked stone and capitals decorated with crosses and vegetal motifs. Augustinovic relates that Russian immigrants extensively looted Tell Matlab for their buildings in Jericho. A short report from 1962 on recent archaeological investigations in Jericho mentions work at the site: “The Department of Antiquities undertook the excavation of the piece of land to the west of Tell Mitlib and separated from it by the main road which originally had been cut through the Tell. A pavement of coloured mosaic with geometrical figures of the 6th/7th century A.D. was discovered

¹²⁴ Augustinovic, *Gerico e dintorni*, 145-6; Bagatti, *Ancient Christian Villages of Samaria*, 102-3; Charles Clermont-Ganneau, *Archæological Researches in Palestine During the Years 1873-1874*. Vol. II (London: Palestine Exploration Fund Publications, 1896), 17-20; Palestine Exploration Fund, *The Survey of Western Palestine*, 9 vols., Publications / Palestine Exploration Fund (London: Palestine Exploration Fund, 1881), 222; Nigro, Sala, and Taha, *Padis I*, 130-1.

¹²⁵ Augustinovic, *Gerico e dintorni*; Raphael Greenberg and Adi Keinan, *Israeli Archaeological Activity in the West Bank 1967-2007: A Sourcebook* (Israel: Ostracon, 2009), 69, site 333; Nigro, Sala, and Taha, *Padis I*, 108.

at a depth of two meters below the surface. Unfortunately the work had to be suspended at the end of the financial year before the excavation had been completed. It is hoped that another season's work will be carried out in the future in order to complete the excavation."¹²⁶

It seems further excavations were never carried out. A visitor to the site today does not see the ruins described by Augustinovic, who noted extensive surface sherds he believed to be Byzantine, found a Byzantine follis with the denomination 'M', and measured the largest tell at fifty meters wide.¹²⁷ Bagatti relates that a pilgrim flask decorated in relief with a cross was recovered from the site in 1950.¹²⁸ The weight of the evidence indicates substantial occupation in the Byzantine period, but the Birzeit survey team collected early Islamic pottery here as well.¹²⁹ Further ruins with a similar material culture lie fifty meters to the north. Overall, Tell Matlab was likely a monastic complex with an agricultural production component.

Slightly north and west of the Tell Matlab ruins is the site of Tell Abu Khurs. The site is marked on early twentieth century maps of Jericho. The gazetteer of archaeology in the West Bank, 1967-2007, compiled by Raphael Greenberg and Adi Keinan, lists it as site #333, excavated under Israeli authority in 1990/1 by Hanania Hizmi, whose team found evidence of Byzantine and early Islamic occupation, including pottery, structures, and coins.¹³⁰ A very low tell is still visible today, surrounded by open fields. The Birzeit survey team recorded early Islamic pottery and evidence of mosaics.¹³¹

¹²⁶ Farah S. Ma'ayeh, "Recent archaeological discoveries in Jordan," *ADAJ* VI & VII (1962): 109.

¹²⁷ Augustinovic, *Gerico e dintorni*, 145-6.

¹²⁸ Bagatti, *Ancient Christian Villages of Samaria*, 103.

¹²⁹ Sayej, "Tell es-Samrat (Jericho Region)," 16.

¹³⁰ Greenberg and Keinan, *Israeli Archaeological Activity in the West Bank*, 69.

¹³¹ Sayej, "Tell es-Samrat (Jericho Region)," 15.

Overall, the cluster of settlement including Tell Matlab and Tell Abu Khurs appears to have been a Christian agricultural community of some size, beginning in the Byzantine period. Archaeological evidence is clear that the community lasted into the early Islamic period, at which time it likely benefitted from its position between the Christian urban core and the new Muslim elite complex at Khirbet al-Mafjar.

2.10 Persistent landscapes

When pieced together, the different types of historical and archaeological data form an empirical record of Jericho's urban signature. Yet in a settlement landscape that includes three iconic archaeological sites, Tell al-Sultan, Tulul Abu al-'Alayiq, and Khirbet al-Mafjar, the city of Jericho itself has been largely ignored. Indeed, until recently, archaeology in Jericho not related to Tell al-Sultan has tended to suffer from what Walmsley refers to as interpretation of settlement archaeology based on monument archaeology.¹³² On the one hand, the prominence of Tulul Abu al-'Alayiq and Khirbet al-Mafjar in discussions of the archaeology of Jericho reflects the importance of these sites to our knowledge of the art, architecture, and settlement strategies of the elites who commissioned their construction. On the other hand, these luxury complexes are elements in a much broader settlement pattern and to examine them without the context of their relationship to the urban core is like analyzing an excavated coin without its stratigraphic context.

Wilkinson discusses the idea of persistent places: features in the landscape that have survived long enough to be observed and recorded into the archaeological record. He writes that persistence relies on a particular feature leaving a sufficiently permanent mark on the landscape,

¹³² Walmsley, *Early Islamic Syria: An Archaeological Assessment*, 145.

and that “we are therefore only able to see part of the ancient landscape, for example, either those parts that were imposed by the heavy weight of imperial power or alternatively those that persisted for a sufficient length of time to leave a permanent record.”¹³³ In other words, two factors in particular influence how we interpret signature landscapes: scale and perpetuated use. In an effort to take these elements into an account, Wilkinson proposes an approach he terms ‘landscape taphonomy,’ which seeks to understand the interplay between physical transformations, cultural transformations, and socio-economic and political processes on landscape formation.¹³⁴

This idea rings true for Jericho, although it can actually be taken further. The survival of both Tulul Abu al-‘Alayiq and Khirbet al-Mafjar clearly owes something to their size and scope. These were very large elite complexes that have continued to leave a conspicuous imprint on the landscape of the Jericho plain up until present-day. They were observed and recorded by surveyors from the Palestine Exploration Fund in the nineteenth century and are visible in aerial photographs from the early twentieth century. As such, they were known archaeological sites by the time Jericho started to benefit from an increased focus on such sites, beginning in the British Mandatory Period, in large part connected to the work of Dimitri Baramki, much of which has been presented above. Seen from another perspective, however, the ruins of Tulul Abu al-‘Alayiq and Khirbet al-Mafjar have endured as archaeological sites not because of their success but because of their failure. Both sites required major investment in hydraulic infrastructure, and the breakdown of central authority that accompanied the end of the dynasties that built them made these sites unsustainable. Tulul Abu al-‘Alayiq and Khirbet al-Mafjar were inserted into areas peripheral to the urban core, both at the time of construction and today. As such, they have

¹³³ Wilkinson, *Archaeological Landscapes of the Near East*, 7.

¹³⁴ *Ibid.*, 8.

remained undisturbed by modern development, the effect of which is so destructive and complete that it has the ability to upend any model of landscape formation processes.



Figure 27: Aerial photo taken in 1918 showing Jericho as a small community (dotted circle in white), one that is centered in the area of the modern city today (Zone 1), reflecting a process of persistence of the location of the urban core and road network (after Dalman 1925 p. 79, figure 70)

Conversely, the Byzantine urban core has been obscured by modern development. Although outside the chronological scope of this dissertation, it is worth considering Jericho in the centuries between the Ayyubid and Ottoman periods. Archaeological evidence and historical sources, including reports from the Palestine Exploration Fund, suggest that Jericho was significantly reduced during this period, a sparsely populated agricultural landscape. But the potential for urban settlement always remained because of ‘Ayn al-Sultan, and as Jericho became

more populated in the early twentieth century, it is no surprise that the new town arose again in Zone 1 near the Wadi al-Qelt. This is particularly evident in an aerial photograph of Jericho taken in 1918, which captures a small town situated amongst the Byzantine and early Islamic sites discussed in this chapter.¹³⁵ Neither the hydrological advantage nor the routes of the road system had been altered and thus the urban core became a persistent place. Unfortunately, this persistence into the modern period has resulted in earlier features being covered or destroyed.

As such, there remain major gaps in our understanding of Jericho's urban core. Despite their depiction on the Madaba Map, no traces of Jericho's old city walls remain. Turning to Ramla for comparison, no traces of that city's wall have ever been discovered either. Presumably, looting or modern development destroyed both cities' walls. Perhaps Jericho's walls were built in mud-brick, making them more easily wiped out. Likewise, no direct evidence of ancient streets persists. In theory, we should see vestiges of an orthogonal street pattern. Such a pattern should have continued from the Roman into the early Islamic period with gradual modifications. Even *de novo* foundations like Ramla, while representing a new type of city, still consisted of an orthogonal grid design of a well-planned city.¹³⁶ The challenges posed by the continuing growth and expansion of modern Jericho necessitate an approach that takes advantage of the broad array of empirical evidence still available within the framework of landscape as an entity reused and altered over time, bearing incomplete traces of past signatures.

2.11 Summary

This chapter has argued that Jericho found a fixed location in Settlement Zone 1, in the area of the modern city, by at least the Byzantine period. This analysis emerges from an

¹³⁵ Gustaf Dalman, *Hundert deutsche Fliegerbilder aus Palästina* (Gütersloh: Bertelsmann, 1925), 79, figure 70.

¹³⁶ Avni, *The Byzantine-Islamic Transition in Palestine*, 189.

examination of extant written sources (including contemporary pilgrims' accounts), epigraphic evidence (especially the depiction of Jericho and Elisha's fountain on the Madaba Map), reports from inspectors working in British Mandatory Palestine, survey data, and archaeological excavations. In particular, two archaeological sites, the Russian Museum site and Tell al-Hassan, have greatly expanded our knowledge of Byzantine and early Islamic material culture of Jericho's urban core.

The urban centers of Palestine did not evolve following a standard narrative in the early Islamic period. More excavations are needed to investigate Jericho's development. Key points in the topography of the urban core remain unknown and it is hard to evaluate changes with such limited evidence. Recent archaeological work has dramatically changed our conception of architectural principles and urban planning ideals in the early Islamic period. In the center of the city of Bet Shean is a broad, straight street bordered by arcaded porticoes. Long dated to the Byzantine period, a mosaic inscription now shows it was constructed under the orders of the Caliph Hisham in the 730s.¹³⁷ In some respects, our knowledge of Jericho is like that of Ramla twenty-five years ago: it is only in the last twenty-five years that extended archaeological work in Ramla has greatly increased our knowledge of the city. For Jericho, despite its fame for archaeology, there has not been enough excavation of sites that were part of its urban core.

¹³⁷ Hugh Kennedy, "Inherited Cities," in *The City in the Islamic World*, ed. Salma Khadra Jayyusi, et al. (Leiden; Boston: Brill, 2008), 100.

CHAPTER THREE -- Setting the Stage for Khirbet al-Mafjar: The Development of Satellite Settlements on the Jericho Plain

3.1 Introduction

The Umayyad dynasty inherited a Jericho plain that had undergone several distinct settlement phases since the Hellenistic period. In addition to the relocation and development of the urban core, explored in Chapter Two, a variety of satellite settlements emerged in different areas around the city. Khirbet al-Mafjar reflects earlier trends observable in these sites and thus, as discussed earlier, its study necessitates an examination of the ways in which the settlement profile of the Jericho plain changed over time. This chapter examines the diachronic development of the Jericho plain from the Hasmonean to Byzantine periods. It focuses on the transformations of the settlement profile over time to give a sense of the ways in which different agents interacted with the cultural landscape. To this point the scholarly work on the Jericho plain has divided satellite settlements from each other, treating each as an independent case in history and archaeology. The combined methods centered on landscape analysis used in this research, which links these settlements with respect not only to chronology but also to the larger setting -- the physical landscape and relationships with the urban core -- presents new insights into issues that have concerned the scholarly literature on the history of the Jericho plain.

The analysis presented in this chapter helps to explain the dynamics between settlement type and landscape that influenced the construction of Khirbet al-Mafjar, shedding light on its historical and archaeological context in a trajectory of earlier settlements. One defining factor can be singled out above all to understand the role of satellites in the settlement history of the Jericho plain: location. A site's particular location in the physical landscape is linked to its place

in the cultural landscape. More specifically, two features of location are directly linked to cultural circumstances behind the genesis of settlement: whether the satellite site used ‘Ayn al-Sultan as its main water source and whether it was separated from the urban core by a wadi.

Features that constitute the physical landscape drive a structural process that influences the placement of certain types of sites in certain settlement zones. There is plenty of arable land for settlement around Jericho, so site choice is not constrained by space. Also, there is more than one water source capable of sustaining a settlement, situated in different parts of the plain, thus making Jericho more versatile than a traditional oasis clustered around a single spring or cluster of springs. A consequence of the variety of potential settlement zones in the Jericho plain is that a settlement’s location has a particularly strong correlation with the motivations of its builders; location informs more about the cultural parameters that underlie a site than the physical constraints of the landscape.

Linking the three case studies presented here -- Hellenistic/Herodian Tulul Abu al-‘Alayiq, Roman settlement, and Byzantine monasteries -- allows exploration of broader patterns in both the relationship between satellite sites and the physical landscape of the Jericho plain, as well as differences in the relationship between each satellite site and its urban core. We can start to recognize a structure for the cultural landscape across historical periods.

The Hasmoneans were the ruling dynasty in Judea starting in the second half of the second century BCE. In Jericho, they built their palace complex Tulul Abu al-‘Alayiq in Zones 2 and 3 away from the urban core, protected by the Wadi al-Qelt, near the road to Jerusalem and their defensive centers in the mountains above Jericho. Significantly, the

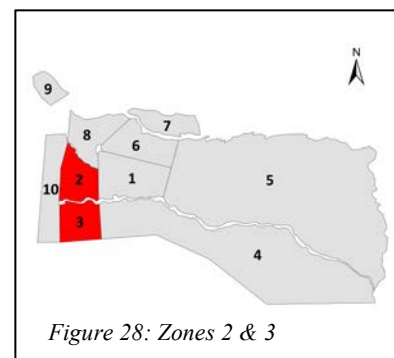


Figure 28: Zones 2 & 3

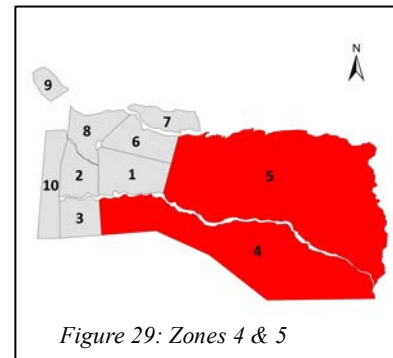
palace complex and related agricultural park were watered not from ‘Ayn al-Sultan, but from a combination of the Na‘aran and Wadi al-Qelt springs. The separation from the urban core and non-use of the most prolific water source of the region -- a situation continued by Herod -- are viewed in this chapter as directly related to the status of these rulers in the Jericho plain. This status was fostered by the motivations of the Hasmonean elite and Herod for building in Jericho, which were concerned less with permanent settlement and instead revolved around economic exploitation of the agricultural potential of the land.

After Herod, a series of uprisings in the early Roman period by Jewish populations resulted in increased Roman military control of Palestine. The Romans were clear outsiders in Jericho, with different motivations than their predecessors. Roman strategy in Jericho involved direct control of the urban core and its antipathetic population. While there is no direct archaeological evidence for military settlement, this chapter investigates Roman objectives on the basis of analysis of the cultural landscape and written sources.

Finally, this chapter places special emphasis on the relationship between the urban core of Jericho and its monastic hinterland in the Byzantine period.

The aim of the Byzantine elite contrasts with previous rulers due to two main factors: 1) by this period the population of the urban core was culturally and religiously affiliated with the Byzantine empire; and 2) the alignment of the interests of the Byzantine state and Christian church. Unlike previous

periods, the Byzantine period saw an intentionally fostered connection between the city of Jericho and its periphery, especially its monastic hinterland in Zones 4 and 5. The Byzantines did not build an elite satellite settlement separated from the urban core, instead the Jericho plain



was dotted with monastic complexes, many of which received direct support from the Byzantine state and were watered by the same source as the city, ‘Ayn al-Sultan. Of course there was still an element of seclusion in the monastic settlement pattern, but this is linked to the nature of monasticism rather than an antagonistic relationship with Jericho. Byzantine ambition in the Jericho plain permeated both the city and the rest of the oasis.

The diachronic analysis of the settlement landscape presented here will provide a framework for the following chapter, which explores these same issues in connection to Khirbet al-Mafjar. By emphasizing the relationship between physical and cultural factors in settlement location, especially in the Byzantine period, this chapter sets the stage for a contrast between clear Byzantine Christian aims of conversion and expansion with an early Islamic period characterized by a more muted proselytism and weaker links to the urban core.

3.2 Tulul Abu al-‘Alayiq and the Royal Estate: cash crop production in the Jericho plain

The Hasmonean dynasty’s inception perhaps took its initial spark in 167 BCE, when an edict of the Seleucid king Antiochus IV Epiphanes outlawed the practice of Judaism. This action helped spark the Maccabean revolt, which was, in part, a guerrilla war against Antiochus’s troops and in part a civil war between Jews who adopted Hellenism and those who opposed it. The rebels were successful in first forcing Antiochus’ son to rescind the edict and then eventually casting off Seleucid rule in Judea. Rebel descendants established the Hasmonean dynasty, a Jewish kingdom ruling over much of Palestine and parts of Trans-Jordan.

The Hasmonean period in Jericho marks the beginning of the use of large-scale aqueducts. Hasmonean rulers invested in the construction of two major water delivery systems. These projects brought water to Zones 2 and 3, which, as described earlier, are two of the zones

that did not have internal water sources and were separated from ‘Ayn al-Sultan by one or more wadis.

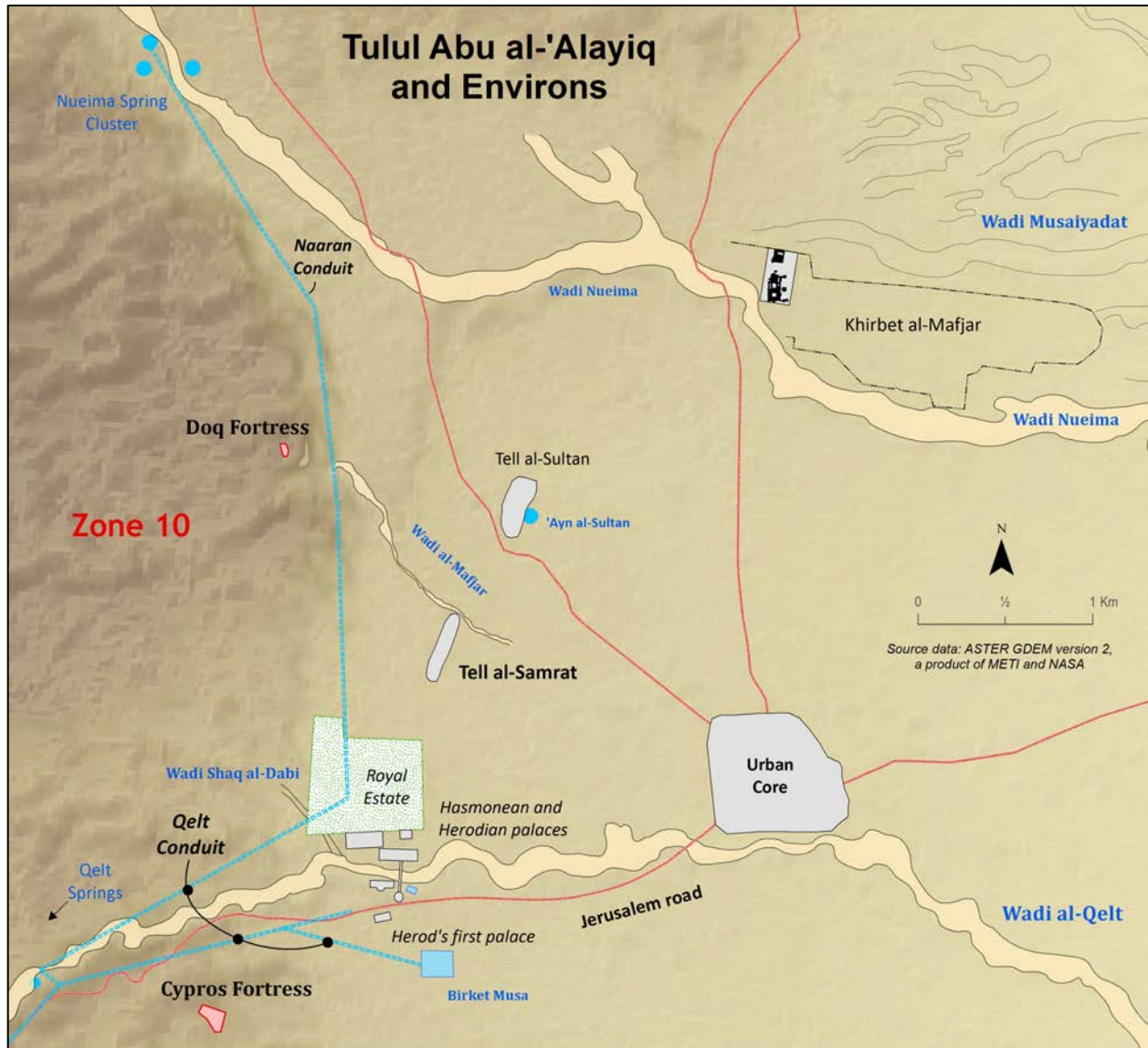


Figure 30: General location and features of Tulul Abu al-'Alayiq (including the Royal Estate and the Qelt and Naaran Conduits), Tell al-Samarat, and the Hasmonean fortresses of Zone 10 (GIS plan created by author)

The first of the Hasmonean aqueducts was the Qelt Conduit. It allowed a new large-scale settlement at Tulul Abu al-'Alayiq, around two kilometers southwest of ‘Ayn al-Sultan. The Qelt Conduit made use of water from three springs: ‘Ayn Farah, ‘Ayn al-Fawwar, and ‘Ayn al-

Qelt. The system included two aqueducts lined the wadi, one along the north bank and the other along the south bank. The original aqueduct ran along the north bank and brought water to the Hasmonean palace-estate complex at the foot of the Judean hills where the wadi reaches the Jericho plain. An aqueduct along the south bank eventually augmented and replaced the north bank aqueduct. This newer aqueduct was fed by a bridge spanning the Wadi al-Qelt, which brought water from north to south over the wadi, down into Jericho at Tulul Abu al-‘Alayiq, and beyond to sites like Khirbet Mughefir.¹

At some point in the Hasmonean period after the first palace complex had been established at Tulul Abu al-‘Alayiq, residents decided to expand the cultivated area and provide more water to the palace. To do so, it was necessary to supplement the water supply. The area of Na‘aran contains three springs with a total annual capacity of around 8,100,000 cubic meters: ‘Ayn al-Duyuk (5,300,000 cubic meters), ‘Ayn al-Nueima (2,300,000 cubic meters), and ‘Ayn Shusha (500,000 cubic meters); water was also available north of Na‘aran at ‘Ayn al-‘Auja, the largest spring in its hinterland with an average annual capacity of 11,000,000 cubic meters.² Two aqueducts branched off of ‘Ayn al-‘Auja: Qanat Musa, which connected ‘Auja to Duyuk, and Qanat Musa was part of the Naaran Conduit, with a contemporary section from Duyuk to the estates at Tulul Abu al-‘Alayiq. Builders turned to these sources, constructing an impressive channel that snaked high along the contours of the cliffs west of Jericho, crossing both the Wadi al-Nueima and the Wadi al-Mafjar.³ Ehud Netzer named this channel the Naaran Conduit and dates its construction to the reign of Alexander Jannaeus (r. 103 BCE to 76 BCE).

¹ Yosef Porath, "Hydraulic plaster in aqueducts as a chronological indicator," in *The Aqueducts of Israel*, ed. David Amit, J. Patrich, and Yizhar Hirschfeld (Portsmouth, R.I.: Journal of Roman Archaeology, 2002), 29-31.

² Ehud Netzer and Gunter Garbrecht, "Water channels and a royal estate of the Hellenistic period in Jericho's western plains," 367, note 5 & 6.

³ *Ibid.*, 372-3.

The Qelt and Naaran Conduits were built using the same techniques. Both were about sixty centimeters wide with varying internal heights based on terrain. They were constructed of medium-sized fieldstones bonded by lime-based mortar, which were then covered in plaster. The channels were left open, except in sections with high risk of slope erosion, where they were covered. Both conduits seem to have been used throughout the Hasmonean and Herodian periods, gradually falling out of use sometime at the end of the first or beginning of the second century CE.⁴

The palace complex at Tulul Abu al-‘Alayiq was the center of Hasmonean activity in Jericho. Various scholars explored the site in the nineteenth century, including Charles Warren, who opened several trenches there in 1868. The road from Jerusalem to Jericho in the Roman period met and followed the Wadi Qelt, arriving in Jericho at the site. Warren’s excavations found Roman materials, as well as the expeditions of A. Noldeke, C. Watzinger, and E. Sellin in 1909, who also unearthed opus reticulatum walls in 1911. These discoveries led to an early classification of the site as Roman/Herodian city of Jericho itself. Tulul Abu al-‘Alayiq thus became “New Testament Jericho,” standing in contrast to the separate, older ruins at Tell al-Sultan.

Having recognized the importance of the site, the American Schools of Oriental Research participated in two expeditions there in the early 1950s. The first was a joint project in 1950 with the Pittsburgh-Xenia Theological Seminary, was directed by James Kelso and Dimitri Baramki. Baramki had recently excavated Khirbet al-Mafjar and some of the workmen accompanied him to the new site. One year later, the team conducted more fieldwork, and Pritchard published the results.

⁴ Ehud Netzer et al., *Hasmonean and Herodian Palaces at Jericho: Final Reports of the 1973-1987 Excavations*, III vols., vol. I (Jerusalem: Israel Exploration Society: Institute of Archaeology, The Hebrew University of Jerusalem, 2001), 10.

Ehud Netzer led the next major investigation of Tulul Abu al-‘Alayiq in 1973. This large-scale project brought to light the impressive extent of the site, including four palaces, ritual pools, mosaics, and distinctive opus reticulatum construction techniques. Tulul Abu al-‘Alayiq was similar in general structure and function to the desert castles of the early Islamic period. It consisted of an estate with palaces, a large area of land exploited for agriculture, and various agriculturally related installations such as wine and oil presses. Residents built a variety of hydraulic constructions to support agricultural development around the palaces. The initial Hasmonean palace arose alongside the Royal Estate, a fifty-hectare agricultural area and palace complex established around 134 BCE either by John Hyrcanus (r. 134-104 BCE) or his father Simeon (r. 143-134 BCE).

By the first century BCE, the Jericho plain was a zone of intense agricultural production for profit. From 36 to 30 BCE, Cleopatra ruled over Jericho, which Marc Anthony gave her as a gift. During this time, Herod would not have been able to expel the Hasmoneans from their palaces, although this was likely his desire. Herod likely built his first palace near the Hasmonean complex around 35 BCE; the two probably coexisted for some time. Herod leased the Jericho plantations from Cleopatra. After a major earthquake in 31 BCE and the Battle of Actium in 30 BCE, with the subsequent deaths of Marc Anthony and Cleopatra, Herod took control of Jericho, expelled the Hasmoneans, and built his second palace on the ruins of the former Hasmonean complex.

Herod expanded the hydraulic infrastructure at Tulul Abu al-‘Alayiq, restoring earlier channels and conduits, including those related to the Royal Estate. He also constructed, south of the Wadi al-Qelt near his first palace, a large water tank known as Birket Musa. It was approximately 180 meters by 150 meters, and 3 meters deep. Its dating and function are both

uncertain. It may have functioned as a reservoir to capture winter overflow directed from the Wadi al-Qelt, which was then used for summer irrigation.

Strabo describes Jericho in the time of Herod, especially the plantations of the Royal Estate. In *Geography*, he wrote: “Here is the Phoenicon [Palm-grove], which is mixed also with other kinds of cultivated and fruitful trees, though it consists mostly of palm trees; it is one hundred stadia in length, and is everywhere watered with streams and full of dwellings. Here are also the palace [built by Herod] and the balsam park.”⁵

By the first century BCE, Jericho attracted the attention of the greater classical world as a place where rare and expensive plants could be grown for profit. Ancient historians, including Strabo, Pliny the Elder, and Josephus knew the Jericho plain for large irrigated fields of cash crops cultivated by kings and rulers from Jerusalem and beyond. These crops became part of the economy of Palestine and as such Jericho itself became a valuable commodity that needed to be controlled.

Strabo links balsam production exclusively with Jericho, stating that it is expensive and time-consuming to process and therefore expensive: “The people make incisions in the bark and catch the juice in vessels. The juice is a glutinous, milk-white; and when it is put up in small quantities it solidifies; and it is remarkable for its cure of headache and of incipient cataracts and of dimness of sight. Accordingly it is costly; and also because it is produced nowhere else.”⁶ Clearly, Strabo found the cultivation of palms and balsam noteworthy.

Cash crops and commodities grown and produced in Jericho included not just palms and balsam, but grapes and dates for wine production as well. Excavations in the extended

⁵ Strabo, *The Geography of Strabo*, Books 15-16, ed. Horace Leonard Jones, Revised and reprinted ed., vol. VII, Loeb classical library (London; Cambridge, Mass: Heinemann; Harvard University Press, 1931), 16.2.41, 290-3.

⁶ Ibid.

agricultural area of Tulul Abu al-‘Alayiq revealed four wine presses, the largest of which is comprised of two crushing tanks, two settling tanks, and a main collecting pool with narrow access stairs.⁷ This already impressive structure was later expanded. For their part, date palms were likely the principal crop of the Royal Estate and it is likely that the majority of the presses at Tulul Abu al-‘Alayiq served the production of date wine. For Netzer, the architectural clue that the presses were related to date-wine production was the linkage of the presses and the overall hydraulic system, a connection absent for winepresses producing wine from grapes.⁸ He noted, “according to Pliny the Elder, there were one hundred and forty-nine kinds of palm tree, among which the caryotae, one of the types that grew at Jericho, was outstanding because it supplied much fruit and its unctuous juice was extremely sweet.”⁹

Tulul Abu al-‘Alayiq is associated as well with the site of Tell al-Samarat, situated about one and a half kilometers north of Tulul Abu al-‘Alayiq and seven hundred and fifty meters south of Tell al-Sultan. Warren examined the site in 1868 and interpreted it as a typical mound comprised of built up occupation layers. However, in the 1970s, aerial photographs showed the nearby fields laid out in the form of a racetrack. Knowing that Josephus mentions the existence of a hippodrome at Jericho, in 1975, Netzer, who was conducting excavations nearby at Tulul Abu al-‘Alayiq, opened exploratory trenches along the hypothetical course and found it was indeed a track bounded by an ancient wall.

⁷ Netzer and Garbrecht, "Water channels and a royal estate of the Hellenistic period in Jericho's western plains," 370.

⁸ Netzer et al., *Hasmonean and Herodian Palaces at Jericho*, 334-5.

⁹ *Ibid.*, II: 134.



Figure 31: Photo of Tell al-Samarat and the hippodrome course (looking south; from Netzer 2001, p. 64)

Further excavations on the tell revealed that it was a one-phase complex -- a single construction activity that included the use of earth fill to create of a kind of cavea. While the seats themselves were gone, impressions in plaster show their existence. This complex consisted of a theater approximately seventy meters in diameter and an adjoining square structure with an open courtyard. The combination of a racecourse, theater, and grand superstructure is unique in the Hellenistic-Roman world: a multi-functional complex more similar to modern arenas than ancient ones.¹⁰ This hippodrome is presumably the location where Herod planned to have Jewish notables from all parts of Judea trapped and executed immediately upon his own death, in

¹⁰ Ehud Netzer, "Tell es-Samarat," in *The New Encyclopedia of Archaeological Excavations in the Holy Land*, ed. Ephraim Stern (Jerusalem & New York: Israel Exploration Society & Carta; Simon & Schuster, 1993), 692.

a delusional fantasy of mourning, as Josephus relates the story. For the purposes of this chapter, Tell al-Samarat is further evidence of elite architecture linked to Hasmonean rulers and Herod.

3.3 Political/military aspects of Hasmonean development of the Jericho plain

It is evident that both the Hasmoneans and Herod were interested in Jericho for its agricultural potential. Why then did they not build their elite complexes in position to take advantage of 'Ayn al-Sultan, the easiest and most abundant water source available in the region, and the large areas of arable land in Zones 1 and 6? To address this question requires examination of the security situation of the second and first centuries BCE.

The Hasmonean period was a time of political volatility in Palestine, especially in the region around Jericho. The same factors that discouraged permanent settlement in the Judean desert -- the harsh climate and broken terrain -- made it attractive to groups seeking isolation, whether for religious, social, or political reasons. This trend became more conspicuous sometime after the destruction of the Second Temple, with examples including groups seeking refuge from the armies of Alexander the Great, the settlement at Qumran, and Jewish rebels mobilizing against Seleucid rule.¹¹ The latter developed into the Maccabean Revolt, which led to the overthrow of Seleucid rule in Judea and the foundation of the Hasmonean dynasty.

Rebellion propelled the Hasmoneans into power and they enacted a strategy of defense to ensure the same did not happen to them. They put in place a system of seven fortresses in Judaea -- Doq, Cypros, Alexandrium, Hyrcania, Herodium, Machaerus, and Masada -- each constructed around the beginning of the Hasmonean dynasty and developed in various degrees under Herod.

At the same time, Hasmoneans greatly expanded Jerusalem, which archaeological evidence

¹¹ Yoram Tsafrir, "The Desert Fortresses of Judaea in the Second Temple Period," in *The Jerusalem Cathedra. Studies in the History, Archaeology, Geography and Ethnography of the Land of Israel*, ed. Lee I. Levine (Jerusalem: Yad Izhak Ben-Zvi Institute, 1981), 120-2.

indicates was first settled in the Early Bronze Age (circa 3000 BCE) and was still relatively small in the early Hellenistic period Jerusalem. Thus, we have Jericho settled by kings from an increasingly important Jerusalem. In this growing connection lie the roots of an increasing link between Jericho and Jerusalem that would continue in the Roman and Byzantine periods, resulting in attention and investment in Jericho from power interests in Jerusalem, Rome, and Constantinople.

In Jericho, the Hasmoneans developed Settlement Zone 10 in parallel to construction at Tulul Abu al-‘Alayiq. Control of this zone offered both a dominant position over the Jericho plain and beyond, and also the ability to protect and regulate the road to Jerusalem. Of the seven fortresses of the Hasmonean defensive system, two are located in Zone 10: Cypros and Doq. The ruins of Cypros are located on a conical hill known as Tell al-‘Aqaba, three kilometers southwest of present-day Jericho. The site was a palatial fortress complex controlling the Jerusalem-Jericho road and the Jordan Valley beyond. It certainly operated in connection to developments at Tulul Abu al-‘Alayiq, which is only 1.3 kilometers away. Cypros also included a bathhouse similar to those built at Masada and Herodium. We know little about Doq fortress. The name seems to come from the fact that the ancient path up to the fortress

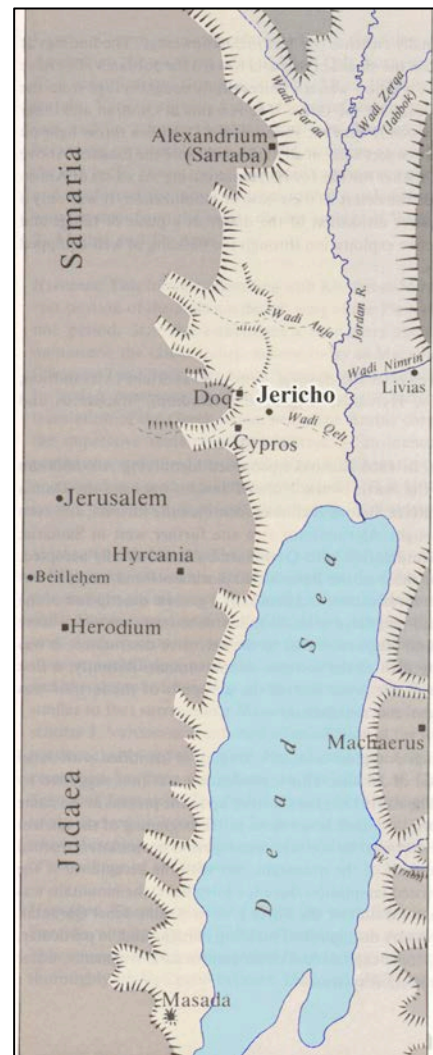


Figure 32: The desert fortresses of Judaea (after Tsafirir 1982, p. 121)

starts at ‘Ayn Duyuk/Doq, but it is also called Dagon or Qarantul. Surveyors identified various

architectural elements, including Ionic capitals, water supply, and collection systems.¹² It is protected north and south by steep valleys, east by a cliff face, and west by a manmade ditch.¹³

Some scholars identify Doq and Cypros as two Hasmonean fortress known from written sources (for example Strabo, Geography 16.2.40) as Threx and Taurus, which Pompey destroyed. Pompey's actions were "directed against the common Hasmonean tactic of entrenching themselves in one or several of the fortresses in order to muster strength for their rebellion against Roman authority."¹⁴ Just as it had been for the Hasmoneans and Seleucids, the Judean desert became theater for struggle between Hasmoneans and Romans. In this way, the Judean desert "provides an unusual example of the clear connection between natural features and historical events, and of the prominent role played by the geography that lies behind history."¹⁵

Instability after the death of the Hasmonean ruler Alexander Jannaeus in 76 BCE paved the way for the annexation of Palestine by the Roman general Pompey. In 63 BCE, Pompey's route from Damascus to Jerusalem passed through Jericho. Pompey capitalized on the opportunity offered by discord in Judea to establish political control in the region. He divided the Hasmonean kingdom and eventually designated Herod as the ruler of Judaea. The Roman Senate appointed Herod king of Judaea in 40 BCE and he conquered Jerusalem in 37 BCE.

Under Herod, Jericho continued to gain importance as a center of agricultural production and its connection to Jerusalem grew. Accounts of Josephus paint a picture of Jericho as an increasingly important center for the movement of troops: "Joseph [Herod's brother]...marched towards Jericho with five cohorts...This movement was intended for seizing of the corn, as it was

¹² Ibid., 122.

¹³ C. C. Conder and H. H. Kitchener, *The Survey of Western Palestine: Memoirs of the Topography, Orography, Hydrography, and Archaeology*. Volume III. Sheets XVII-XXVI (Judea, London 1883), 204.

¹⁴ Tsafirir, "The Desert Fortresses of Judaea in the Second Temple Period," 129.

¹⁵ Ibid., 120.

now in the midst of summer; but when his enemies attacked him in the mountains, and in places which were difficult to pass...the entire Roman cohorts were destroyed.”¹⁶ This account indicates that control of Jericho’s crops was a key military strategy and that the mountain routes could be dangerous if not protected.

As portrayed in written sources, the reaction from the urban core of Jericho after the death of Herod in 4 BCE strongly suggests that Herod’s standing with the local population had been tenuous. From Josephus, on the breakdown of order after Herod’s death: “One of the servants to the king...went about with a company of robbers that he had gotten together, and burnt down the royal palace that was at Jericho, and many other costly edifices besides.”¹⁷ Even the fields of the Royal Estate themselves were seen as a symbol of unwanted, foreign rule. Pliny relates that after Herod, the residents of Jericho attacked the plantations of the royal estate: “The Jews vented their wrath upon this plant [the balsam] as they also did upon their own lives, but the Romans protected it against them, and there have been pitched battles in defense of a shrub in the past. At the present day the reproduction of it has become a duty of the fiscal authorities, and the plants were never known to be more numerous or of larger growth.”¹⁸ From this account we see that Rome took control of balsam production in Jericho and that harvesting of the plant continued well into the Roman period. The plant “was exhibited to the capital by the emperors Vespasian and Titus; and it is a remarkable fact that ever since the time of Pompey the Great even trees have figured among the captives in our triumphal processions.”¹⁹

¹⁶ Josephus, *Josephus: The Complete Works*, trans. William Whiston (Nashville, Tennessee: Thomas Nelson, Inc., 1998), Wars 1.17.1, 682.

¹⁷ Josephus, *Complete Works*, Wars 2.4.2; 721.

¹⁸ Pliny, *Natural History* XII.LIV, 113.

¹⁹ *Ibid.*, XII.LIV, 111-112.

To conclude this section on Hasmonean/Herodian Jericho: evidence from landscape analysis, archaeological data, and historical texts bolster the idea that the location of Tulul Abu al-‘Alayiq is linked to the status and objectives of its builders. The Hasmonean elite invested in hydraulic infrastructure in Jericho and were rewarded with agricultural profits. Herod continued this exploitation, developing an antagonistic relationship with the people of Jericho. For both ruling powers, the placement of Tulul Abu al-‘Alayiq in Zones 2 and 3 sacrificed the advantages of the physical landscape of zones near ‘Ayn al-Sultan, but offered a defensive separation from the urban core and backup water sources in case of trouble.

3.4 Jericho and Roman Palestine

After Herod, the central theme in Palestine was the developing struggle between Roman authority and various Jewish communities unwilling to accept its political rule. Like the Hasmoneans and Herod, the Romans were a foreign power, with an antagonistic relationship to the residents of the city of Jericho. But unlike their predecessors, the Roman aims in Jericho required complete control of the urban core. In studying the era of Roman occupation, some of our best information is derived from the larger landscape analysis and understanding of the region; Roman buildings and artifacts are absent from the archaeological record, which would be consistent with their settling within the urban fabric.

The first centuries CE was a period of protracted military campaign in Judea. They would see the destruction of the Temple in Jerusalem and the violent suppression of a number the rebellions against Roman power. The first of these confrontations was the so-called Great Revolt, the culmination of tensions that exploded in open conflict in 66 CE. The Judea that emerged was a changed region, now fully out of the Hellenistic and into the Roman era.

Josephus' account that Jewish fighters fled to Jericho during the Great Revolt -- "the whole army of the Romans were upon them, they put them into great fear on every side; so they got in great numbers together, and fled to Jericho"²⁰ -- suggests that the urban core of Jericho was sympathetic to the rebels against the Roman army.

In the winter of 68/9 CE, with the Great Revolt in progress, the Tenth Legion was stationed at Jericho. Jericho's strategic location in the Judean desert, with access to the Jordan Valley and the Judean highlands necessitated Roman military control of the city. While there is no direct archaeological or written evidence that the Tenth Legion built a legionary camp at Jericho, examples from this time period suggest it is possible.

Just a few years later, the Tenth Legion led the siege of Masada, the final major confrontation of the Great Revolt. The siege lasted only one winter (72-3 or 73-4 CE), yet the legion was able to build a ring wall with intermittent watchtowers, a series of camps, and a siege ramp. Supplies for the Masada siege arrived via boats in the Dead Sea from various settlements in Palestine, including Jericho.²¹ For the buildup to the conquest of Jerusalem, Josephus relates that Titus ordered the building of a camp as well.²² After 70 CE, the Romans separated Judaea from Syria and stationed the Tenth Legion in Jerusalem in order to maintain a firmer control of the region. Archaeological features in Jerusalem associated with the Tenth Legion, often identified by stamps on terra-cotta roof tiles and pipes include a Roman-style bathhouse and kiln works.²³ Given these trends, it is certain the Roman military left an archaeological imprint on the cultural landscape of Jericho.

²⁰ Josephus, *Complete Works*, Wars 4.7.5, 281.

²¹ Jodi Magness, *The Archaeology of the Holy Land: From the Destruction of Solomon's Temple to the Muslim Conquest* (New York: Cambridge University Press, 2012), 217.

²² Josephus, *Complete Works*, Wars 5.2.3, 839.

²³ Magness, *The Archaeology of the Holy Land*, 281.

Roman authorities continued to designate resources to maintain a strong presence in Jericho throughout the second century CE, a period that saw two Jewish revolts against Roman rule: the Diaspora Revolt (115-7 CE), and the Bar-Kokhba Revolt (132-6 CE). The latter, led by a messianic figure, saw guerrilla warfare and significant early victories against the Romans, but eventually turned into a disaster for the Jews. The brutal suppression resulted in a large number of Jewish dead and increased persecution of Judaism, with even a change in the name of Judea to Syria-Palestine to obscure biblical ties to the land.

Historically, Roman armies left a structural and material impression on the cities in which they established themselves. In Jericho, given the lack of archaeological studies in the urban core, the material traces of this imprint are lacking; however, the absence of evidence is not evidence of absence. In general, Roman army garrisons were located both in distant outposts and in population centers; their initial role in the latter was likely to maintain internal order.²⁴ Unfortunately, there is no direct evidence of a new major settlement for the early Roman Jericho plain.

Faced with the relative lack of direct excavated evidence for early Roman Jericho we turn to landscape archaeology. A particularly conspicuous feature of the cultural landscape of the first and second century CE left was a network of roads connecting Jericho to Roman Palestine and beyond. The Romans invested great energy and resources in planning of road systems. They cleared and leveled rocky terrain, constructed embankments, retaining walls, and bridges where necessary, and placed milestones at intervals of one Roman mile, approximately 1.5 kilometers. The earliest known milestone from the over 2,500 mile highway network that

²⁴ David Kennedy, *The Roman Army in Jordan*, 2nd rev. ed. (London: Council for British Research in the Levant, 2004), 51.

covered Provincia Judaea, dated to 69 CE, is from the Caesarea-Scythopolis road, built by the Tenth Legion.²⁵

The Roman road system is key to understanding the political and economic landscape of the region. Roman Palestine was divided into two provinces: Palaestina (north of the Negev and west of the Jordan Valley) and Arabia (essentially Transjordan, extreme southern Syria, the Negev, and Sinai). Fifth century Palaestina was divided into three provinces, with Judea, Scythopolis (Beth-Shan), and possibly Petra (or Elusa) as the capitals.²⁶ Serving as a central node of no less than seven highways and after 70 CE as the permanent home of the Tenth Legion, Jerusalem was clearly the center of Roman Palestine.²⁷

Jericho in the Roman period was a nexus of several main roads: the Jerusalem-Jericho road that passed by the palatial fortress Cypros; the road up the Jordan Valley to Bet Shean, Tiberias, and other cities north of Jericho; and the road east, which led both straight on to Transjordan and then veered south to the Dead Sea.²⁸ The Dead Sea itself was an extension of this route via boats that continued on to 'Ein Gedi, Masada, and other centers. These routes and roads enabled the movement of vehicles, goods, animals, and persons, facilitating trade, travel, and communication.

²⁵ I. Roll, "The Roads in Roman-Byzantine Palaestina and Arabia," in *The Madaba Map Centenary 1897-1997: Travelling through the Byzantine Umayyad Period*, ed. M. Piccirillo and E. Alliata (Jerusalem: Studium Biblicum Franciscanum, 1999), 109.

²⁶ S. Thomas Parker, "An Empire's New Holy Land: The Byzantine Period," *Near Eastern Archaeology* 62, no. 3 (September 1999): 137.

²⁷ Roll, "The Roads in Roman-Byzantine Palaestina and Arabia," 111.

²⁸ Netzer et al., *Hasmonean and Herodian palaces at Jericho*, I, 331-2.

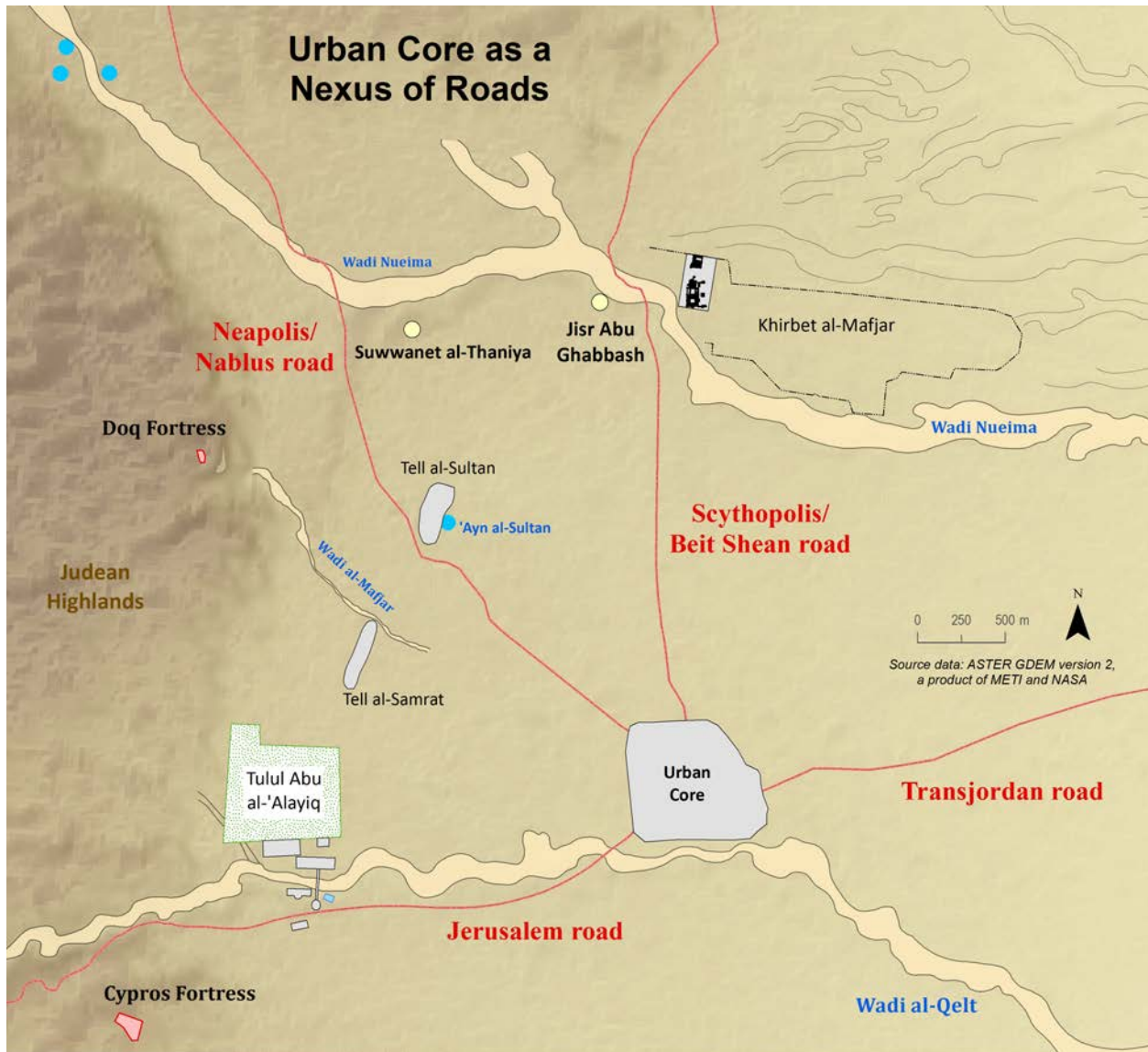


Figure 33: Jericho as a nexus of roads (GIS plan created by author)

The second century CE saw ambitious road building and repair efforts. A collection of over fifty milestones dated to the year 162 CE seem to commemorate the road repair effort chronicled in the *Historia Augusta* (*Vita Marci* 11,5) as one of the first imperial efforts of Marcus Aurelius.²⁹ The Peutinger Map is the only map of the Roman world that has survived from Antiquity. The surviving copy takes its name from Konrad Peutinger, a collector of antiquities who was willed the map in the early 16th century. The *Provincia Palestina* part of the

²⁹ Roll, "The Roads in Roman-Byzantine Palaestina and Arabia," 110.

Peutinger map must be from after 135 CE because it calls Jerusalem ‘Aelia Captiolina,’ the name Hadrian gave to the city in 135 CE. The map depicts Jericho as linked to two roads heading north, one northwest to Neapolis (Nablus), and one north passing Archelais and on to Scythopolis (Bet Shean).



Figure 34: Jericho on the Peutinger Map (<http://upload.wikimedia.org/wikipedia/commons/5/50/TabulaPeutingeriana.jpg>)

Possible archaeological evidence in Jericho connected to these roads is found at Suwwanet al-Thaniya in Zone 8 and the nearby site of Jisr Abu Ghabbash.³⁰ Suwwanet al-Thaniya is a small tell site flanking the Wadi Nueima and about three hundred and fifty meters west-southwest of Khirbet al-Mafjar.

The site was investigated as part of a salvage excavation conducted in 1968 by George Landes. These excavations indicated three strata of occupation: sedentary occupation in the late Chalcolithic (3300-3200 BCE), followed by a period of abandonment until the Iron Age (late seventh to early sixth century BCE), after which there was a long gap before renewed occupation in the first century CE.³¹ Excavations at Jisr Abu Ghabbash also uncovered an early Roman stratum, including a small cistern with three steps. The development of these sites in the first centuries CE was likely linked to their position along the roads leaving Jericho to the north.

Roman aims within the empire were shaped by larger, regional objectives; the Roman road network shows the ways in which Jericho was linked to their overall colonization strategy. It follows that the overall Roman settlement profile of the Jericho plain was shaped by this same strategy. They certainly had the resources to resettle Tulul Abu al-‘Alayiq and profit from the

³⁰ George M. Landes, *Report on Archaeological Work at Suwwanet eth-Thaniya, Tananir, and Khirbet Minya (Munhata)*, *Bulletin of the American Schools of Oriental Research*: Supplemental studies no 21 (Missoula, Mont.: Published by Scholars Press for the American Schools of Oriental Research, 1975), 1-22; Basema Hamarneh, "Dynamics and Transformation of the Rural Settlements of Provincia Arabia and Palestina Tertia in the Omayyad and Early Abbasid periods. Archaeological Evidence" (paper presented at the ICAANE 6, Rome, 2008), 154-5.

³¹ Landes, *Report on Archaeological work at Suwwanet eth-Thaniya, Tananir, and Khirbet Minya (Munhata)*, 11.

production of the Royal Estate, which passed to the control of the Roman authorities. The Qelt and Naaran Conduits, if not still in use, could have been repaired. Yet archaeological evidence indicates that occupation in Zones 2 and 3 was reduced in the Roman period.

The argument presented here is that the Romans did not resettle these zones because their aims in Jericho differed from the earlier rulers. Because their main strategic goal was to control the urban population of Jericho and to cut off its support of rebel groups, it is much more likely that the Romans established themselves and all their military power closer to the urban core, either adjacent to or within the city limits. This hypothesis is at present without direct evidence; testing it requires new excavations within the area of the current urban core. It is possible that archaeological investigation has thus far failed to find evidence of first and second century CE Roman occupation on this scale because it lies under the modern city.

3.5 The formation of a Byzantine oasis: introduction

The Byzantine period spanned from the early fourth to the mid-seventh century. As with other dividing lines based on political and religious considerations, the actual relevance to settlement history is unclear, but we can make a distinction in the extent to which political, economic, and religious policies determined in Constantinople affected the landscape.³² Constantine became sole ruler in 324 CE. He legalized Christianity with the Edict of Milan and effectively established Constantinople as a seat of imperial government. Jerusalem gained immensely from these developments, with such initiatives as new building programs instituted by the government and church and a consequent boost in prestige and profit from pilgrims, for example. Whereas from the Roman point of view, “Palestine was a remote and relatively

³² Doron Bar, "Population, Settlement and Economy in Late Roman Byzantine Palestine (70-641 AD)," *Bulletin of the School of Oriental and African Studies, University of London* 67, no. 3 (2004): 311.

uncivilized province inhabited by a troublesome people with a peculiar ancestral religion and strange customs,” in the eyes of the Byzantines it was a province of prestige and great importance.³³ This was especially true of the Jericho oasis, with its many biblical associations. The rise of Christianity and its ties to Jericho would come to impact settlement patterns in the Jericho plain.

For Jericho, reinterpretation and visualization previously published survey data indicates that the process initiated by the Romans of controlling the urban core had by Byzantine period led to shift in settlement patterns of the Jericho plain. In 1999, as part of a joint project between Birzeit University and the University of Bergen in Norway, an archaeological survey was conducted in Jericho under the supervision of Ghattas Sayej.³⁴ Its methodological approach consisted of dividing the Jericho plain into squares of either four hundred square meters or two hundred square meters, with the terrain dictating a few irregular squares. The team did a walking survey of these areas, collecting ceramic sherds and lithics. They did not include Tulul Abu al-‘Alayiq and Khirbet al-Mafjar because these sites were already protected archaeological areas. Hamed Salem and Omar Abed Rabbu dated the pottery.

Further analysis of these survey results done by this author sheds additional light on the settlement history of Jericho. By compiling the sherd distribution counts and linking them with maps, the data presents itself from a different perspective.³⁵ Close examination of the results of the survey raised doubts about the accuracy of some of the ceramic counts. In the area of Tell al-Hassan near the city center of modern Jericho, for example, one hundred thirty-one sherds were

³³ Magness, *The Archaeology of the Holy Land*, 333.

³⁴ Ghattas Sayej, "Tell es-Samrat (Jericho Region) The Result of the 1999 Survey Campaign: a preliminary report" (Birzeit University, 1999).

³⁵ This analysis involved linking a Filemaker database that produced a .kml extension for export to Google Earth. For more on this process: <http://paperlessarchaeology.com/2014/01/03/charting-antioch-coinage-in-google-earth/>

designated as early Islamic and none as Byzantine. Excavations in this area, discussed in detail in the previous chapter, uncovered substantial pre-Islamic remains, calling into question the previous distribution. Considering this and other examples, the results of the 1999 survey were grouped into two phases: Hellenistic/Roman and Byzantine/early Islamic.

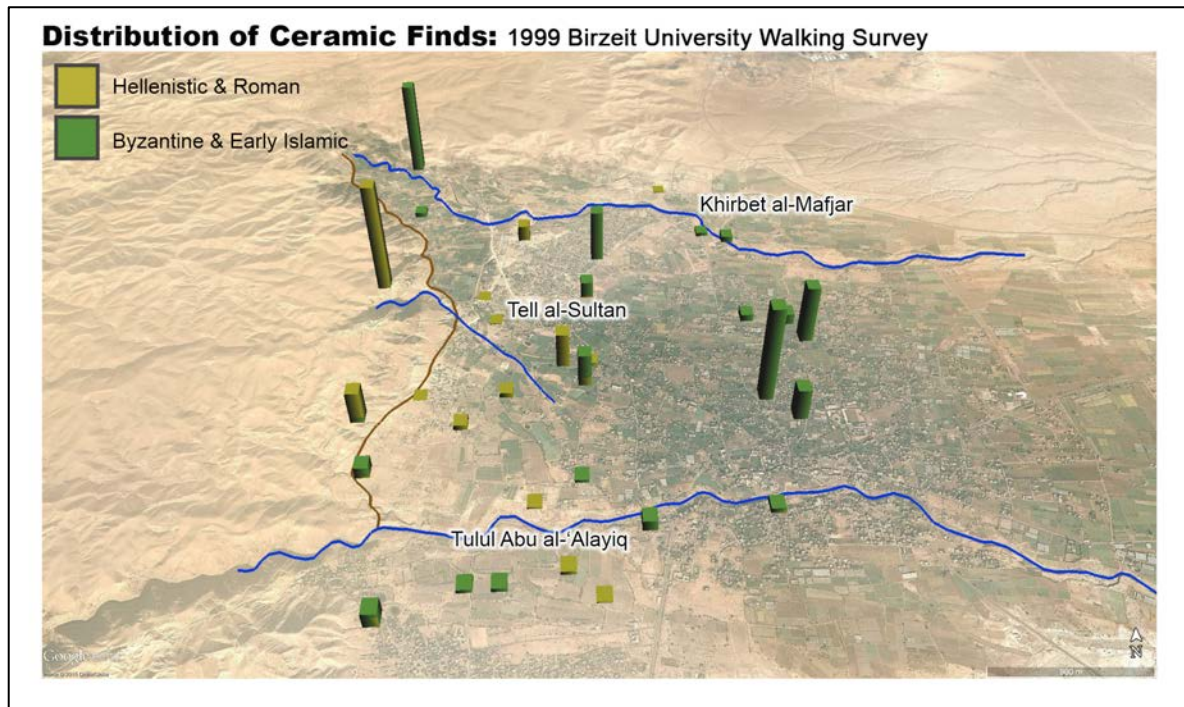


Figure 35: Visualization of 1999 Birzeit walking survey ceramic results; the author compiled the pottery statistics into two groups, Hellenistic/Roman (yellow) and Byzantine/early Islamic (green), and linked to Google Earth via a Filemaker database (see note 35); note the clear trend of increased occupation east into the plain over time

The resulting figure shows a clear distribution of pottery recovered by the Birzeit team in which Hellenistic/Roman material evidences tend to be located more in Settlement Zones 2, 8, and 10, and Byzantine/early Islamic materials in Zones 1, 2, and 9. There is an observable shift in occupation in the Jericho plain over time. The early periods saw a concentration of settlements near the highlands rising west of Jericho, at the base of its slopes and atop its peaks. The later periods saw an eastward shift, out into the flat plains downslope of ‘Ayn al-Sultan.

In trying to understand the spatial structure of Jericho and its hinterland in the Byzantine and early Islamic period, we must first realize that in the fourth through sixth centuries CE this was a settlement landscape in transition. With the elite settlement at Tulul Abu al-‘Alayiq long abandoned, there was a new focus of wealth, coming now from the Byzantine state, which invested in the urban core itself and monasteries. The urban development of Jericho and its hinterland was shaped by the demographic and population influx tied to Christianity, from the arrival of pilgrims in need of food and lodging and church officials with money to spend on the construction of churches, monasteries, and hospices.³⁶ The Jericho region was central to the religious, civic, and commercial activities of the Jordan Valley in particular and Palestine in general.

3.6 The Rise of Christian Jericho

The Byzantine governing elite did not have the same political and religious status as previous rulers. As such, it was not necessary to invest in a separated and protected settlement;



Figure 36: Byzantine lamp from THP'12 (prepared by author)

resources were directed towards the urban core itself. This development was examined in the previous chapter, but it is important here to explore it in relation to the growing influence and importance of Christianity in Jericho. By the fourth century CE, Jericho was already an important religious center. Beginning with the bishop Janarius, who participated in the Council of Nicaea in 325 CE, a series of influential bishops led the local church in coalition with Jerusalem.³⁷ The Jericho oasis eventually became a landscape dotted with monasteries and

³⁶ Gideon Avni, *The Byzantine-Islamic Transition in Palestine: An Archaeological Approach*, 1st ed., Oxford studies in Byzantium (Oxford: Oxford University Press, 2014), 125.

³⁷ Bellarmino Bagatti, *Ancient Christian Villages of Samaria*, Studium Biblicum Franciscanum Collectio minor (Jerusalem: Franciscan Printing Press, 2002), 95.

churches. It is likely that pilgrimage to Jericho created an economic boost for the city, benefitting a variety of residents such as innkeepers, guides, and food retailers much in the same way modern tourism does.³⁸

Church building proliferated in the Byzantine period, becoming the key structures in the urban landscape of Palestine. Palestine throughout the Byzantine period underwent a transformation in which the number churches, monasteries, public inns, and hospitals increased and traditional public features like the theater, hippodrome, civic basilica, and forum decreased.³⁹ It is quite common in Byzantine villages of Palestine to find more than one church, with monasteries located on the periphery of the town.⁴⁰ As discussed in further detail in Chapter Two, four major churches were spread around the city center of Jericho and numerous monasteries stood in the periphery. This is testament to financial prosperity, particularly in the fourth and fifth centuries, but also in the Justinian period. Historical sources, including contemporary hagiographies written by monks -- Anthony of Choziba, John Moschus, Cyril of Scythopolis, and others -- list a variety of structures built in and around Jericho, including several separate monasteries for men and women, a monastic hospital, hospices, and monastic caves in the hills above the city.⁴¹ Church or government officials often initiated and financed building projects at monasteries in the Jericho region ranging from water works to entire monastic complexes.⁴²

³⁸ Zbigniew T. Fiema, "City and Countryside in Byzantine Palestine. Prosperity in Question," in *Settlements and Demography in the Near East in Late Antiquity: Proceedings of the Colloquium, Matera, 27-29 October 2005*, ed. Ariel S. Lewin and Pietrina Pellegrini (Pisa; Roma: Istituti editoriali e poligrafici internazionali, 2006), 74.

³⁹ *Ibid.*, 76-7.

⁴⁰ Yizhar Hirschfeld, "Farms and Villages in Byzantine Palestine," *Dumbarton Oaks Papers* 51(1997): 64.

⁴¹ John Wilkinson, *Jerusalem Pilgrims before the Crusades*, 2nd ed. (Warminster, England: Aris & Phillips, 2002), 313-4.

⁴² Yizhar Hirschfeld, *The Judean Desert Monasteries in the Byzantine Period* (New Haven: Yale University Press, 1992), 61-2.

Hospices were important centers to serve travelers and pilgrims on their way to the Jordan River from Jerusalem. Both historical accounts and inscriptions connect religious institutions in Jerusalem and Jericho. Procopius mentions that Justinian restored a hospice at Jericho.⁴³ This hospice of Jericho probably stood where the Russian hospice sits today, near the center of the modern city, just east of the main square. Within the grounds of the Russian hospice today is a chapel built over the oratory of St. George and a tomb, both of the Byzantine period. It includes a mosaic pavement and an inscription dedicating the tomb to a priest named Ciriaco, who died in 566 CE. He was founder of the oratory and a benefactor of the New St. Mary Church in Jerusalem.⁴⁴ The seventh century account of a Byzantine monk, John Moschus, also mentions a connection between a hospice at Jericho and the New Church of St. Mary in Jerusalem.⁴⁵

The topography of Jericho's urban core in the Byzantine period was heavily influenced by Christianity. Archaeological, textual, and epigraphic sources indicate that a distinctly Christian topological signature arose in connection to places of religious significance. The Madaba Map depicts a symbol of a church near 'Ayn al-Sultan, suggesting that the area of the spring was some type of Christian sanctuary. Procopius mentions among Justinian's constructions a "church at the well of St Eliseaeus."⁴⁶ Theodosius (ca. 530 CE) writes that a memorial church had been built directly above the fountain blessed by Elisha.⁴⁷ Interestingly,

⁴³ Palestine Pilgrims' Text Society (London England), *The Library of the Palestine Pilgrims' Text Society*, 36 vols. (London, 1897), 147.

⁴⁴ A. Augustinovic, *Gerico e dintorni* (Jerusalem: Tipografia dei PP. Francescani, 1951), 86-7.

⁴⁵ *Ibid.*, 104.

⁴⁶ Palestine Pilgrims' Text Society (London England), *The Library of the Palestine Pilgrims' Text Society*, 147.

⁴⁷ Augustinovic, *Gerico e dintorni*, 39.

Clermont-Ganneau's travel account describes and depicts an apse with a niche at the site of the fountain.⁴⁸

Other biblical events became associated with Christian holy places as well. In the destruction of Jericho depicted in the Book of Joshua, the house of Rahab and her family is spared because Rahab gave shelter to Joshua's spies.⁴⁹ Historical sources, including the Bordeaux pilgrim (ca. 333 CE) and Theodosius (ca. 530 CE), place the house of Rahab near Elisha's Fountain. The Piacenza pilgrim (ca. 570 CE) relates that, at the time of his visit, the house had been turned into a guesthouse, and a chapel dedicated to St. Mary had been built over the bedroom where she had hidden the spies.⁵⁰ This source also mentions that by his time the Sycamore tree from the story of Zacchaeus was surrounded by an oratory.⁵¹

In parallel to the development of a Christian urban core described above, a Christian monastic hinterland arose in Zones 4 and 5. This parallel settlement pattern has been largely ignored in academic studies of the Jericho plain, which tend to separate investigations of monasticism in the Jericho plain from the city of Jericho itself. This dissertation's interest in using wider landscape analysis to understand specific sites, leads us to attempt to integrate these separate investigations to provide a fuller understanding of the plain in the time leading up to the early Islamic period.

There are several important published surveys of monastic sites around Jericho. The geography and antiquities of the Judean Desert have been described by travelers and pilgrims,

⁴⁸ Charles Clermont-Ganneau, *Archæological Researches in Palestine During the Years 1873-1874*, 2 vols., Palestine Exploration Fund Publications (London, Published for the Committee of the Palestine Exploration Fund, 1899), II 22.

⁴⁹ Joshua 6:17 New International Translation: "The city and all that is in it are to be devoted to the Lord. Only Rahab the prostitute and all who are with her in her house shall be spared, because she hid the spies we sent."

⁵⁰ Wilkinson, *Jerusalem Pilgrims before the Crusades*, 137.

⁵¹ Palestine Pilgrims' Text Society (London England), *The Library of the Palestine Pilgrims' Text Society*, 13.

but surveyors for the Palestine Exploration Fund were perhaps the first scholars to record its ruins in a more comprehensive manner.⁵² This was followed shortly by Federlin's more detailed examination of monasticism in the region.⁵³ Augustinovic, whose study we have seen focused more specially on Jericho and its surroundings, catalogues the available information for monasteries in and around Jericho.⁵⁴ More recent survey projects by Yizhar Hirschfeld and Ofer Sion have followed an archaeological methodology, presenting a systematic analysis of observable physical remains.⁵⁵

As a result of all these studies, there is a fairly thorough secondary corpus focused on the description and localization of monasteries in the region, which need not be replicated here. However, neither historians nor archaeologists have attempted to examine the relationship between the monasteries of the Judean Desert and

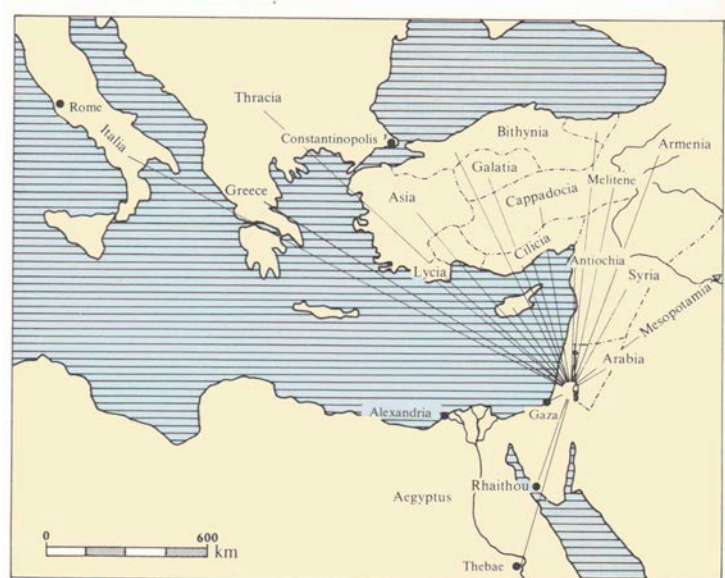


Figure 37: Places of origin of monks of the Judean desert (after Hirschfeld 1992, p. 14 map 4)

its primary urban center, Jericho. It is precisely this sort of relationship that drives the analysis in this dissertation and is one of the tools by which it is hoped to better understand the Jericho

⁵² Palestine Exploration Fund., *The Survey of Western Palestine*, 9 vols., Publications / Palestine Exploration Fund (London: Palestine Exploration Fund, 1881).

⁵³ Federlin, J.L. "Recherches sur les Laures et Monastères de la Plaine du Jourdain et du Désert de Jérusalem." *La Terre Sainte* 20 (1903): 133-80.

⁵⁴ Augustinovic, *Gerico e dintorni*.

⁵⁵ Y. Hirschfeld, "List of the Byzantine Monasteries in the Judean Desert," in *Christian Archaeology in the Holy Land, New Discoveries: Essays in Honour of Virgilio C. Corbo, OFM*, ed. Virgilio C. Corbo, et al. (Jerusalem: Franciscan Printing Press, 1990); Ofer Sion, "The Monasteries of the Desert of the Jordan," *Liber Annus* 46 (1996).

plain as it was when Khirbet al-Mafjar was constructed, and thus to understand the nature and design of Khirbet al-Mafjar itself.

The same Christian signature that shaped the urban core influenced the Jericho plain, creating an important area of monastic activity linked to the religious importance of both the city and the baptism sites along the Jordan River. Byzantine emperors promoted pilgrimage as an extension of their own piety, and possibly also as a way of uniting the empire and Jerusalem, Bethlehem, and religious sites near Jericho were important destinations.⁵⁶ Jericho is the principal city on the route from Jerusalem to the Jordan River and the traditional baptism sites and the monastic movement in the Jericho oasis had “strong ties with the Church establishment in Palestine, especially Jerusalem.”⁵⁷

3.7 Settlement Zones 4 & 5 -- Jericho’s Monastic Hinterland

The majority of monasteries constituting Jericho’s monastic hinterland were located east-southeast of Jericho in Zones 4 and 5. These complexes proliferated in parallel to the rise of the urban core in the fourth through seventh centuries as a religious and economic center. Included in this area was the Baptism Site, the principal pilgrimage site of the Jordan Valley. The religious significance of the Jordan River and traditions of the baptism linked to the area east of Jericho attracted monks and pilgrims; many of the monasteries in this study are either near the site or on the road to it from Jericho and Jerusalem.

⁵⁶ Hirschfeld, *The Judean Desert Monasteries in the Byzantine Period*, 71.

⁵⁷ *Ibid.*, 236.

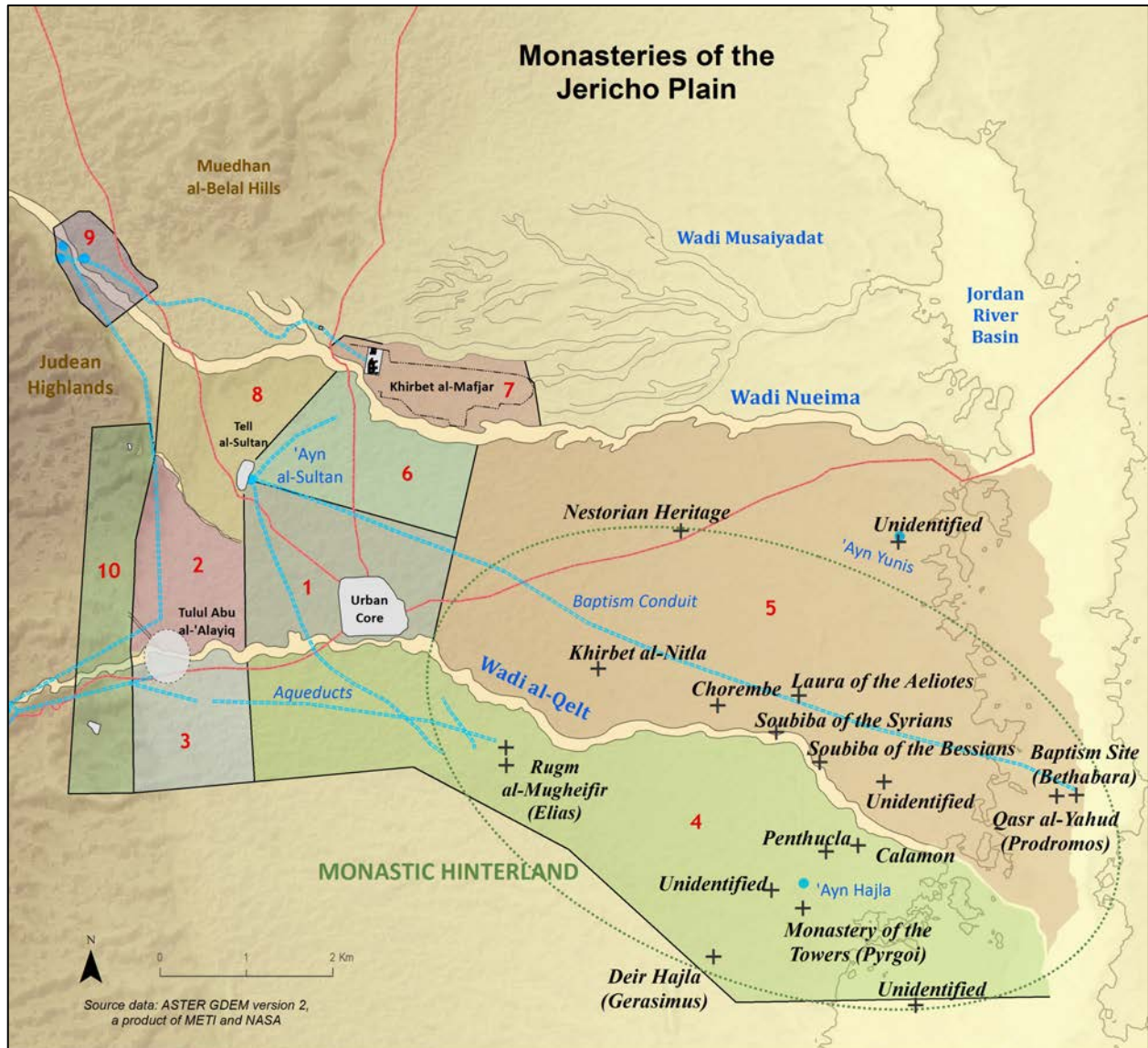


Figure 38: Monasteries of the Jericho plain, Byzantine and early Islamic periods (GIS plan created by author)

The physical landscape of the Jericho plain shaped the distribution pattern of monastic sites around the city. The essential combination for desert monasticism is seclusion, and this was a major attraction of the Judean desert: the area east of Jericho is increasingly barren before reaching the Jordan River. Seclusion could be found in many places, but Settlement Zones 4 and 5 offered the easiest water supply: in addition to several springs located in the zones, the output of the Wadi Qelt springs and ‘Ayn al-Sultan could be channeled there using the natural

downslope flow direction. The resulting distribution of Jericho's monastic hinterland is a band extending southeast from the city until the Jordan River, a mirror of natural hydrology and topography.

There were two main groupings of monastic sites in Zone 4: Khirbet al-Mugheifir and the monasteries around 'Ayn Hajla. The name Khirbet al-Mugheifir is used to represent two sites, Rujm al-Mugheifir North (Elias's Monastery)⁵⁸ and Rujm al-Mugheifir South (Tell al-Khursi)⁵⁹, located about two kilometers southeast of Jericho.⁶⁰ The foundation of Khirbet al-Mugheifir is connected to Elias, an Arab monk who became patriarch of Jerusalem in 494. During his term of office, he apparently erected monasteries around Jericho and played an active role in their administration.⁶¹ Cyril of Scythopolis relates that Elias traveled to the Jordan Valley and built himself a monastic cell in Jericho, around which at a later time two monasteries were founded, the Monastery of the Eunuchs and the Monastery of St. Stephen. Results of various surveys in this area point to a major monastic complex at the site, including a monastery with some thirty rooms, church, and a walled garden. Much of the building material was taken for use in modern

⁵⁸ Augustinovic, *Gerico e dintorni*, 185-6; Charles Clermont-Ganneau, *Archæological Researches in Palestine*, II, 40; Conder and Kitchener, *The Survey of Western Palestine*, 221; J.L. Federlin, "Recherches sur les lares et monastères de la plaine du Jourdain et du désert de Jérusalem," 199; Raphael Greenberg and Adi Keinan, *Israeli Archaeological Activity in the West Bank 1967-2007: A Sourcebook* (Israel: Ostrakon, 2009), 73, site 370; Hirschfeld, "List of the Byzantine Monasteries in the Judean Desert," 22-3, site 10; Lorenzo Nigro, Maura Sala, and Hamdan Taha, *Padis I: Archaeological Heritage in the Jericho Oasis: A Systematic Catalogue of Archaeological Sites for the Sake of Their Protection and Cultural Valorisation*, Rome La Sapienza Studies on the archaeology of Palestine & Transjordan (Rome: La Sapienza Expedition to Palestine & Jordan, 2011), 142.

⁵⁹ Augustinovic, *Gerico e dintorni*, 187-8; Clermont-Ganneau, *Archæological Researches in Palestine*, II, 40-1; Conder and Kitchener, *The Survey of Western Palestine*, 181-2, 221; Federlin, "Recherches sur les lares et monastères de la plaine du Jourdain et du désert de Jérusalem," 199, 215; Hirschfeld, "List of the Byzantine Monasteries in the Judean Desert," 22-3, site 11; Nigro, Sala, and Taha, *Padis I*, 143.

⁶⁰ Note regarding Sion, "The Monasteries of the Desert of the Jordan," 249: For the location of Khirbet al-Mugheifir, Sion says he is following Hirschfeld's conclusions, but then places the two monasteries at Khirbet al-Mafjar and Tell Mafjar (his sites C and D), which is not in the same location as Hirschfeld and Federlin. Sion's main map incorrectly locates Khirbet al-Mafjar and Tell Mafjar; perhaps at one point he mistook Khirbet Mugheifir for Khirbet al-Mafjar. Hirschfeld's conclusion should be followed.

⁶¹ Irfan Shahîd, *Byzantium and the Arabs in the Fifth Century* (Washington, D.C.: Dumbarton Oaks Research Library and Collection, 1989), 195-6.

Jericho, but still seen in mid-twentieth century were a series of large pools, basins, subterranean cisterns, channels, pottery, frescoes, and colored mosaic tesserae.⁶² The Israeli archaeological activity in the West Bank sourcebook lists it as site #370, surveyed under Israeli authority in 1982 by Yosef Porat. The impression given by the gazetteer entry is that of a major site, with occupation spanning from the Roman period into the ‘Abbasid period.⁶³

The remarkable thing about Khirbet al-Mugheifir is that it was supplied water by possibly three different aqueducts. The first of these aqueducts is part of the so-called pipe aqueduct, part of a southern extension of the Qelt Conduit. This aqueduct is an elaborate system of connected terracotta pipes, settling pools, pressure-releasing points, and bridges, which carried water from the springs of the Wadi al-Qelt down to the Jericho plain.⁶⁴ The aqueduct winds down the drainage basin of the wadi, then splits, with a southern branch reaching Khirbet al-Mugheifir, possibly stopping first at Birket Musa. Two other aqueducts were described by Conder and Kitchener, including one arriving directly from ‘Ayn al-Sultan via a bridge over the Wadi al-Qelt, and another that was likely a branch off from the ‘Ayn al-Sultan to Qasr al-Yahud aqueduct, also crossing the wadi, at an unknown point.⁶⁵ Overall, the archaeological indicators -- extensive ruins and water supply -- clearly suggest that this was an important area of settlement in the Byzantine and early Islamic periods.

Also in Zone 4 are a number of monasteries located to the east near ‘Ayn Hajla. Whether the spring provided adequate water for these monasteries and if there were aqueducts that extended to this area as well is uncertain. Surveyors in the late nineteenth century describe it as

⁶² Augustinovic, *Gerico e dintorni*, 186-8.

⁶³ Greenberg and Keinan, *Israeli Archaeological Activity in the West Bank*, 73, site 370.

⁶⁴ David Amit and Ze'ev Meshel, "The water-supply systems of Cypros fortress," in *The Aqueducts of Israel*, ed. David Amit, J. Patrich, and Yizhar Hirschfeld (Portsmouth, R.I.: Journal of Roman Archaeology, 2002), 322-29.

⁶⁵ Conder and Kitchener, *The Survey of Western Palestine*, 180.

a fine spring whose waters form a small stream that drains to the Jordan River.⁶⁶ Byzantine and early Islamic archaeological evidence recorded around the spring include domestic architecture, mosaics, and various small finds.⁶⁷ In the immediate vicinity of the spring we find the Monastery of Penthucla, referred to in historical sources as “The coenobium of the Baptism,” and which likely corresponds to the place name ΒΗΘΑΓΛΑ on the Madaba Map.⁶⁸ The site consists of monastic cells and cisterns, mosaic tesserae, and pottery. Nearby are the ruins of an unidentified monastic site.⁶⁹

Also located near ‘Ayn Hajla is the Laura of Calamon.⁷⁰ It seems to have been founded in the second half of the fifth century, possibly in 470 CE. Augustinovic identifies it with Qasr Hagla located at ‘Ayn Hajla, although this is unclear. Hirschfeld believes a more logical location for the Laura of Calamon is the ruins about two hundred meters east of the spring.⁷¹ It consisted of a central structure with an inner courtyard surrounded by cells. Sion identified a cistern and Byzantine surface sherds at the site.⁷² Nearby, is Pyrgoi Monastery, also known as the Monastery of the Towers.⁷³ Further to the southwest, around 1.3 kilometers from ‘Ayn Hajla, is

⁶⁶ Ibid., 171.

⁶⁷ Augustinovic, *Gerico e dintorni*, 198-203; U. Dinur, "En Hogla," *Excavations and Surveys in Israel* 5(1986): 118; Nigro, Sala, and Taha, *Padis I*, 114.

⁶⁸ Augustinovic, *Gerico e dintorni*, 110; Federlin, "Recherches sur les laures et monastères de la plaine du Jourdain et du désert de Jérusalem," 180; Hirschfeld, "List of the Byzantine Monasteries in the Judean Desert," 55, site 36; Nigro, Sala, and Taha, *Padis I*, 114.

⁶⁹ Augustinovic, *Gerico e dintorni*, 201-2; Federlin, "Recherches sur les laures et monastères de la plaine du Jourdain et du désert de Jérusalem," 197; Nigro, Sala, and Taha, *Padis I*, 115.

⁷⁰ Augustinovic, *Gerico e dintorni*, 100; Federlin, "Recherches sur les laures et monastères de la plaine du Jourdain et du désert de Jérusalem," 132-4; Hirschfeld, "List of the Byzantine Monasteries in the Judean Desert," 24-6, site 13; Nigro, Sala, and Taha, *Padis I*, 115-6; Sion, "The Monasteries of the Desert of the Jordan," 248, site K.

⁷¹ Hirschfeld, "List of the Byzantine Monasteries in the Judean Desert," #26.

⁷² Sion, "The Monasteries of the Desert of the Jordan," 248.

⁷³ Augustinovic, *Gerico e dintorni*, 112-3; Federlin, "Recherches sur les laures et monastères de la plaine du Jourdain et du désert de Jérusalem," 181-2; Hirschfeld, "List of the Byzantine Monasteries in the Judean Desert," 46, site 29; Nigro, Sala, and Taha, *Padis I*, 114; Sion, "The Monasteries of the Desert of the Jordan," site L.

Deir Hajla (Qasr Hajla), the Monastery of St. Gerasimus.⁷⁴ It was apparently founded in 455 CE, expanded in the sixth century, and used into the Crusader period. Conder and Kitchener noted extensive standing ruins, including the apse of a large chapel, arches, and building stones decorated with arches, along with frescoes and mosaic pavements.⁷⁵

In Settlement Zone 5, the site in Jericho's monastic hinterland that has received the most archaeological attention is Khirbet al-Nitla.⁷⁶ It is located approximately three kilometers from modern Jericho along the old route from Jericho to the Jordan River. It is named for a solitary tamarisk tree (nitla in colloquial Arabic) rooted adjacent the ruins. Conder visited the site in 1874, as did Bliss in 1894. Both observed a series of a dozen or so small mounds and some surface pottery. Conder observed a stream created by diverting flows from 'Ayn al-Sultan flowing through the site.⁷⁷ This is similar to irrigation use in modern Jericho today, in which the waters of 'Ayn al-Sultan are diverted throughout the Jericho plain for farming. Other features noted by the nineteenth century surveyors include a thirty-meter by twenty-five meter storage pool, Birket Jiljulieh, along with an Islamic cemetery.⁷⁸

Kelso explored Khirbet al-Nitla in 1950. He was interested in a possible connection with the Biblical tradition of Gilgal. In 1954, Kelso and Baramki directed excavations in the form of

⁷⁴ Conder and Kitchener, *The Survey of Western Palestine*, 213-17; Federlin, "Recherches sur les laures et monastères de la plaine du Jourdain et du désert de Jérusalem," 134-48; Sion, "The Monasteries of the Desert of the Jordan," 248-49, site M.

⁷⁵ Conder and Kitchener, *The Survey of Western Palestine*, 178.

⁷⁶ Augustinovic, *Gerico e dintorni*, 166-8; Dimitri C Baramki, "The Excavations at Khirbet en-Nitla," in *Excavations at New Testament Jericho and Khirbet En-Nitla*, ed. James L. Kelso (New Haven: American Schools of Oriental Research, 1955); F.J. Bliss, "Notes on the Plain of Jericho," *Palestine Exploration Quarterly* Quarterly Statement 26(1894): 181-3; Conder and Kitchener, *The Survey of Western Palestine*, 175; Federlin, "Recherches sur les laures et monastères de la plaine du Jourdain et du désert de Jérusalem," 309-10; Hirschfeld, "List of the Byzantine Monasteries in the Judean Desert," 50-2, site 33; Hamarneh, "Dynamics and Transformation of the Rural Settlements," 134-5; Sion, "The Monasteries of the Desert of the Jordan," 250, site E.

⁷⁷ Conder and Kitchener, *The Survey of Western Palestine*, 213-7.

⁷⁸ See plan on: Bliss, "Notes on the Plain of Jericho," 182; Conder and Kitchener, *The Survey of Western Palestine*, 191.

five test trenches. Of these five soundings, four revealed Byzantine or early Islamic structures and the fifth exposed a church that had undergone many significant architectural changes from its construction in the fourth century until its abandonment in the ninth century.⁷⁹

The church's foundations consisted of roundish river stones, similar to those found by the Tell al-Hassan Project and Russian Museum excavations. Excavators place the last two phases of church construction, both modest structures, after the earthquake of the mid-eighth century. Excavators place the last two phases of church construction, both modest structures, after the earthquake of the mid-eighth century. Later deposits yielded ceramics from the ninth century, helping to date the life of the church.⁸⁰ In general, Baramki noticed similarities to the ceramic corpus from Khirbet al-Mafjar, where he had already excavated. After abandonment and in modern times, there was substantial looting of stones. Hirschfeld is somewhat critical of Baramki's report and believes the evidence suggests the site was a monastery affiliated with a Byzantine church.⁸¹

To the north of Khirbet al-Nitla, still in Zone 5, roughly midway between Jericho and the Jordan River is a small hermitage tentatively dated to the seventh century, which was accidentally discovered by a road worker in 1933. Baramki excavated the site, which consists of a large sleeping room and a small chapel with a mosaic floor.⁸² Based on a Syriac inscription in the mosaic floor, Baramki interpreted the hermitage to have a Nestorian affiliation, dating to the ninth century. Both Robert Schick and Hirschfeld challenge this conclusion -- believing the

⁷⁹ James L. Kelso, *Excavations at New Testament Jericho and Khirbet En-Nitla. The Annual of the American Schools of Oriental Research*, v 29-30 for 1949-1951 (New Haven: American Schools of Oriental Research, 1955), 50.

⁸⁰ *Ibid.*, 52.

⁸¹ Hirschfeld, "List of the Byzantine Monasteries in the Judean Desert," #52.

⁸² Dimitri C. Baramki, "A Nestorian Hermitage between Jericho and the Jordan," *Quarterly of the Department of Antiquities of Palestine* 4, no. 1 & 2 (1934).

structure instead to be a Byzantine construction used by Syriac-speaking monks -- based on Byzantine pottery and a revised paleographic dating of the inscription in its geometric mosaic floor.⁸³

A dispersed line of monasteries and monastic structures stretches across Zone 5 in a southeast direction from Khirbet al-Nitla along the Wadi al-Qelt. These monasteries were served by the Baptism Conduit, which originated from ‘Ayn al-Sultan and extended all the way to the monasteries around the Jordan River, and is mentioned by Procopius among the works of Justinian.⁸⁴ Conder and Kitchener describe the aqueduct as “a long mound, showing hardly the trace of a channel, but running straight as possible through the copse over the flat plain between the mud mounds, until disappearing close to the convent [Qasr al-Yahud].”⁸⁵ The Baptism Conduit was still visible when Hirschfeld conducted his survey; he relates that it is mislabeled as a Roman road on a Survey of Western Palestine map.⁸⁶ Extensions assumed to be part of the same aqueduct system have been observed in the vicinity of the Laura of the Aeliotas between Khirbet al-Nitla and Qasr al-Yahud.⁸⁷ Nearby lies the site of ‘Ayn al-Gharabe, ancient Chorembe.⁸⁸ The Chorembe monastery site consists of architectural ruins, a lime kiln, mosaic tesserae, and Byzantine/early Islamic pottery and glass. At a point just south of the site, Federlin

⁸³ Robert Schick, *The Christian Communities of Palestine from Byzantine to Islamic Rule: An Historical and Archaeological Study*, Studies in late antiquity and early Islam (Princeton, N.J.: Darwin Press, 1995), 323.

⁸⁴ Conder and Kitchener, *The Survey of Western Palestine*, 177.

⁸⁵ *Ibid.*, 178.

⁸⁶ Hirschfeld, "List of the Byzantine Monasteries in the Judean Desert," #36.

⁸⁷ Sion, "The Monasteries of the Desert of the Jordan," 252.

⁸⁸ Augustinovic, *Gerico e dintorni*, 111-12; Federlin, "Recherches sur les laures et monastères de la plaine du Jourdain et du désert de Jérusalem," 299-300; Hirschfeld, "List of the Byzantine Monasteries in the Judean Desert," 55, site 38; Nigro, Sala, and Taha, *Padis I*, 109.

recorded the foundations of a bridge spanning the Wadi al-Qelt, which he dates to the Byzantine period.⁸⁹

Additional monastic settlements in Zone 5 are suggested by evidence from both historical sources and archaeological surveys. On the western side of the river, the Madaba mosaic depicts the Monastery of Prodhomos, which most scholars accept to be the present-day named Qasr al-Yahud.⁹⁰ The ruins are extensive, including a large cistern apparently connected to the Baptism Conduit from ‘Ayn al-Sultan. Also displayed on the Madaba Map is the inscription “BEΘABAPA,” indicating a baptism location. Both Theodosius and the Piacenza pilgrim discuss a monastic center dedicated to John the Baptist situated on the banks of the Jordan. Theodosius relates that a marble cross with an iron cross atop it marks the place where Jesus was baptized. Nearby, he continues, stands the Church of St. John, built by Anastasius on high vaults so protect it against potential flooding of the river.⁹¹ The Piacenza pilgrim adds that the monastery was very large, with two-guest-houses.⁹² The Maronite Chronicle mentions an earthquake in 660 CE, describing how it destroyed the greater part of Jericho and its churches, as well as the house of John the Baptist on the Jordan River.⁹³

3.8 Monasteries and the economic landscape

A monastery’s location affected its accessibility to cities and trade routes, its agricultural viability, and its religious significance. Monks living in the Jericho plain would have had a high

⁸⁹ Augustinovic, *Gerico e dintorni*, 200; Federlin, "Recherches sur les laures et monastères de la plaine du Jourdain et du désert de Jérusalem," 198; Nigro, Sala, and Taha, *Padis I*, 110.

⁹⁰ Augustinovic, *Gerico e dintorni*, 110-11; Conder and Kitchener, *The Survey of Western Palestine*, 217-9; Hirschfeld, "List of the Byzantine Monasteries in the Judean Desert," 35-6, site 20; Nigro, Sala, and Taha, *Padis I*, 136-7; Sion, "The Monasteries of the Desert of the Jordan," 249-50, site N.

⁹¹ Wilkinson, *Jerusalem Pilgrims before the Crusades*, 112.

⁹² *Ibid.*, 137.

⁹³ Schick, *The Christian Communities of Palestine*, 126.

degree of involvement in the city of Jericho. Papyri from Nessana show that near the end of the Byzantine period, monks would maintain a close relationship with a town's community.⁹⁴ This had been normal practice since the fourth century, when the influential Basil of Caesarea promoted the establishment of monasteries near existing settlements.⁹⁵ Byzantine Jericho provided its monastic hinterland with a supply base, a market for monastic production, and a sense of security.⁹⁶ An extensive network of footpaths connected monasteries in the Jericho plain.

Monastic life took many forms, from wandering holymen to solitary hermits living in isolated cells to large communities of monks living in substantial complexes. The larger complexes had a variety of functions beyond being religious centers. They played an important role in agricultural development. Monasteries were often equipped with presses and other agricultural structures. They produced much more than needed for self-sufficiency, thus generating a commercial relationship with urban centers. By the beginning of the early Islamic period, monasteries had become an important part of the economy of Palestine. There were a large number of rural settlements in this period, evidenced archaeologically by various domestic and agricultural installations.⁹⁷

Jericho was an urban center serving agricultural exchange. Agricultural economy in Palestine consisted of four main elements: wine production, olive growing and oil extraction, cultivation of cereals, and animal husbandry, in particular sheep and goats.⁹⁸ One can imagine a

⁹⁴ Doron Bar, "Rural Monasticism as a Key Element in the Christianization of Byzantine Palestine," *The Harvard Theological Review* 98, no. 1 (2005): 56.

⁹⁵ *Ibid.*, 57.

⁹⁶ Hirschfeld, *The Judean Desert Monasteries in the Byzantine Period*, 12.

⁹⁷ "Farms and Villages in Byzantine Palestine," 33.

⁹⁸ T. J. Wilkinson, *Archaeological Landscapes of the Near East* (Tucson: University of Arizona Press, 2003), 139.

cultural landscape characterized by various agrarian activities and installations: grain storage, bread ovens, cattle barns and pens, as well as the cultivation of olives, grapes, palm trees, and fields. The Piacenza pilgrim mentions exceptional dates, legumes, and citrons from Jericho, some of which he brought back to Italy as souvenirs.⁹⁹ Palestine was a wealthy province. Avi-Yonah¹⁰⁰ viewed the Palestinian economy of the Byzantine period as artificially sustained by external capital linked to the proliferation of church building, but this outlook is less popular now in the face of studies pointing to agricultural production as a better base indicator of economic prosperity and surplus for export.

Wine was an integral product associated with monasticism. Written sources link monasticism and wine production. Biographies of the monks Hilarion (ca. 300-371 CE) and Peter the Iberian (end fifth century CE) relate accounts of the monks visiting vineyards to bless crops and portray the importance of viticulture to monasteries.¹⁰¹ Winepresses and oil presses are abundantly common in monasteries throughout Palestine. Kingsley states “Not only was late Antique Palestine self-sufficient in wine, but many industrial-sized presses mass-produced surpluses.”¹⁰² The same is probably true of oil. Avni cites a variety of studies that suggest the average output of oil presses was much greater than the needs of the local population.¹⁰³

Written accounts from the Byzantine and early Islamic periods provide an idea of the continuity of Jericho’s agricultural output in earlier centuries. Theodosius gives some details of

⁹⁹ Bagatti, *Ancient Christian Villages of Samaria*, 96.

¹⁰⁰ Avi-Yonah, "The Economics of Byzantine Palestine," *Israel Exploration Journal* 8, no. 1 (1958).

¹⁰¹ Philip Mayerson, "The Wine and Vineyards of Gaza in the Byzantine Period," *Bulletin of the American Schools of Oriental Research* 257(Winter, 1985): 75-6.

¹⁰² Sean A. Kingsley, "The Economic Impact of the Palestine Wine Trade in Late Antiquity," in *Economy and Exchange in the East Mediterranean During Late Antiquity: Proceedings of a Conference at Somerville College, Oxford, 29th May, 1999*, ed. Michael Decker (Oxford: Oxbow, 2001), 58.

¹⁰³ Gideon Avni, "Early Mosques in the Negev Highlands: New Archaeological Evidence on Islamic Penetration of Southern Palestine," *Bulletin of the American Schools of Oriental Research* 294(May, 1994): 205.

agrarian practices in the sixth century. He mentions the cycling of crops, with half of fields ploughed in August and the other half around Easter.¹⁰⁴ More importantly, he gives details about Jericho's agrarian economy, stating that Jericho wine would bear fruit at Pentecost would be exported along with grain to the Byzantine capital: "the produce both of the field and of the vine are transmitted at the proper season to Constantinople."¹⁰⁵ Constantinople would have generated such a high level of demand that it would affect production throughout the Empire; Jericho was clearly a place that produced wine on a large scale.

The Piacenza pilgrim, from circa 570 CE, also discusses Jericho wine, saying it is particularly strong with certain medicinal qualities. Furthermore, he relates that around Easter large quantities of grapes and must from Jericho were sold on the Mount of Olives of Jerusalem, along with great jars of wine.¹⁰⁶ Here we see written evidence of regional trade. Palestine had been generally prosperous since the Late Roman period and Jericho benefitted from its regional placement in the broader commercial world of the Roman Empire.¹⁰⁷ In Late Antiquity, North Africa served the West, while the Levant played a correspondingly integral role in the East.

Wine was an important source of calories and nutrition, especially iron, in Antiquity.¹⁰⁸ The construction of wine and oil presses adjacent to, or within pre-existing structures, for example at Umm al-Rasas, Khirbet al-Badiyya, and Khirbet Yajuz, indicates the prosperity of villages in Jordan during the seventh and eighth centuries.¹⁰⁹ Excavations at Khirbet Shuwayka, twelve kilometers north of Jerusalem, have revealed an extensive settlement lasting from the

¹⁰⁴ Palestine Pilgrims' Text Society (London England), *The Library of the Palestine Pilgrims' Text Society*, 14.

¹⁰⁵ Wilkinson, *Jerusalem Pilgrims before the Crusades*, 111.

¹⁰⁶ *Ibid.*, 137.

¹⁰⁷ Bar, "Population, Settlement and Economy in Late Roman Byzantine Palestine (70-641 AD)," 312.

¹⁰⁸ Kingsley, "The Economic Impact of the Palestine Wine Trade in Late Antiquity," 46.

¹⁰⁹ Hamarneh, "Dynamics and Transformation of the Rural Settlements," 96.

Byzantine period through to the Abbasid period. The site includes a large residential complex, church, and wine press.¹¹⁰ Byzantine Egypt was a major consumer of wine and other products from Palestine, particularly from Gaza and Ashkelon. Overall, some nine hundred wine presses dated to the Byzantine period have been published from Israel alone.¹¹¹ Palestinian wines were predominantly stored in Gaza/Ashkelon LR4 or bag-shaped LR5/6 amphora, often lined with pitch to prevent evaporation. For Jericho, Gaza amphorae have been found in large quantities from Byzantine contexts at Tell al-Sultan.¹¹²

3.9 Monasticism and the political landscape

Byzantine Jericho and its monastic hinterland served as a pivot between the state and the Bedouin world. It was the gate to and from the Holy Land. On the one hand, monasteries connected to the structural components of the Byzantine state such as the city of Jericho and religious institutions in Jerusalem. On the other hand, monasteries were part of a landscape inhabited by nomadic and semi-nomadic tribal groups. These groups, many of which had migrated from the Arabian Peninsula, shifted throughout Syria-Palestine, including the Jordan Valley.

Syria-Palestine was a region with a long history of Arab political development, a region populated in the Byzantine period by Arabic-speaking elites involved in cultural, religious, and political affairs of society.¹¹³ Arab Christianity took hold in the Judean Desert in Late Antiquity

¹¹⁰ Ibrahim Abu A'mar et al., "The Byzantine and Early Islamic settlement of Khirbat Shuwayka," *Web Journal of Cultural Patrimony* 1, no. 2 (2006).

¹¹¹ Kingsley, "The Economic Impact of the Palestine Wine Trade in Late Antiquity," 49.

¹¹² Enrico Cirelli and Francesca Zagari, "L' oasi di Gerico in eta bizantina e islamica. Problemi e proposte di ricerca," *Archeologia Medievale* 27(2000): 368.

¹¹³ Greg Fisher, *Between Empires: Arabs, Romans, and Sasanians in Late Antiquity*, Oxford classical monographs (Oxford England ; New York: Oxford University Press, 2011), 210.

and a variety of Arab tribal groups inhabited the monastic landscape. These groups ranged from small pastoral bands to large sedentary tribes. Chief among the latter group were the Ghassanids, who came to Syria-Palestine from South Arabia in the late fifth century. Sometime around the reign of Anastasius (491-518 CE), the Ghassanids established themselves inside the borders of the empire, in the Batanea, between Bostra and Damascus.¹¹⁴ After the martyrdoms of Najran in the 520s CE, many people from that city fled Arabia and joined the Ghassanids. The Ghassanids used the area in many ways, with some settling more permanently and others using it as a zone of semi-nomadic living.

Ghassanid soldiers, like Roman legionaries, participated in a wide range of activities that were not strictly military-related, including building bridges, aqueducts, and churches.¹¹⁵ They built monasteries and improved irrigation systems. These investments, especially in reliable water supply, would have made permanent settlement an attractive option. In this way, nomads within the empire had an incentive to become farmers, and nomads outside the borders drew nearer.¹¹⁶ Many Arab Christian tribes gradually decreased their level of nomadism and settled throughout Palestine in the sixth and seventh centuries, particularly in the Negev and the Hauran. In addition, the Ghassanids had strong ties to monasticism. Most monasteries of the Judean desert were Monophysite and the Ghassanids were an essential part in the resurgence of

¹¹⁴ Wolf Liebeschuetz, "Nomads, Phylarchs and Settlement in Syria and Palestine," in *Settlements and Demography in the Near East in Late Antiquity: Proceedings of the Colloquium, Matera, 27-29 October 2005*, ed. Ariel S. Lewin and Pietrina Pellegrini (Pisa; Roma: Istituti editoriali e poligrafici internazionali, 2006), 136.

¹¹⁵ Shahîd, *Byzantium and the Arabs in the Fifth Century*, 6-7.

¹¹⁶ Liebeschuetz, "Nomads, Phylarchs and Settlement in Syria and Palestine," 143.

Monophysitism throughout Syria-Palestine and its protection in conflicts with Chalcedonians in the sixth century CE.¹¹⁷

Monasteries became points of interaction between local Arab tribes and broader regional state authorities. Nomads, sedentary farmers, and city dwellers depended on each other. Nevertheless, relationship between Arab Bedouin and sedentary peoples living in towns inside the Byzantine empire could be contentious. Southern Palestine in particular was subject to raiding by Bedouin tribes. These raids posed a threat to travelers, merchants, farmers, villages, and cities. Monasteries could be places of economic production and political power; “As points of convergence in the steppe, the overlapping roles that monasteries assumed were practical, social, spiritual, and aesthetic. Coexisting with these was a political dimension that cannot be separated from the others.”¹¹⁸

3.10 Summary

This chapter has examined the role of satellite settlements in the integrated cultural landscape of the Jericho plain, showing how the distribution of satellite settlements in the Jericho plain is a product of a combination of the physical landscape and goals and ambitions of the builders. It has focused on the development of the Jericho plain from the time of the Hasmoneans through the Roman and Byzantine periods, which sets the stage for the place and time in which Khirbet al-Mafjar was built.

¹¹⁷ Shahîd, Irfan. "Ghassân." *Encyclopaedia of Islam*, Second Edition. Edited by: P. Bearman, Th. Bianquis, C.E. Bosworth, E. van Donzel, W.P. Heinrichs. Brill Online, 2013. Reference. University of Chicago. 10 October 2013 <http://referenceworks.brillonline.com.proxy.uchicago.edu/entries/encyclopaedia-of-islam-2/ghassan-SIM_2472>

¹¹⁸ Garth Fowden and Elizabeth Key Fowden, *Studies on Hellenism, Christianity and the Umayyads*, Meletemata 37 (Athens 2004), 190.

The Hasmoneans were interested in Jericho above all for economic exploitation. Tulul Abu al-‘Alayiq was developed through direct patronage from this foreign ruling class, forming a detached relationship with the local population. The Romans were interested in suppressing the rebellions of the first centuries CE, which posed a serious threat to their colonization of Palestine. The Byzantine period saw urban change marked the spread and institutionalization of Christianity and the corresponding construction of churches. Unlike Herod, or the Roman military, the Byzantines were not political or religious outsiders, and thus developed the civic center of Jericho itself instead of building in a separated, protected area. Elite complexes as a settlement type were supplanted by Christian communities and monasteries.

The Jericho plain of the Byzantine period became fully permeated by Christianity. This was the aim of the Byzantine state and church, which took advantage of the relative peace and prosperity in this period. The archaeological manifestation of connections between state and church, and between urban core and monastic hinterland, is that as monasticism spread in Zones 4 and 5, it maintained links to the city of Jericho. The Baptism Conduit, which ran from ‘Ayn al-Sultan to monasteries near the Jordan River and likely built by Justinian, is a physical representation of these relationships.

Monasteries were connected to a political and economic network via the urban core as the central node. Many of the settlements had a surplus of agricultural products, creating a hinterland supply on which the urban core was dependent. This dependency worked both ways, as the satellite relied on the infrastructure of trade and exchange, market, and transport offered by the urban core, for connections to other urban systems throughout Palestine and beyond. Similar to the situation around Jerusalem, a network “agricultural villages and monasteries

supplied the city with goods consumed by local residents and foreign pilgrims.”¹¹⁹ The hinterland of Jericho in the Byzantine and early Islamic period was a monastic landscape serving as a nexus of religious, economic, and political functions.

By combining archaeological evidence from excavations and surveys, as well as pertinent textual references, along with incorporating structural analysis of the cultural landscape, this study has highlighted the variety of settlements of the Jericho plain. This analysis informs our understanding of the setting into which Khirbet al-Mafjar was inserted in the early eighth century. Monasticism was associated with the hinterland and the slow religious conversion of the countryside, which remained predominantly Christian throughout the early Islamic period, allowing for a continuity of rural monasticism. Continuity is confirmed by archaeological investigations at sites in the Judean Desert, which indicate that monastic activity continued after the Islamic conquest.¹²⁰ Monasteries continued to play an important role in the political landscape and rural economy in the early Islamic period and Jericho’s monastic hinterland is an important point of context for the construction of Khirbet al-Mafjar.

Satellite settlements, in all their variety, share a relationship with the urban core from which they grew, but the literature contains no synthesis of how the satellite systems of the Jericho plain related to Jericho’s urban core. This chapter has attempted such a synthesis, using the tools of landscape archaeology.

¹¹⁹ Avni, *The Byzantine-Islamic Transition in Palestine: An Archaeological Approach*, 157.

¹²⁰ *Ibid.*, 153.

CHAPTER FOUR -- Beyond the Wadi: Locating Khirbet al-Mafjar

4.1 Introduction

Having analyzed the landscape of the Jericho plain and the main cultural elements and constructions that shape the plain and set the context for the beginning of the Umayyad period, we are now in a position to turn to Khirbet al-Mafjar itself, to explore how the new understanding of its background shapes our view of the site. This chapter examines Khirbet al-Mafjar through the lens of the overall landscape model presented thus far. This model allows us to look for patterns in time and space that can provide insight into the inception of Khirbet al-Mafjar and the intentions of its builders. We have seen that different elite and state level motivations led to the construction of specific settlement types in discrete areas of the Jericho plain, and that these settlements had varying relationships with the urban core. This chapter uses those insights to aid analysis of Khirbet al-Mafjar.

The Hasmoneans and Herod built and expanded Tulul Abu al-‘Alayiq in Zones 2 and 3. The area was a perfect fit for their objectives and concerns in Jericho. As newcomers threatened with insecurity, the separation from Jericho, easy access to Jerusalem, and protection by their own defensive positions in Zone 10 were all important safeguards. The agricultural space and alternative water sources to ‘Ayn al-Sultan allowed them to achieve their main goal: profit from cash crop production. The main objective of the Romans, instead, was military control and suppression of potential rebellion, which was achieved in part by camping the Tenth Legion in Jericho, possibly building a legionary camp right next to the city. The Byzantine period saw a major shift, as the Byzantine state itself developed both the urban core and the periphery, development facilitated by the rise of Christianity, which joined the Christian Byzantine rulers

with the predominantly Christian populace of the Jericho plain, manifesting in promotion of the religion through urban churches and ex-urban monasteries.

While our analysis of these earlier historical periods and settlements was aided by numerous historical sources, we lack such material for the early Islamic period. Fortunately, the patterns observed serve as a platform to draw evidence-based conclusions about Khirbet al-Mafjar. In light of the previous discussed correlation between settlement location and type to the socio-political character of the builders and patrons, this chapter explores Umayyad strategy in the Jericho plain by analysis of the similarities and differences between the Umayyads and the previous cultures that developed the plain. In particular, three main points emerge:

1. It is clear that one of the reasons that the Umayyads were interested in Jericho was as a source of agricultural profit. The qusur generated great revenues for the Umayyad elite. But unlike the Hasmoneans, whose development of Tulul Abu al-‘Alayiq was primarily for such profit, the motivations behind the construction of Khirbet al-Mafjar were more complicated than simple exploitation and luxury.
2. The Umayyad strategy of control in Jericho differed from that of the Romans, with Umayyad caution standing in contrast to Roman confidence. Whereas the Romans brought military forces directly to the gates of the urban core, the Umayyads developed a triangle of strategic sites outside the city in Zones 3, 7, and 9.
3. Khirbet al-Mafjar was developed with an important political and religious role, but in a very different way from the Byzantine aims. The Byzantine period was characterized by an active promotion of an already-prevalent Christianity in both urban core and countryside, linking the cultural landscape to the Church and State. Umayyad proselytism was much more reserved, taking place through tribal connections and in the

great audience hall and mosques at Khirbet al-Mafjar away from the urban core. The Umayyads focused much of their religious and political efforts not on pre-existing urban populations, but on tribal groups to which they were more culturally akin. Umayyad palaces are often situated in well-watered crossroad locations frequented by these groups, like the Jericho plain.

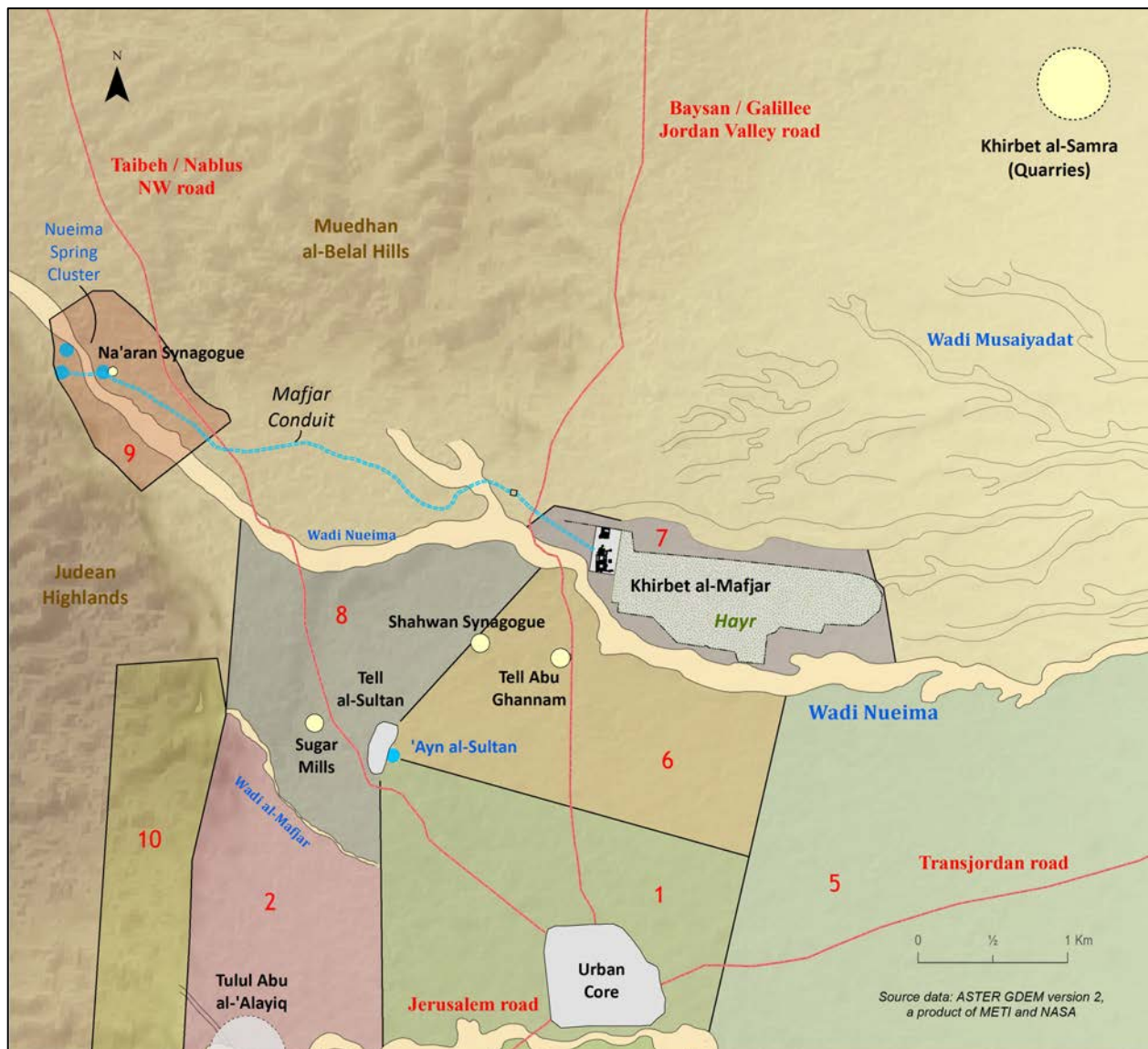


Figure 39: General map of sites and features discussed in Chapter Four (GIS plan created by author)

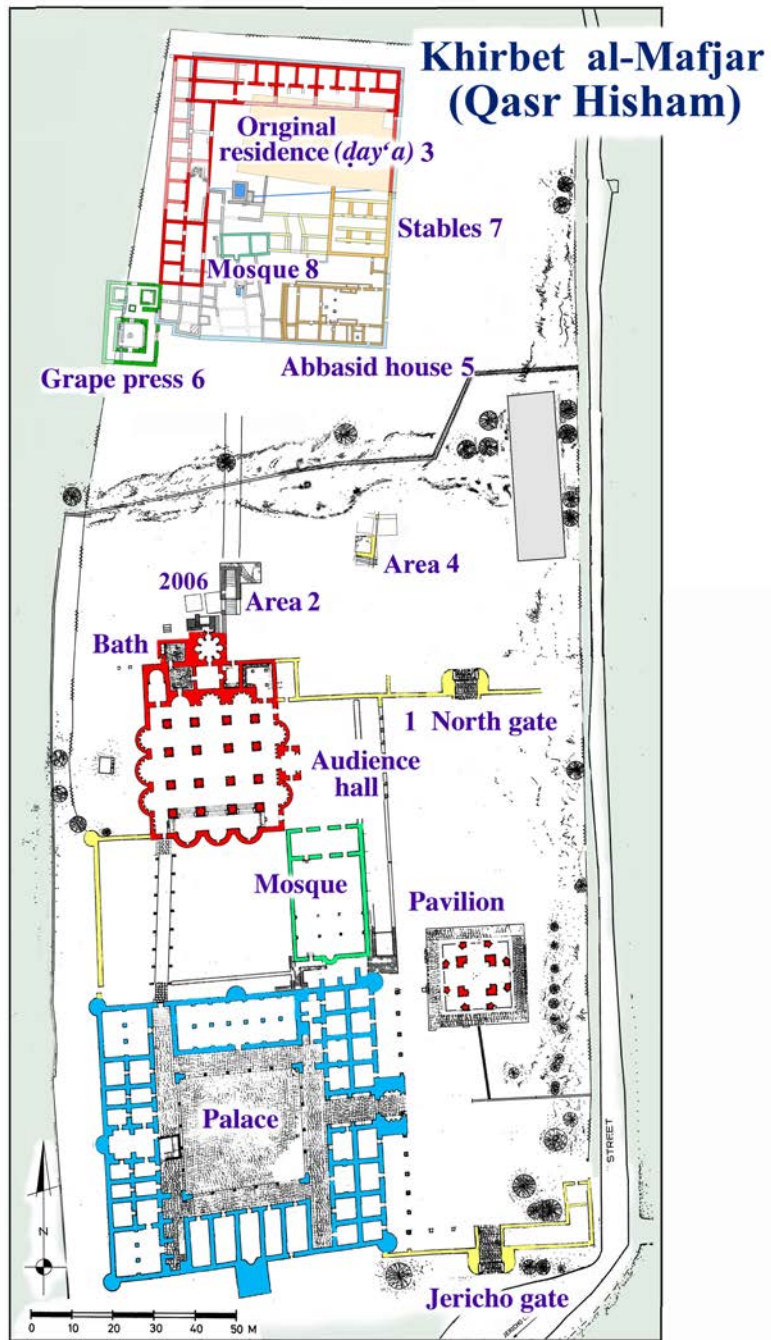


Figure 40: Khirbet al-Mafjar site plan (by Whitcomb and the Jericho Mafjar Project)

This chapter focuses on the specific site location of Khirbet al-Mafjar within the context of both the physical landscape and settlement history of the Jericho plain. It addresses the question: why of all available places did the Umayyads choose Settlement Zone 7 to build their palace complex? For basic factors such as ease of water supply and agricultural land, it is not the most obvious choice, so it follows that other elements were at play in their decision-making process. The choice not to use 'Ayn al-Sultan as the principal source of water supply is particularly conspicuous. Instead, the Umayyads elected to exploit the springs of the Na'aran area in Zone 9, which offered continuous and abundant supply, but required a major investment in hydraulic infrastructure, including two bridge-aqueducts, to reach their selected location. We examine the specifics of this system as well as the relationship between the physical landscape of Zone 7 and the orientation and placement of the archaeological features that comprise Khirbet al-Mafjar.

Through analysis of the cultural landscape, this chapter will seek more definite conclusions from the choice of Zone 7. The most noticeable feature of this area is that it is located on the opposite side of the Wadi Nueima from the urban core of Jericho. This separation is our first insight into the relationship between Khirbet al-Mafjar and Jericho city, reflecting the standing of the Umayyad elite within an early Islamic Palestine still populated by a Christian majority. Arab groups had existed for centuries in and around Jericho, living in the shadow of the prosperous Byzantine urban center. With the arrival of a new religion and state, both still in the process of being formed, the balance and tension between notions of disconnection and interdependence between the new Umayyad elite complex at Khirbet al-Mafjar and the preexisting city mirrors the balance and tension within the early Islamic state between the success of the Islamic conquests and the enduring outsider status of the Umayyad elite. The

placement of settlements in the Jericho plain, including Khirbet al-Mafjar, occupation around the Na‘aran springs, and resettlement at Tulul Abu al-‘Alayiq, forming a triangle around the urban core and controlling three main roads leading to and from the city, must necessarily relate to a defined religious, political, and strategic Umayyad program.

In addition to landscape analysis, this chapter employs a variety of methods to address these problems, including: review and presentation of new archaeological data, assessment of unpublished archaeological data from the Palestinian Department of Antiquities, examination of published archeological reports, and survey of available historical sources.

4.2 How to build an Umayyad palace

Once the decision to build in Jericho was made, it goes without saying that someone actually had to build it.¹ For the architects charged with this task, how might the decision process have unfolded?

The first thing they must do is select a building site. They might scout the Jericho plain, evaluating the different potential settlement areas on factors such as availability of water, usable space, and defensive capabilities. After visiting the peaks of our Zone 10, they would perhaps make note of the utility of a defensive outpost there, but rule it out for this grander project.

¹ The exact ruler or rulers under which the site was built is uncertain, but the most common guess is Hisham ibn ‘Abd al-Malik (r. 723-743) based on an epigraphic reference excavated at the site along with similarities with Qasr al-Hayr al-Gharbi, believed to be built by Hisham.

Schick -- Robert Schick, *The Christian Communities of Palestine from Byzantine to Islamic Rule: An Historical and Archaeological Study*, Studies in late antiquity and early Islam (Princeton, N.J.: Darwin Press, 1995), 324. -- and Hoyland -- Robert Hoyland, *Theophilus of Edessa's Chronicle and the Circulation of Historical Knowledge in Late Antiquity and Early Islam* (Liverpool: Liverpool University Press, 2011), 272-3. -- both discuss later written evidence related to Sulayman ibn ‘Abd al-Malik.

Soucek -- Priscilla P. Soucek, "Solomon's Throne/Solomon's Bath: Model or Metaphor?," *Ars Orientalis* 23, Pre-Islamic Palaces(1993). -- suggests a connection between the Northern Area at Khirbet al-Mafjar and Sulayman ibn ‘Abd al-Malik, and discusses a hypothesis that the iconographic program at Mafjar is an allegorical reference to Solomon and Solomonic power.

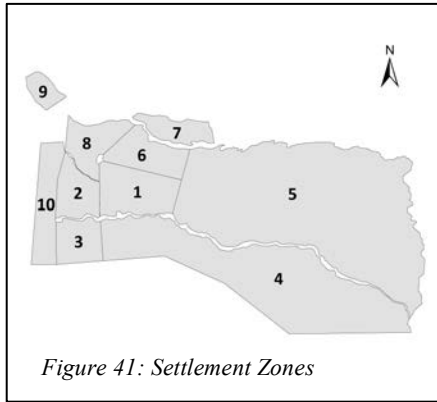


Figure 41: Settlement Zones

Looking down from these highlands, they would see the sweeping flat plain. Below would be Zone 8, which would be excluded for its mixed topography and lack of a water source. Turning their gaze north to Zone 9, the architects would have found the lack of usable space and the low position dominated by higher ground untenable for their

needs. Surely, however, record was made of the prodigious output of the Na‘aran springs as a potential alternative to ‘Ayn al-Sultan.

Turning now towards the south, the architects study the extents of the city of Jericho on the Wadi al-Qelt, perhaps reduced from the thriving Byzantine city of a few centuries earlier, but still an important urban center with a sizable population of Christian residents. On the periphery of the city to north in our Zone 6, the architects would have likewise taken note of the Christian communities there.

Looking further east towards the Jordan River, they consider the wide sweep of land comprising our Zones 4 and 5. An Umayyad palace in this area would benefit from the same advantages offered the monasteries in this area, including seclusion, space, and available agricultural land. But the major disadvantage here is that the main water source for these zones was ‘Ayn al-Sultan, the output of which would first pass through Christian populated Zones 1 and 6; the idea of being reliant on this spring would have made the Umayyad elite uncomfortable.

At this point, the builders of Mafjar are left with two choices for site location, Zone 3 or Zone 7. In surveying Zone 3, they must have been tempted to simply resettle the area of the former elite complex at Tulul Abu al-‘Alayiq. First of all, the issue of water supply had long

been solved in the Hellenistic period. Given the present day remnants of the hydraulic infrastructure, it is easy to imagine that in the Umayyad period the system would have been easily refurbished if it had fallen into disrepair during the Roman or Byzantine eras. The Birket Musa and pipe aqueduct supply from the springs of the Wadi Qelt supplied abundant water to Zone 3, and the Umayyads might have chosen a place here for their new complex, in the area where Herod had constructed his own first Jericho palace. This area would have offered the ability to control the crucial Jerusalem-Jericho road as well. Furthermore, an Islamic resettlement at Tulul Abu al-‘Alayiq could have recreated the Royal Estate, the profitable agricultural enclosure in Zone 2. The Qelt and Naaran Conduits, built and expanded under the Hasmoneans and Herod, made this area exceptionally well-watered. It is important to note that these conduits were easy to maintain in contrast to the logistic complexities of the Mafjar Conduit, with its bridges. In the end, however, though there was early Islamic resettlement of Zone 3, it was not the location of the new elite Umayyad complex.

4.2.1 Settlement Zone 7: Khirbet al-Mafjar and its environs

We know, of course, that Khirbet al-Mafjar was built in zone 7; it was to find the explanation for this decision that we have conducted the landscape analysis. Examination of the physical landscape has revealed that the most attractive areas of settlement are Zones 1, 4, 5, and 6, those with lots of available agricultural land and

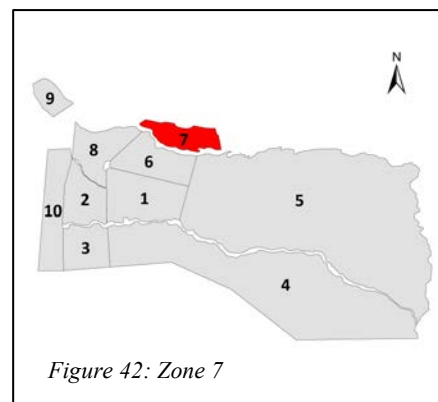


Figure 42: Zone 7

which can receive water from ‘Ayn al-Sultan along the natural flow path determined in our GIS analysis without having to traverse a major wadi. That the Umayyad elite did not choose to build

here or make 'Ayn al-Sultan the main source of water supply for Khirbet al-Mafjar requires an explanation.

The explanation we seek is linked to our understanding of the settlement strategy of the Umayyads in Syria-Palestine. At first glance, Zone 7 seems like a poor choice to build a major new construction. It is squeezed up against the Wadi Nueima and other wadi systems and hills, with no immediate water source. But in reality, it had the exact two things the Umayyads were looking for: 1) the protection and isolation offered by the Wadi Nueima, a buffer from the still predominantly Christian city of Jericho; and 2) the opportunity to exploit a different water source than that used by the urban population. That it also had enough space for Umayyad needs further added to the appeal of this location.

Having chosen a site for Khirbet al-Mafjar, the first logistical challenge for the builders to consider concerned water supply; how to deliver water from the springs of Zone 9 -- 'Ayn al-Duyuk, 'Ayn al-Nueima, and 'Ayn Shusha -- to the site. It is important to note that this area could be controlled independently of the urban core, an important feature desired by the Umayyads. In the pre-Islamic period, the two springs located on the western side of the Wadi Nueima, 'Ayn al-Duyuk and 'Ayn Shusha, were channeled south towards the elite complex at Tulul Abu al-'Alayiq. 'Ayn al-Nueima, on the eastern side of the wadi, served mainly the local community of Neara; the Naaran Synagogue is built right next to it. The output of all three springs and perhaps 'Ayn al-'Auja was combined in the early Islamic period by construction of the Mafjar Conduit, which included a large aqueduct bridge spanning the Wadi Nueima. Centuries of repairs and refurbishments make it difficult to say whether there was a pre-Islamic structure here, and no definitive examination of the bridge's architectural stratigraphy has been undertaken. Nevertheless, the bridge has pointed arches consistent with Umayyad building

techniques; Richard Hamilton argued that its construction was directly connected to the early Islamic building program at Khirbet al-Mafjar.²

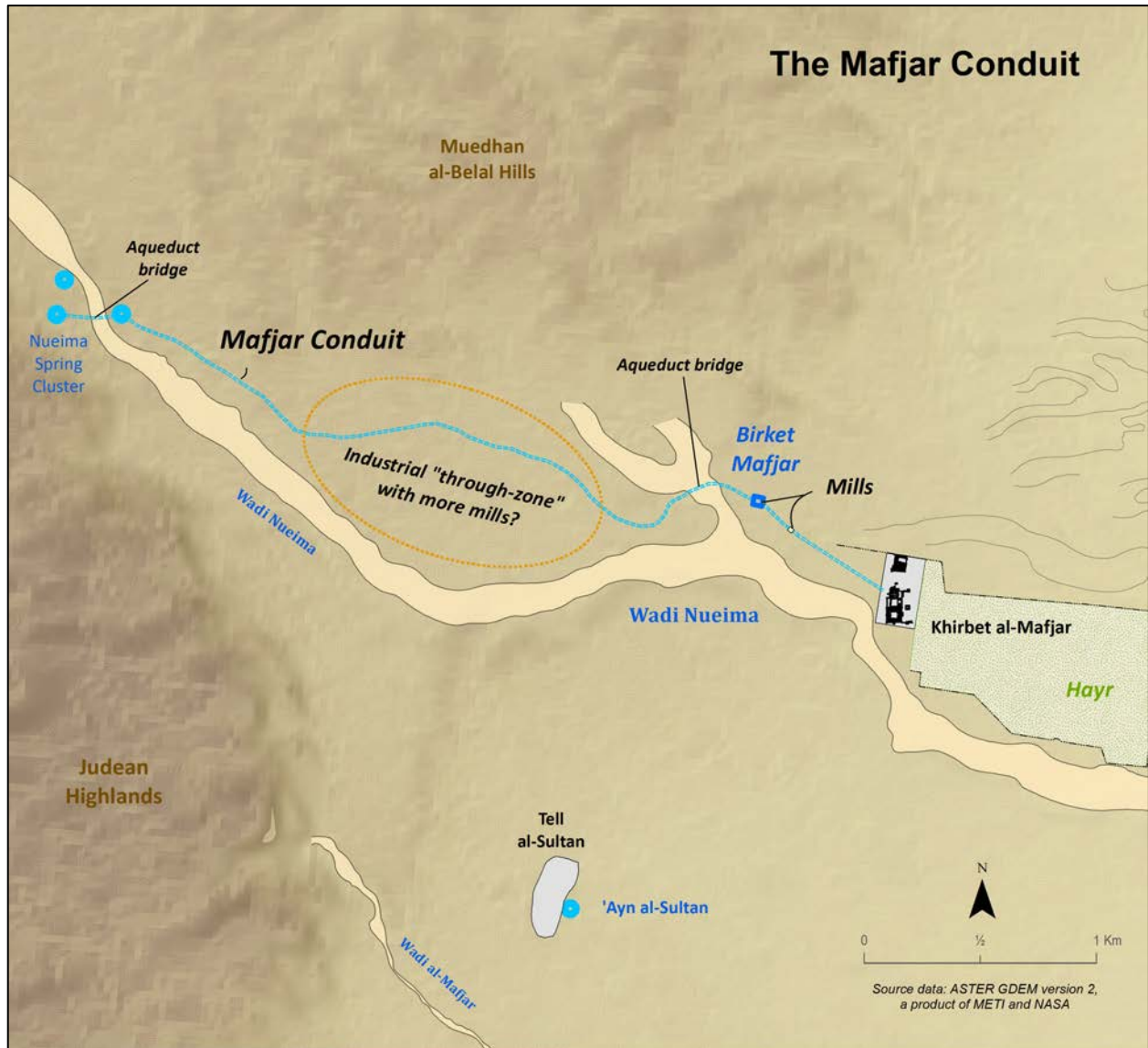


Figure 43: The Mafjar Conduit: water supply system from the Na'aran springs to Khirbet al-Mafjar (GIS plan created by author)

Once the output of the springs was combined, it was channeled southeast towards Khirbet al-Mafjar, through the modern refugee area of Nueima. This area is unknown archaeologically, but may have been a kind of industrial area of mills making use of the massive amount of water

² R. W. Hamilton and Palestine Archaeological Museum, *Khirbat al Mafjar: An Arabian Mansion in the Jordan Valley* (Oxford, Clarendon Press, 1959), 5.

being sent to the palace complex. Dimitri Baramki mentions in his dissertation that the Palestine Exploration Fund surveyed the Mafjar Conduit and that it included at least three mills (we currently only know of two).³ In any event, at around one kilometer west of the palace, the Mafjar Conduit included a second bridge, some ninety meters long, which spanned a tributary of the Wadi Nueima catchment system. The ruins of this bridge are still visible on either bank of the tributary today. Next the water was deposited in a large reservoir (fifty meters by forty-four meters), located about seven hundred meters west of the palace. This reservoir has been the target of recent excavations under the direction of Mahmoud Hawari, whose team exposed a large pier in its middle, likely used to measure the water level, as well as a mill structure abutting the eastern side of the reservoir.⁴ Between this reservoir and Khirbet al-Mafjar was another mill, excavated by Baramki. The Mafjar Conduit thus represents a very complex hydraulic supply system designed both to deliver water to the palace complex and make use of it along its path.

Another important issue is the availability of building materials for such an ambitious endeavor. The sandstone blocks used to construct Khirbet al-Mafjar were quarried from the site of Khirbet al-Sumra, located six kilometers to the northeast. Still visible today, the area was ideal for a quarry, with firm abundant sandstone at ground surface. One can still see chisel marks today and discern that the stone cutters both carved blocks directly from open rock faces and undercut ledges in order to break off larger slabs. It is easy to imagine a steady train of pack animals and carts bringing stone to the building site during the construction of Khirbet al-Mafjar. Khirbet al-Sumra was relatively close to Zone 7, there were no major physical boundaries such

³ Dimitri C Baramki, "Arab Culture and Architecture of the Umayyad Period: A Comparative Study with Special Reference to the Results of the Excavations of Hisham's Palace" (University of London, 1953), 93.

⁴ The excavations have not yet been published, but have been presented.

See also: Mahmoud Hawari, "Archaeological Landscape Survey at Khirbat al-Mafjar - 2009 and 2010. *Bulletin of the Council for British Research in the Levant* 5 (2010), 22-34.

as wadis between the two, and the quarries could be reached without having to pass near the urban core of Jericho. Clearly the Umayyads had to carefully evaluate a range of logistical issues when planning Khirbet al-Mafjar, and the availability and access to building material is an important element that can be added to considerations of water supply, usable land, and security.



Figure 44: Aerial photo with Birket Mafjar in the foreground; note that only one water channel enters Zone 7 (Khirbet al-Mafjar), splitting into multiple branches within the zone (looking southeast; taken by author)

4.2.2 Design and layout of Khirbet al-Mafjar

As to the design and layout of the buildings at Khirbet al-Mafjar, it is clear that the architects sought a solution that fit parameters dictated by the physical landscape. To the present, excavations at Khirbet al-Mafjar have failed to yield any significant evidence of pre-Islamic occupation. While the absence of evidence cannot be considered evidence of absence nor conclusive, it is a strong indication that there were no previous structures or developments of significance that the builders would have had to accommodate. So the builders could have based

the orientation and plan of the complex based on their understanding of topography, hydrology, and the required infrastructure.

Recent work by Ignacio Arce, and archaeological investigation by the Jericho Mafjar Project, has shed new light on the relative sequence of building constructions at Khirbet al-Mafjar. For our purposes though, we see that the placement of the structures remains more or less consistent. Settlement Zone 7 is set between the Wadi Nueima to the south and a smaller offshoot wadi to the north. The structures at Khirbet al-Mafjar are built on the western edge of this area, near a bend in the Wadi Nueima and upslope from the rest of the zone. They are laid out in a line on a roughly north-south axis.

This axis should be viewed as a function of hydrology. Baramki relates that as the Mafjar Conduit approached the complex, it separated into a network of canals directed at the different structures. A similar system of modern canals is still used today to spread water out across the area. The important thing to note is that water arrives to the buildings at Khirbet al-Mafjar at an angle roughly perpendicular to their line of placement. This design serves two functions. The first is mentioned by Baramki in his dissertation and has been further discussed by Ignacio Arce in recent conferences in Jerusalem and Jericho.⁵ By laying the buildings out in a single line, the Umayyads were able to better manage the risk posed by overflow and inundation. Excess water could simply be diverted past the line of buildings, possibly through open areas such as that between the palace and audience hall and out into the fields, averting the danger. It is possible that the Umayyads had learned of the necessity of this design the hard way; Robert Schick has found reference in a Syriac chronicle of 1234 CE that mentions a series of buildings in Jericho built by Sulayman ibn 'Abd al-Malik that were destroyed after an earthquake caused a

⁵ Baramki, "Arab Culture and Architecture of the Umayyad Period," 93.

shift in the course of a wadi.⁶ The referent of that chronicle has not been determined conclusively, but if not Khirbet al-Mafjar, there is no construction or evidence of such a construction fitting the description on the Jericho plain.



Figure 45: Aerial photo of Khirbet al-Mafjar and its downslope fields and schematic illustration of water flow across the site and onto the hayr (looking east; taken by author)

The second advantage of the layout of the complex at Khirbet al-Mafjar was that water from the Mafjar Conduit flowed “through” the buildings, so to speak. That is, the cleanest water was first delivered to the buildings with excess and used water not being wasted but rather continuing on in the same direction to water the downslope fields. The fields themselves must

⁶ Schick, *The Christian Communities of Palestine*, 324.

See also: Hoyland, *Theophilus of Edessa’s Chronicle*, 272-3.

have been extensive. The *hayr* wall that enclosed them extends east out from the area of buildings over 1.5 kilometers, capturing as much usable space between the wadis as possible. Even if we include the plausible hypothesis that the hayr included some type of racetrack or area for horse training, the agricultural land is still plentiful. So plentiful, in fact, that at some point it seems water was also brought from ‘Ayn al-Sultan in an aqueduct that crossed the Wadi Nueima directly to the fields, although the date of such a system is uncertain; it could easily belong to the Abbasid period. Runoff water from the fields was then channeled to a small cemented reservoir, Bir Heider, which was recorded by surveyors of the Palestine Exploration Fund but the function of which is unknown.⁷

4.3 The Umayyad agenda in Jericho

Three main factors made the Jericho area an attractive place for an Umayyad palace complex: 1) its agricultural potential; 2) its strategic location in the network of roads of Palestine; and 3) the link to various tribal groups of the region fostered by Jericho’s role as an oasis and in particular by the many monasteries that dotted its hinterland -- in other words, money, location, and politics.

4.3.1 Money

Early Islamic historical sources are unanimous in their depiction of Jericho as an agricultural center. In an otherwise unflattering depiction of Jericho, al-Muqaddasi still praises the city’s produce and natural resources. He writes about Jericho: “this is the City of Giants, and herein is the gate of which God spoke to the Children of Israel. It is an abundant source of indigo

⁷ Charles Clermont-Ganneau, *Archæological Researches in Palestine During the Years 1873-1874*. Vol. II (London: Palestine Exploration Fund Publications, 1896), 209.

and has many palms. Its rural district is the Ghawr, where the fields are watered by springs. The heat here is excessive, snakes and scorpions are numerous. The people are tan and swarthy, and fleas abound. Even so, the water is the lightest on the digestion you will find in Islam; bananas are plentiful, as are fresh dates, and fragrant plants.”⁸ Idrisi and al-Muqaddasi both describe the various structures used to divert and collect water for agricultural exploitation.

The potential for agricultural profit had drawn the Hasmoneans to establish their own elite complex in Jericho centuries earlier. With its abundant water sources and tropical climate, the Jericho region can support year-round crop production. There was a lot of money to be made from the surpluses. Important members of the Umayyad family financed the qusur and revenues often stayed within the province from which they were raised. Whether revenues from production at Khirbet al-Mafjar went to the governor or the caliph, there was great motivation among the ruling elite to build and maintain a complex in Jericho for this reason.

It is clear from later periods as well that Jericho remained an important agricultural production center even in times of diminished settlement, in particular archaeological and historical evidence concerning Jericho’s agrarian-based economy in the Crusader/Ayyubid and Mamluk periods. Early medieval Arab and Crusader sources mention the flourishing sugar industry in the Jordan Valley. Al-Muqaddasi and Ibn Hawqal specifically refer to sugar cane cultivation in connection with Jericho.⁹ Writing in the thirteenth century, Yakut stated that the Ghor region’s principal crop was sugar cane, with Jericho producing the best sugar.¹⁰

⁸ al-Muqaddasi, *The Best Divisions for Knowledge of the Regions: A Translation of Ahsan al-Taqaṣim fi Ma’rifat al-Aqalim*, trans. Basil Anthony Collins (Ithaca, NY: Ithaca Press, 2001), 146-7.

⁹ Hamdan Taha, "Some Aspects of Sugar Production in Jericho, Jordan Valley," in *A Timeless Vale. Archaeological and Related Essays on the Jordan Valley in Honour of Gerrit van der Kppj on the Occasion of his Sixty-Fifth Birthday*, ed. E Kaptijn and L.P. Petit, Archaeological Studies Leiden University 19 (Leiden: 2009), 181.

¹⁰ Guy Le Strange, *Palestine Under the Moslems: A Description of Syria and the Holy Land from A.D. 650 to 1500. Translated from the Works of the Medieval Arab Geographers* (New York: AMS Press, 1975), 397.

Archaeological evidence for the cultivation of sugar cane and the production of sugar in Jericho is found at the site of Tawahin al-Sukkar, in the foothills of Mount Qarantal one kilometer west of Tell al-Sultan. Excavations in 2000 and 2001 under the direction of Hamdan Taha brought to light a wide range of installations related to the sugar industry, including an aqueduct, press, mill house, refinery, kitchen, furnace, and storage rooms.¹¹ The sugar production process requires much water for irrigation and mill powering. Refashioned sections of the Naaran Conduit delivered water to the site.

Overall, Taha's excavations succeeded in establishing a stratigraphic chronology for the site. The work yielded a substantial amount of ceramic finds, including glazed bowls with geometric designs, Ayyubid/Mamluk lamps, and conical sugar pots, which are used once in the last phase of sugar production and then discarded. More than thirty-two coins were found, dating from the Byzantine to Ayyubid periods. Excavators thus date sugar production at Tawahin al-Sukkar to the Crusader/Ayyubid period with a final phase in the Mamluk period.¹²

It is thus likely that the Umayyads engaged in a variety of agro-industrial money-making activities in and around Jericho. From Yaqut we hear that Jericho's environs were rich in sulfur. Abu-l Fida mentions that the only sulphur mines in Palestine are located in Jericho.¹³ Several authors mention the importance of indigo production in the Ghor. The Dead Sea region is an important source for raw materials, including salt, bitumen, and sulphur. All three were prized staples of trade, which the inhabitants of Jericho probably to some extent exploited, and which were trafficked from the city to the great ancient routes of commerce in the Near east and

¹¹ Taha, "Some Aspects of Sugar Production in Jericho, Jordan Valley," 182.

¹² *Ibid.*, 189.

¹³ Le Strange, *Palestine Under the Moslems*, 397.

beyond.¹⁴ The center of many of these activities was Khirbet al-Mafjar itself, which would have served as a secondary market, complimentary to the city itself.

As previously mentioned in Chapter Three, wine grapes were a cash crop in the Jericho plain from at least the Hellenistic period; multiple wine press were excavated at Tulul Abu al-‘Alayiq. A striking indication of continuity of wine production to early Islamic Jericho was discovered in 2012 at Khirbet al-Mafjar by the Jericho Mafjar Project. The project has explored the site’s so-called Northern Area, an enigmatic set of ruins first excavated by Jordanian authorities in the 1960s. These ruins comprise an agricultural estate built in the first decades of the eighth century. Excavations uncovered a major wine press complex in the southwest corner of the area. The press is of exceptional quality, constructed of well-faced stone blocks similar to those of the palace and bath, some with the same craftsmen's marks.

Ignacio Arce studied the plan and building materials of the wine press complex revealing its elaborate design, which integrated stone arches and brick roofing. The structure is exceptional for two main reasons: first, the perfectly symmetrical plan and quality of construction are unusual for the period; second, such presses are usually dated to the Byzantine period, but from the context, one is clearly Umayyad. It is certainly the most elaborate known press associated with a desert castle. Its discovery complicates our understanding of the site within its broader landscape. Its

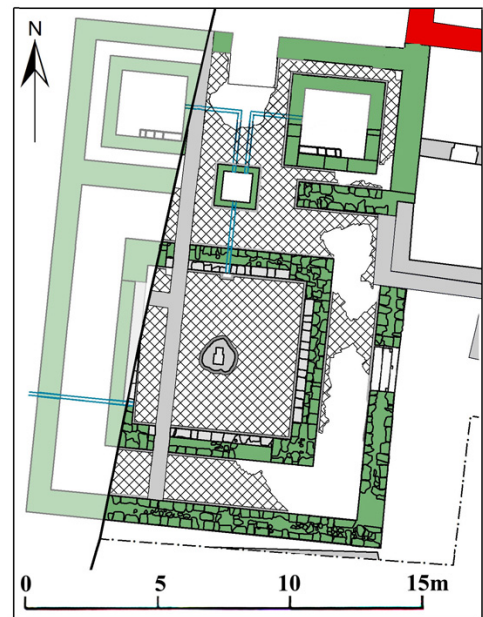


Figure 46: Plan of the wine press at Khirbet al-Mafjar (by Whitcomb and the Jericho Mafjar Project)

¹⁴ Emmanuel Anati, "Trade and the Puzzle of Jericho," *Bulletin of the American Schools of Oriental Research* 167(1962, Oct.): 29.

large scale suggests the press played an important role in the economics of the complex. No longer can we envisage the site as simply a palace and bath, but rather a larger settlement. With such a massive production output, it is reasonable to assume that Jericho wine was sold throughout the region, just as it had been in the sixth century. Furthermore, such an impressive structure gives further evidence to the economic vitality of the Jericho plain in this period. Clearly, Mafjar contributed economically not only to local market of Jericho, but beyond.

4.3.2 Strategic location

In addition to the profit potential from agricultural products, Jericho was key to the management of routes of trade and movement, and a place from which to control both the semi-nomadic peoples of the Judean Valley and rebel groups of the Judean desert.

As mentioned earlier in Chapter One, Jericho forms a central node in a network of roads connecting pilgrimage sites and trade routes in the Jordan Valley and beyond. Jericho was connected in all directions. The main Roman road from Jerusalem into the Jordan Valley, including the Baptismal Site on the Jordan River east of Jericho, frequently mentioned in historical sources, entered the valley at Tulul Abu al-‘Alayiq. Later, pilgrims on the hajj used the Jerusalem-Jericho road. The *Notia Dignitatum* shows a road running north from Jericho to Scythopolis and then to Tiberias. The road east from Jericho ran to Livias and eventually to the great cities of Jordan. Jericho was even connected via the Dead Sea: Idrisi mentions that the different provinces from Aqaba to Jericho were commercially linked via small trade ships sailing on the Dead Sea.¹⁵

¹⁵ Le Strange, *Palestine Under the Moslems*, 66.

A range of foodstuffs and commodities were transported throughout Palestine via the dense network of roads that had been established centuries before the arrival of Islam. In the early Islamic period, the broader region of Bilad al-Sham, or Syria-Palestine, was divided into five horizontal zones each stretching from sea to desert (Hims, Damascus, al-Urdun, Filastin, and, later, Qinnasrin). Jericho was part of Jund Filastin, which included the districts of Ramla, Jerusalem, ‘Imwas, Lod, Yavne, Jaffa, Caesarea, Nablus, Sebastia, Bayt Jibrin (Byzantine Eleutheropolis), the Dead Sea, Ascalon, and Gaza.¹⁶ Ramla, founded by Sulayman ibn ‘Abd al-Malik, who was governor of Filastin from 705 to 715 CE, and caliph for two years after that, was the capital of Filastin and seat of the governor at least until the eleventh century. Each district (kūra) was subdivided into sub-districts (iqlīm; plural: āqālīm). Overall, this organization owes its heritage to Byzantine administration.

Some historical sources place Jericho in a sub-district of Filastin known as the Ghawr, which means depths or lowlands, a reference to the Jordan River valley. Ya’kubi refers to Jericho as the capital of the Ghawr and Idrisi states that “Ariha, with ‘Amta and Baysan are the finest cities of the Ghawr.”¹⁷ The most important city in the Dead Sea region was So‘ar (Zoar or Zughar), near the southern part of the sea; indeed, the Dead Sea is frequently referred to as ‘the sea of Zughar’ in Arab sources.¹⁸ Al-Ya’qubi, in Kitāb al-buldān, adds that Ghawr is inhabited by Qays and a group of the Quraysh.¹⁹

¹⁶ Moshe Gil, *A History of Palestine, 634-1099*, 1st paperback ed. (Cambridge; New York: Cambridge University Press, 1997), 111.

¹⁷ Le Strange, *Palestine Under the Moslems*, 30-1.

¹⁸ Gil, *A History of Palestine, 634-1099*, 202.

¹⁹ Schick, *The Christian Communities of Palestine*, 148.

King argues that the location of the desert castles are linked to the principal routes connecting the Hijaz and central Arabia with Syria-Palestine and Transjordan.²⁰ His study focuses on the desert routes of Wadi'l-Sirhan, Tariq Ubayr and Darb al-Sham in eastern Jordan and northern Arabia, but this idea can be expanded into Palestine to include the routes linking the Jordan Valley, Jericho, and Jerusalem. These routes were well established by the Byzantine period and there was likely some existing infrastructure that the Umayyads could take advantage of. As Luz points out, early Islamic Palestine continued many elements of the Byzantine province, and the network of settlements and roads had crystallized before the Muslim conquest.²¹ We should evaluate settlement spacing and new constructions in the early Islamic landscape of the Jericho plain with this in mind. In doing so, it is important to note the importance of cities in the early Islamic period. Umayyad settlement patterns are characterized by a variety of urban centers on different scales as the rulers "realized that towns were essential to their policy of territorial control, especially in light of the fact that their markets played a vital role in the monetary economy of the new state."²²

The choice of Zone 7 for the building site of Khirbet al-Mafjar reflects the importance of the Jordan Valley road and the status of its cities in the Umayyad period. The road system of the Jericho plain was in large part determined by its physical landscape. Two routes travel north from Jericho and split around the Muedhdhan al-Belal, a series of hills bordering Jericho to the north. The western road heads through Zone 9 to Taibeh and Nablus. The eastern road runs

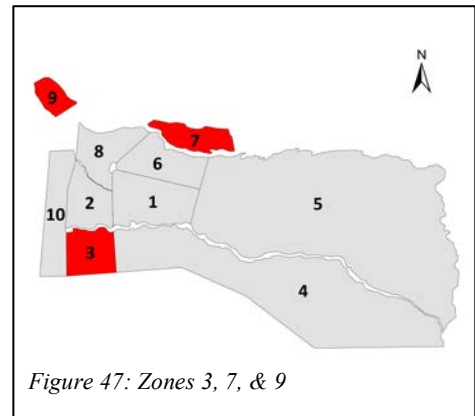
²⁰ G. R. D. King, "The Distribution of Sites and Routes in the Jordanian and Syrian Deserts in the Early Islamic Period" (paper presented at the Twentieth Seminar for Arabian Studies held at London on 1st-4th July 1986, London, 1987).

²¹ Nimrod Luz, "The Construction of an Islamic City in Palestine. The Case of Umayyad al-Ramla," *Journal of the Royal Asiatic Society* 7, no. 1 (1997): 49.

²² Ignacio Arce, "Umayyad Building Techniques and the Merging of Roman-Byzantine and Partho-Sassanian Traditions: Continuity and Change," in *Technology in Transition: A.D. 300-650*, ed. Luke Lavan, Enrico Zanini, and Alexander Constantine Sarantis (Leiden ; Boston: Brill, 2007), 494.

through Zone 7 and north up the Jordan Valley to Baysan and eventually to Tabariyyah on the shores of the Sea of Galilee. Archaeological investigation has shown that Tabariyyah went through a significant expansion in the early Islamic period and that Baysan underwent an urban transformation under the Umayyads, developing into an influential commercial center. Khirbet al-Mafjar's strategic location along this road up the Jordan Valley established it as a go-between Jericho and these cities.

Taking a slightly wider view, we can see Khirbet al-Mafjar as part of a defensive triangle controlling the three main routes into Jericho. This triangle consisted of settlements in Zones 3, 7, and 9, constituting a system designed to control the Jericho-Jerusalem road and two access points in the north.



Archaeological evidence indicates that Zone 9, the area of Na‘aran, saw a major increase in settlement in the Byzantine and early Islamic period. This zone contains three springs located close together: ‘Ayn al-Duyuk, ‘Ayn al-Nueima, and ‘Ayn Shusha. The Na‘aran area is a narrow valley running on a northwest-southeast axis, squeezed between the steep cliffs of the Judean highlands and Muedhdhan al-Belal. The ancient valley was carved by the Wadi Nueima, which enters the Jericho Plain at this point, opening a gap in the hills before turning east and running across the plain to the Jordan River.

The existence of archaeological remains on both banks of the wadi is to be expected because springs are located on both sides, two on the west at the base of the high cliffs and one on the east side. Additionally, north of Na‘aran, the waters of ‘Ayn al-‘Auja, the largest spring in the area, are also easily accessible. The aqueduct built by the Hasmoneans includes an

extension from this area. With all these hydrological advantages and potential water sources, settlement in Zone 9 might have constituted a large community, if not for its limited usable space and mountain pass topography.

Settlement Zone 9 was occupied from at least the Roman period. Clermont-Ganneau found Roman tombs near ‘Ayn Duq.²³ Augustinovic identifies this area as the village of Neara -- alternatively called Na‘arah, Noorat, Neoros, or Naros -- mentioned by historical sources as a Jewish village five Roman miles distant from Jericho.²⁴ In September 1918, a bombshell from the Turco-German army accidentally revealed a synagogue adjacent to ‘Ayn al-Nueima on the east side of the wadi. Known as the Na‘aran Synagogue, its mosaic pavement depicts signs of the Zodiac, Jewish symbolism, animals and birds, geometric designs, and Hebrew-Aramaic inscriptions. The site was investigated under Israeli authority in 1969 by Pesach Bar-Adon and 1983 by Hanania Hizmi.²⁵ Based on architectural and art historical comparison with other sites, Avi-Yonah dates its construction to the sixth century.²⁶ It was certainly in use at this time, as Eusebius mentions it in his *Onomasticon* (136, 24).

²³ Clermont-Ganneau, *Archaeological Researches in Palestine*, II, 21-3.

²⁴ A. Augustinovic, *Gerico e dintorni* (Jerusalem: Tipografia dei PP. Francescani, 1951), 142-3.

²⁵ Raphael Greenberg and Adi Keinan, *Israeli Archaeological Activity in the West Bank 1967-2007: A Sourcebook* (Israel: Ostrakon, 2009), 62, site 273.

²⁶ Michael Avi-Yonah, "Na'aran," in *The New Encyclopedia of Archaeological Excavations in the Holy Land*, ed. Ephraim Stern (Jerusalem & New York: Israel Exploration Society & Carta; Simon & Schuster, 1993), 1076.

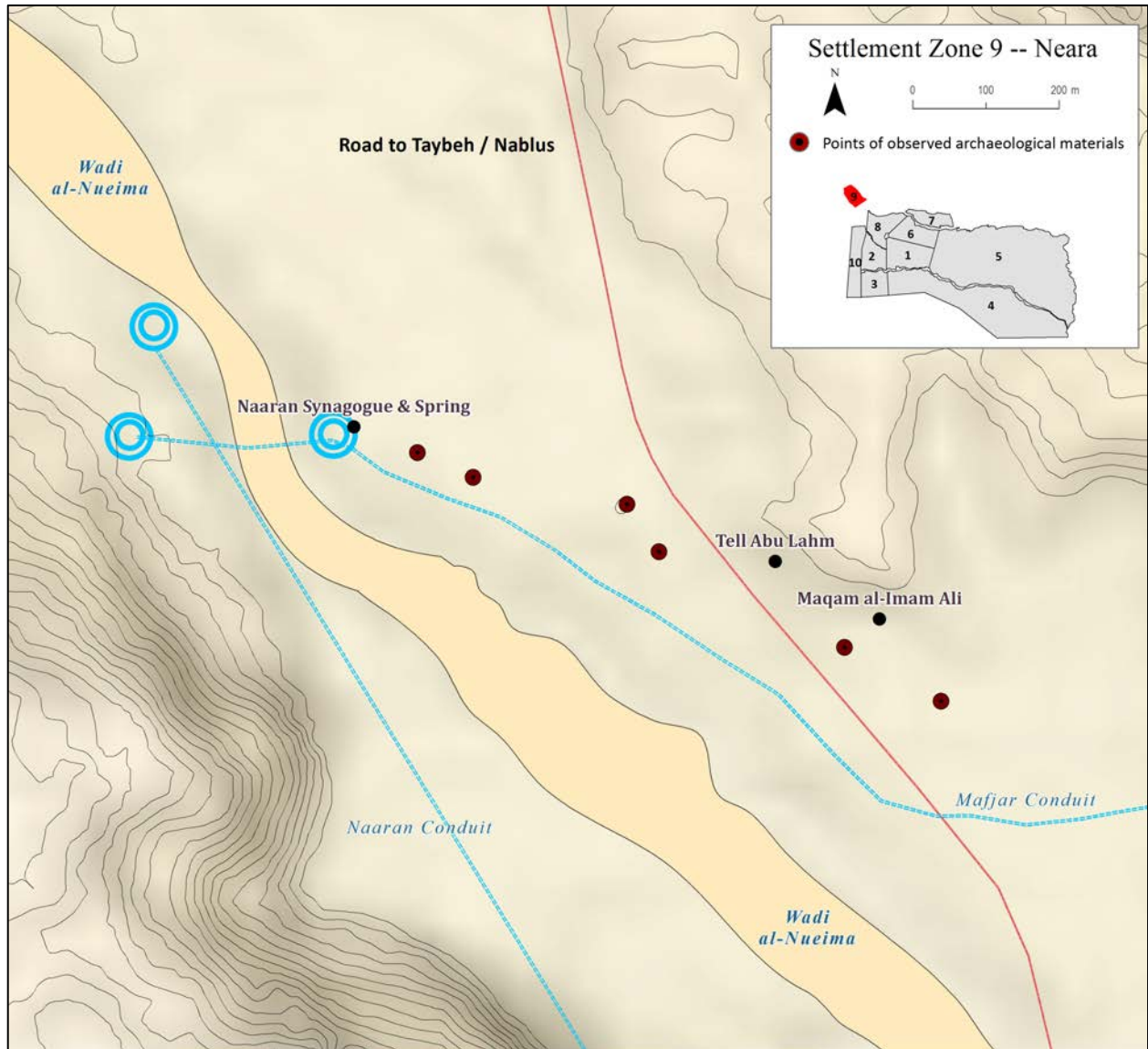


Figure 48: Archaeological and physical features of Zone 9 (GIS plan created by author)

A crucial defining feature of Zone 9 is that it could be controlled without controlling the city of Jericho itself. The village of Nera appears in Rabbinic sources in conflict with Jericho.²⁷ The likely source of discord is the appropriation of spring water. The Hasmoneans diverted water from this area, channeling it along the base of the mountains for use at Tulul Abu al-

²⁷ Augustinovic, *Gerico e dintorni*, 142.

‘Alayiq and the Royal Estate. Josephus mentions that water was diverted away from Neara by Herod’s son, Archelus for his new constructions to the northeast at the settlement of Archelais, which is depicted on the Madaba Map.²⁸ Archelais was supplied with water via the construction of Qanat Manil, a new branch of the Naaran Conduit coming from ‘Ayn al-‘Auja, which extended eastward to the site.



Figure 49: Aerial photo showing Zone 9, including the Na'aran Spring and Synagogue (covered by a modern shelter); from here water was delivered to Khirbet al-Mafjar (looking southeast; taken by author)

The Na‘aran area offers habitable space around ‘Ayn al-Nueima. Here we find the majority of settlement associated with Neara. In addition to the synagogue, several mounds are visible near the spring. These mounds appear to be artificial, with archaeological materials,

²⁸ Josephus, *Josephus: The Complete Works*, trans. William Whiston (Nashville, Tennessee: Thomas Nelson, Inc., 1998), Antiquities XVII, 340.

Archeleus “magnificently rebuilt the royal palace that had been at Jericho, and he diverted half the water with which the village of Neara used to be watered, and drew off that water into the plain, to water those palm trees which he had there planted: he also built a village, and put his own name upon it, and called it Archelais.”

including Byzantine-early Islamic pottery, visible in section and on the surface. The archaeological site continues into land now part of the Banana Land swimming park. During an informal walking survey in a plot of land south of the park, we observed many archaeological features, including both pottery and architectural fragments, spread across a wide area. Indications suggest a sizable settlement in this flat section of land with easy access to the spring, protected from flash floods, but with accessible agricultural plots inside the wadi itself -- a technique used today for palm groves. Unfortunately, bulldozing and the construction of a main road has thoroughly destroyed the site.

Finally, there is space along Muedhdhan al-Belal hills running east of Settlement Zone 9. While clearly linked to Neara, its topography distinguishes it. A site labeled “Tell Abu Lahm” on early twentieth century maps rests on the steep hillside overlooking the Wadi Nueima.²⁹ Over the course of several site visits, we observed structures in multiple rows up the slope, with seventh and eighth-century pottery, including both black-brown wares with white paint and red-orange wares with white paint and a marble grinding stone. Conder and Kitchener recorded a wall and tower on this hill, and recognized the strategic importance of the elevated site, noting its commanding position over the surrounding valleys.³⁰ To its immediate south sits the cemetery and monument of Maqam al-Imam ‘Ali, a mystic Islamic saint.³¹ Exactly when this area became a necropolis is difficult to determine. Archaeological remains lie within the fenced area of the

²⁹ C. C. Conder and H. H. Kitchener, *The Survey of Western Palestine: Memoirs of the Topography, Orography, Hydrography, and Archaeology*. Volume III. Sheets XVII-XXVI (Judea, London 1883), 209.

³⁰ *Ibid.*

³¹ Augustinovic, *Gerico e dintorni*, 144; Clermont-Ganneau, *Archæological Researches in Palestine*, II, 20-1; Lorenzo Nigro, Maura Sala, and Hamdan Taha, *Padis I: Archaeological Heritage in the Jericho Oasis: A Systematic Catalogue of Archaeological Sites for the Sake of Their Protection and Cultural Valorisation*, Rome La Sapienza Studies on the archaeology of Palestine & Transjordan (Rome: La Sapienza Expedition to Palestine & Jordan, 2011), 129.

cemetery, but archeologists have published nothing about them. More than likely a small necropolis area around the shrine expanded outwards.

The combination of available water and strategic position made Zone 9 conducive to settlement. Archaeological evidence paints the picture of a community evolving over time. The small Jewish village became an important control point in the early Islamic period. The 1999 Birzeit survey quadrangle designated “JR 38” corresponds to Settlement Zone 9.³² By their own analysis, they collected nine sherds of Byzantine pottery, including a complete lamp, and one hundred and twenty-seven early Islamic sherds.³³ Even if we allow for possible misreading, the pottery counts represent clear evidence of early Islamic settlement in this area. The survey team also observed rectilinear structures, an ancient road, and columns.

An early Islamic expansion in this area comes as no surprise. Just as today this opening in the hills is one of two routes connecting Jericho to the north; since at least the Roman period there has been a road here. This was the main road to Efrain/Taiybeh, a highland town fifteen kilometers from Jerusalem, as well as Neapoli/Nablus, an important urban center in both the Byzantine and early Islamic period. Control of the hills framing Settlement Zone 9 meant control of this key thoroughfare and was likely an early goal of Muslim strategic planning in the Jericho plain.

It is doubtful that the new Islamic elite, having invested heavily in the hydraulic infrastructure required to serve Khirbet al-Mafjar, including the aqueduct across the Wadi Nueima, would then leave it unprotected. At the very least, a small community of workers

³² Ghattas Sayej, "Tell es-Samrat (Jericho Region) The Result of the 1999 Survey Campaign: a preliminary report," (Birzeit University, 1999), 23-4.

³³ From the drawing, the lamp appears to correspond to Magness's Form 2, "Small Candlestick Lamps," which she dates to the first half of the sixth century.

Jodi, Magness, *Jerusalem Ceramic Chronology: Circa 200-800 CE*, JSOT/ASOR monograph series (Sheffield: JSOT Press, 1993), 251.

would have maintained the water source of the complex. In this sense, too, Zone 9 offered a favorable location for new Arab settlers, complete with its own water and agricultural land, a protected interest of the Muslim ruling elite separated from the large urban Christian population of Jericho itself.

Turning attention to Zone 3, clear archaeological evidence of early Islamic occupation at Tulul Abu al-‘Alayiq was unearthed by Kelso and Baramki, who focused mainly on a large conical mound rising just south of the Wadi al-Qelt. Here the road descending from Jerusalem arrived at Jericho. On the mound were the remains of a guard station or fortress, first interpreted by Warren as belonging to the Ottoman era. Kelso and Baramki, however, excavated pottery from the eighth and early ninth centuries CE and thus date the structure to the early Islamic period, built on top of an earlier Herodian structure with some reuse of Roman era stone blocks.³⁴

A thin defensive wall in the shape of an oval enclosed the fortress. The fortress, thirty-one meters by twenty-seven meters, had rooms arranged around an open polygonal courtyard. From the top, one can see out across the Jericho plain. This vista includes both the road from Jerusalem and all other important elements of the cultural landscape, including Khirbet al-Mafjar. The guard station featured a circular grain pit 3.82 meters in diameter. The most remarkable find was a broken marble slab inscribed in ink with twenty-three lines from the Quran. Baramki placed the majority of found pottery to the eighth century, with some early

³⁴ James L. Kelso, *Excavations at New Testament Jericho and Khirbet En-Nitla. The Annual of the American Schools of Oriental Research*, v 29-30 for 1949-1951 (New Haven: American Schools of Oriental Research, 1955), 4. The fort was reused during WW1, which may have led to Warren’s confusion. In 1868 the walls were standing up to 6 feet, but extensive robbing took place before the 1950s expeditions.

ninth century wares, but no glazed or molded pottery.³⁵ He distinguished twenty-three types, with many similarities to excavated wares from Khirbet al-Mafjar.

No doubt the fortress was part of a larger area of occupation in Zone 3. In addition to the Jerusalem road, a southern extension of the Qelt Conduit offered water supply to this area, likely connecting to Birket Musa. Several sites have been recorded in this area, including Khirbet Qaqun.³⁶ Unfortunately, other than studies of the system of aqueducts in the area, little has been published. This zone remained an important strategic point into at least the Crusader period, as indicated by the ruins of Beit Jabr al-Tahtani, a small fort with characteristic Crusader architecture located at the opening of the canyon on the south side of the Jerusalem road.³⁷

Early Islamic resettlement at Tulul Abu al-‘Alayiq appears to have been part of a system of economic distribution, perhaps a commercial processing point. Pritchard’s excavations recovered a significant number of Early Islamic coins. He concentrated his excavations on structures along the north bank of the Wadi al-Qelt, revealing the remains of a palace from the Herodian period.

Pritchard’s numismatic finds were studied by George Miles, who catalogued and analyzed two hundred and sixty-six bronze coins. Because of its accessibility, copper was important for daily commerce and transactions forming the foundation of a larger economy. Miles noted that the corpus was largely homogenous, belonging to the eighth century Umayyad. Only two of the coins were early pre-reform Arab-Byzantine types and there were few Abbasid

³⁵ Ibid., 38.

³⁶ Augustinovic, *Gerico e dintorni*, 50-1; Conder and Kitchener, *The Survey of Western Palestine*, 210; Nigro, Sala, and Taha, *Padis I*, 136.

³⁷ Augustinovic, *Gerico e dintorni*, 51; Conder and Kitchener, *The Survey of Western Palestine*, 190-1; Nigro, Sala, and Taha, *Padis I*, 120.

issues.³⁸ The corpus included no coins from Jericho itself, suggesting there was no local mint there. The coins were instead minted from various important urban centers throughout Syria-Palestine, including the main capital of Damascus, the regional capital, al-Ramla, and the important cities of Tabariyya and Hims. In addition, there were quite a few issues from Egypt. The corpus, Whitcomb notes, gives “a very clear picture of the regional economic and political context of Ariha,” especially for the Umayyad period.³⁹ Coinage is a marker of both administrative and cultural development.

In sum, even while Jericho’s urban core remained predominantly Christian for much of the early Islamic period, a Hellenistic population with political and religious sympathies still connected to the city’s Byzantine past, the new Muslim rulers were able to control Jericho by settling key points of entry to and exit from the Jericho plain. Jericho’s main regional connection was to Jerusalem, followed by Baysan and Nablus in the north. Early Islamic occupation of Neara in Settlement Zone 9 gave Muslims control of the springs there and the road to Nablus. Khirbet al-Mafjar gave them control of the road to Baysan and the Jordan Valley. A major fort in Settlement Zone 3 at Tulul Abu al-‘Alayiq was designed to control the Jerusalem road and water sources along the Wadi al-Qelt.

³⁸ G. C. Miles, "Catalogue of Islamic Coins," in *The Excavations at Herodian Jericho, 1951*, ed. James B. Pritchard (New Haven: American Schools of Oriental Research, 1958), 29.

³⁹ D. Whitcomb: <http://jerichomafjarproject.org/project/overview>

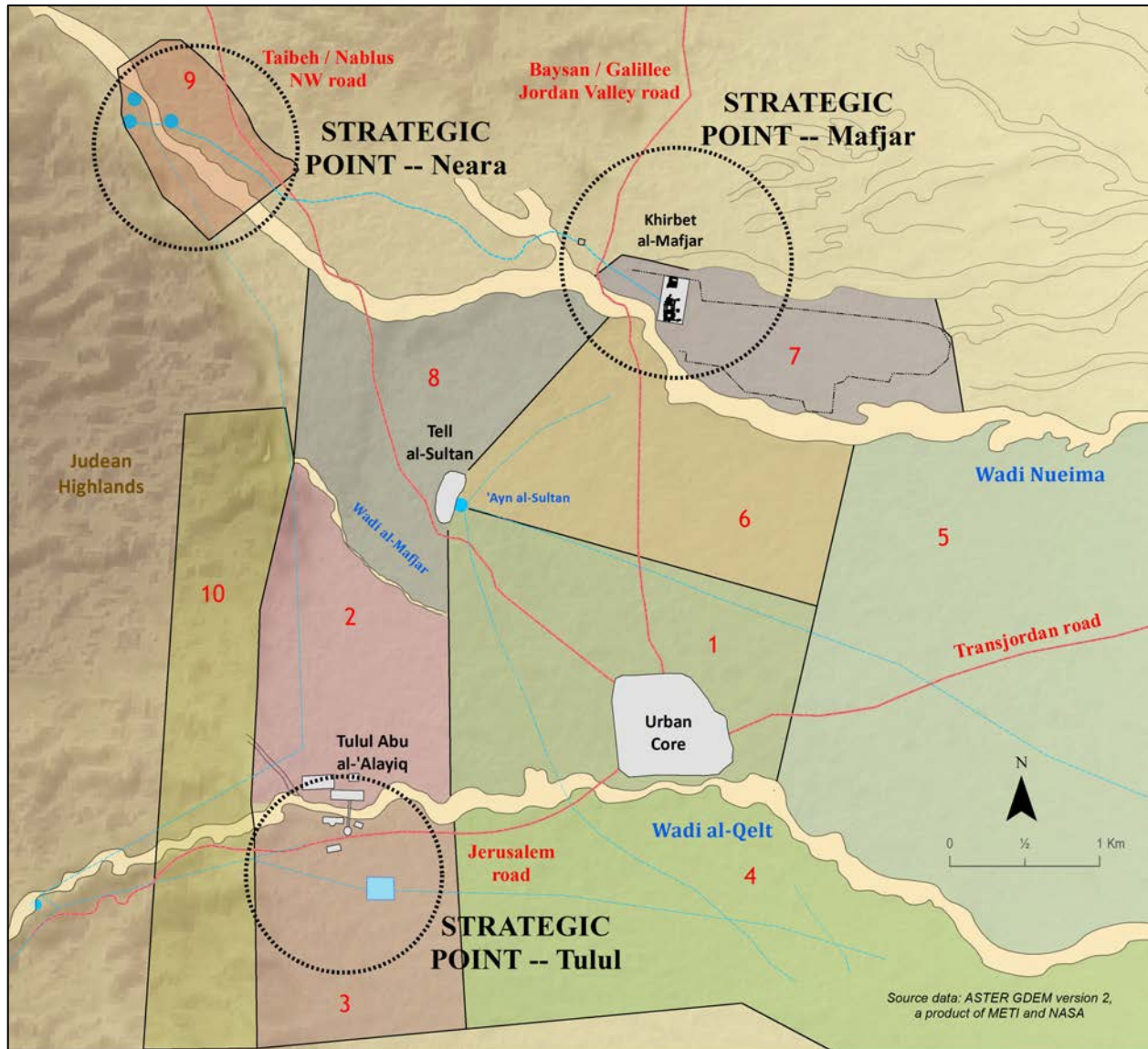


Figure 50: Broader Umayyad settlement strategy in Jericho – strategic points (GIS plan created by author)

4.3.3 Politics

In landscape archaeology, it is important to consider “the roles of culture and tradition as additional filters in how groups structure and organize their use and occupation of places.”⁴⁰

The Jericho plain was a crossing point for a variety of ethno-religious groups. It was often at such points that the Umayyads established themselves. A major function of the desert castles

⁴⁰ Kurt F. Anschuetz, Richard H. Wilshusen, and Cherie L. Scheick, "An Archaeology of Landscapes: Perspectives and Directions," *Journal of Archaeological Research* 9, no. 2 (June 2001): 177.

was projecting an image of the ruling power. The number and importance of monasteries -- and the tribal groups they attracted -- in the Jericho plain explains at least in part why Khirbet al-Mafjar includes the largest audience hall of all the desert castles. Umayyad complexes “were particularly well-sited to reach the tribal groups which were politically important for the stability of the regime.”⁴¹ Khirbet al-Mafjar was no exception.

A possible common factor, as we shall see subsequently, for the construction of many of the desert castles is their function as meeting places for Umayyad governors, caliphs, and tribal leaders.⁴² It is this final idea that is most interesting here as it frames Jericho’s cultural landscape in terms of Umayyad interaction with the Bedouin population in order to enact their cliental policies, illuminating the motivations behind the construction of Khirbet al-Mafjar. The implication for the archaeological situation is that the social interaction between these groups was a factor for Umayyad investment in developing the massive complex outside Jericho. It is worth noting that directly across the Wadi Nueima from Khirbet al-Mafjar was Tell Abu Ghannam, a substantial monastic satellite settlement.

To analyze the connection between Khirbet al-Mafjar and the political structure of Palestine in the early Islamic period, we return to the physical landscape, above all Jericho’s role as an oasis. Oases shape regional networks and settlement patterns, playing “a crucial role in the desert landscape and social systems because they provide not only support for their inhabitants but also supplies and form centers of exchange or markets for bedouin groups from the desert.”⁴³

In oasis-oriented settlement systems, for example in parts of the Arabian peninsula, towns

⁴¹ Greg Fisher, *Between Empires: Arabs, Romans, and Sasanians in Late Antiquity*, Oxford classical monographs (Oxford England ; New York: Oxford University Press, 2011), 207.

⁴² D. Genequand, "Économie de production, affirmation du pouvoir et dolce vita: aspects de la politique de l'eau," in *Stratégies d'acquisition de l'eau et société au Moyen-Orient depuis l'antiquité*, ed. Michel Mouton and Mohamed Al-Dbiyat (Beyrouth: Institut français du Proche-Orient, 2009), 172.

⁴³ T. J. Wilkinson, *Archaeological Landscapes of the Near East* (Tucson: University of Arizona Press, 2003), 155.

clustered around scattered oases could only support as many inhabitants as each oasis could supply food for.

As with Khirbet a-Mafjar itself, we are lacking contemporary written sources. Extant written sources dealing with monasticism in the Umayyad period predominantly date to the Abbasid period. Unfortunately, these sources largely do not describe the full scope of the Umayyad relationship to monasteries; they concentrate on vilifying their predecessors for drinking, debauchery, and impiety. But even historical accounts intended to discredit Umayyad rulers reveal important details about relations with local tribes. For example, we read that al-Walid frequented monasteries outside Damascus and on one occasion had too much to drink. With an audience gathering to meet him, al-Walid's chamberlain reproached him: "Commander of the Faithful, the delegates of the Arabs are waiting for your audience, and here you are coming out in that state!"⁴⁴ The story indicates that monasteries were a place where formal political connections with local tribal shaykhs took place.

Umayyad palace complexes often resembled monasteries in form and function. Pre-existing monastic settlements had many characteristics sought by the Umayyads. Both were usually constructed near a water source and routes through difficult landscapes, so serving "as meeting points where the region's pastoral populations, as well as merchants and pilgrims, could be monitored as well as fed and sheltered."⁴⁵ They were places where the Umayyad rulers could monitor the tribes and maintain diplomatic relations by receiving their leaders and displaying their authority with symbols carried over from pre-Islamic rulers.⁴⁶ Monasteries acted as centers

⁴⁴ Robert Hamilton, *Walid and His Friends: An Umayyad Tragedy*, Oxford Studies in Islamic Art (London ; New York: Oxford University Press for the Board of the Faculty of Oriental Studies, University of Oxford, 1988), 90-1.

⁴⁵ Garth Fowden and Elizabeth Key Fowden, *Studies on Hellenism, Christianity and the Umayyads*, Meletemata 37 (Athens 2004), 150.

⁴⁶ Elizabeth Campbell, "A Heaven of Wine: Muslim-Christian Encounters at Monasteries in the Early Islamic Middle East" (University of Washington, 2009), 163-4.

of agriculture, festivals, and pilgrimage, offering guesthouses serving both Muslim and Christian visitors. This variety of functions made monasteries “places of exchange between urban and rural communities, as well as between Muslims and Christians.”⁴⁷

The functional association between monasteries and political authority that characterized the monastic landscapes of pre-Islamic Arab Syria-Palestine was carried into the early Islamic period by the Umayyad elite. Umayyad rulers faced the need to create a successful client policy with powerful Arab tribes. Like the Ghassanids before them, they depended on the cooperation of the tribes. The vital importance of maintaining relations with the tribes made controlling the shifting areas used by these groups a major factor driving Umayyad settlement patterns.⁴⁸ This policy dates back to Muhammad’s time, whose political consolidation involved “sustained and partly successful efforts to bring the tribes of the northern Hijaz and of southern Syria into Muhammad’s sphere of influence, or, better yet, under his firm control.”⁴⁹

Semi-nomadic culture was important in shaping the rise of Islam. For one thing, a unified state would have been difficult to sustain in a context where most people were only settled for part of the year and even powerful leaders lived just above the subsistence level. It was more plausible to organize society along tribal lines; an autonomous group of people, bound by genealogy and living in the same general area, governed its own welfare. Muhammad belonged to one such tribe, the leading tribe of Mecca. When Muhammad offended his fellow Qurayshis with his message, he alienated his only means of economic and physical protection --

⁴⁷ Ibid., 62.

⁴⁸ Ignacio Arce, "Qasr Hallabat, Qasr Bashir and Deir el Kahf. Building Techniques, Architectural Typology and Change of Use of Three Quadriburgia from the Limes Arabicus. Interpretation and significance." Paper presented at the Arqueología de la Construcción II. Los procesos constructivos en el mundo romano: Italia y las provincias orientales. Proceedings of the workshop 'Archeologia della Costruzione II: I cantieri edili dell'Italia e delle provincie Romane orientali, Siena, 2010, 458.

⁴⁹ Fred McGraw Donner, *The Early Islamic Conquests* (Princeton, N.J.: Princeton University Press, 1981), 108.

he was forced to emigrate to Medina and establish his community there. But the tribal ties were strong, and when Muhammad returned to Mecca years later as a conqueror, he rewarded many of his kinsmen with high positions. The issue of tribal authority continued to shape the early Islamic community even after Muhammad's death, as his successors often justified their rule with their Qurayshi heritage.

Heinz Gaube emphasized the role of the qusur in maintaining a political presence on the edge of marginal lands, allowing the Umayyads to keep tabs on the tribes on which they relied for authority of the region.⁵⁰ The archaeological manifestation of the importance of monasteries and their link to tribal groups is that the Umayyads often built their desert castles either directly on top or near monasteries.⁵¹ An important example is Qasr Burqu, a monastery in the Byzantine period that was converted into a residence by al-Walid I in the early eighth century. Situated in eastern desert of Jordan, the site was near a territory occupied by the Bani Kalb, important strategic partners for the Umayyads.⁵² Qasr Burqu thus became a strategic point of interaction between the Umayyads and tribal leaders in the area.

The Umayyads built upon many Ghassanid settlement sites. This includes Qasr al Hayr al-Gharbi, which was excavated by Denis Schlumberger in the 1930s and shows evidence of both Ghassanid and Umayyad occupation. It is similar to Khirbet al-Mafjar in that it consists of a highly decorated palace and bath, along with other buildings, hydraulic installations, a walled garden, and a mill. Another Ghassanid site with Umayyad occupation is Sergiopolis, the important Ghassanid shrine center, which the Umayyads developed into the city of Resafa. In yet another example of this pattern at Qasr al-Hallabat, Ignacio Arce has been able to distinguish

⁵⁰ Heinz Gaube, "Die syrischen Wüstenschlösser. Einige wirtschaftliche und politische Gesichtspunkte zu ihrer Entstehung," *Zeitschrift des Deutschen Palästina-Vereins* 95, no. 2 (1979).

⁵¹ Jere Bacharach, "Marwanid Umayyad Building Activities: Speculations on Patronage," *Muqarnas* 13(1996): 31.

⁵² King, "The Distribution of Sites and Routes in the Jordanian and Syrian Deserts in the Early Islamic Period," 93.

the phases of building, reuse, and reconstruction, demonstrating that it was an important settlement for both Ghassanid and Umayyad strategies of control, defense, and expansion in the region.⁵³ These and other examples of Umayyad palaces that reoccupied or located in close proximity to monastic sites, underline “the related social and political levels at which both monasteries and qusur operated.”⁵⁴

Members of the Umayyad elite were said to have frequented the monasteries around Damascus and supported monasteries in the provinces they controlled. For example Al-‘Umari reports that Dayr Sa‘id outside Mosul belonged to the governor of Mosul during the reign of ‘Abd al-Malik.⁵⁵ That Abbasid rulers were also associated with monasteries would seem to indicate that the connection drawn between the Umayyads and monasteries in later written sources is not simply the product of bias or an attempt to discredit the Umayyads. There are also some archaeological indications of new monasteries being built and restored after the Islamic conquest.⁵⁶ Some monasteries may have grown initially; Persian elites in Iraq were able to maintain positions of prominence after the Muslim conquest by giving land to monastic authorities in exchange for positions of leadership in monasteries and the Church.⁵⁷ As cultural and spiritual centers, monasteries remained key nodes in the settlement landscape of the Jericho plain.

Across the Wadi Nueima from Khirbet al-Mafjar in Zone 6 we find a final cluster of

⁵³ Ignacio Arce, "Romans, Ghassanids and Umayyads and the Transformation of the Limes Arabicus: From Coercive and Deterrent Diplomacy Towards Religious Proselytism and Political Clientelism," in *La Transgiordania nei secoli XII-XIII e le 'frontiere' del Mediterraneo medievale*, ed. Guido Vannini and Michele Nucciotti (Oxford: Archaeopress, 2012).

⁵⁴ Fowden and Fowden, *Studies on Hellenism, Christianity and the Umayyads*, 176.

⁵⁵ Campbell, "A Heaven of Wine: Muslim-Christian Encounters at Monasteries in the Early Islamic Middle East," 173.

⁵⁶ Fowden and Fowden, *Studies on Hellenism, Christianity and the Umayyads*, 159.

⁵⁷ Michael G. Morony, "Religious Communities in Late Sasanian and Early Muslim Iraq," *Journal of the Economic and Social History of the Orient* 17, no. 2 (1974): 126.

communities which highlights the multicultural composition of the population inhabiting the Jericho plain in the Byzantine and early Islamic period. Archaeological investigations have uncovered a synagogue and monastery, as well as the mosques at Khirbet al-Mafjar, all within short distance of each other.

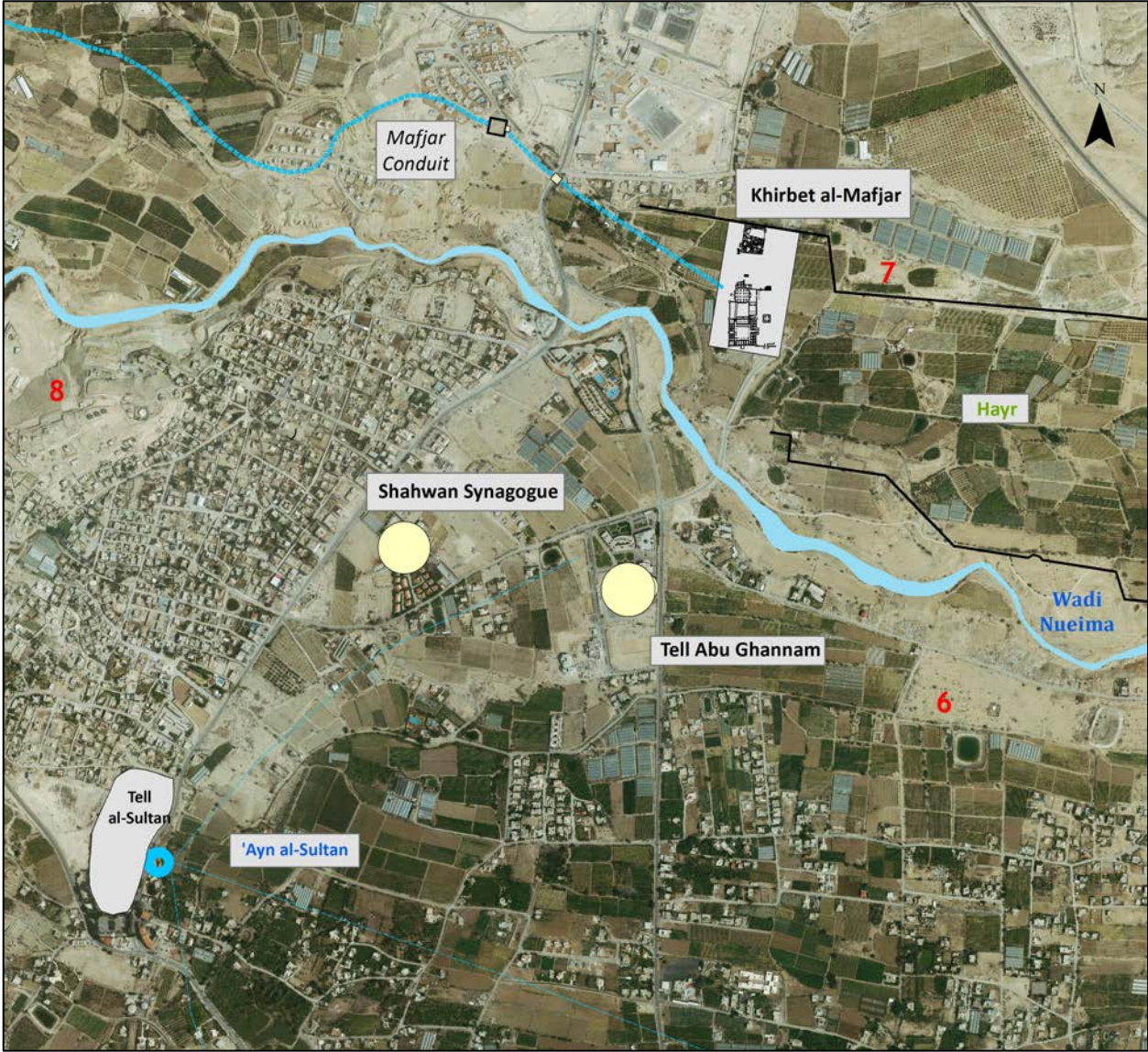


Figure 51: Christian and Jewish communities of Zone 6 across from Khirbet al-Mafjar (map created by author)

Jews, like Christians, had dhimmi status. Jericho appears to have had a considerable Jewish community in the Byzantine and early Islamic periods. There is an account in the Muslim written sources that some of the Jews exiled from Medina went to Jericho, perhaps because they came from there originally.⁵⁸ The presence of a Jewish community in Zone 6 is indicated by a synagogue. In a familiar story for antiquities in Jericho, the discovery of this synagogue happened by chance digging for the planting of banana trees.⁵⁹ The synagogue is today known as the Shahwan Synagogue, named for the family that owns the land upon which it sits. Alternatively, it is also known as the “Peace upon Israel” Synagogue, after a Hebrew inscription in its mosaic floor. Baramki excavated the site in 1936 and discovered a simple ten-by-thirteen meter orthogonal structure comprised of a nave with two aisles and two rows of square pillars, oriented towards Jerusalem. It contained a mosaic with geometric and floral designs, along with a menorah. Associated excavated objects include glass bottles and fragments of bronze lamps with hanging hooks. The synagogue was further investigated in 1990 under Israeli authority by Hanania Hizmi.⁶⁰

For his part, Gideon Foerster dates the construction of the Shahwan Synagogue to the end of the sixth or beginning of the seventh century.⁶¹ This community was located near the urban core of Jericho, but still outside of it. Nine Kufic coins of the early eighth century found in the rubble inside the synagogue are clear evidence that the structure functioned into the early Islamic

⁵⁸ Gil, *A History of Palestine, 634-1099*, 183-4.

⁵⁹ Augustinovic, *Gerico e dintorni*, 157; Dimitri C. Baramki, "An Early Byzantine Synagogue Near Tell Es Sultān, Jericho," *Quarterly of the Department of Antiquities of Palestine* 6(1938); Gideon Foerster, "The Synagogue at Tell es-Sultan," in *The New Encyclopedia of Archaeological Excavations in the Holy Land*, ed. Ephraim Stern (Jerusalem & New York: Israel Exploration Society & Carta; Simon & Schuster, 1993); Greenberg and Keinan, *Israeli Archaeological Activity in the West Bank*, 67, site 317; Nigro, Sala, and Taha, *Padis I*, 127.

⁶⁰ Greenberg and Keinan, *Israeli Archaeological Activity in the West Bank*, 67, site 317.

⁶¹ Foerster, "The Synagogue at Tell es-Sultan," 696.

period, contemporary with Khirbet al-Mafjar.⁶² Baramki didn't find evidence of changes to the structure or destruction levels, suggesting continuity. The Birzeit survey team collected some seventy-four sherds of early Islamic pottery in the extended area around the synagogue.⁶³

There was also a synagogue in the area of Na'aran. Written sources and chronological analysis of its mosaic pavement suggest that the Na'aran Synagogue is earlier in date than the Shahwan Synagogue. Assuming each synagogue was surrounded by a Jewish community, it follows that there existed at least two Jewish satellite settlements around Jericho in the Byzantine and early Islamic periods, one in Zone 6 and in Zone 9. The differences in character of these zones makes it difficult to evaluate the status of these communities. On the one hand, the location of the Shahwan Synagogue in Zone 6, while certainly outside the urban core of Jericho, does not imply a major sense of insecurity. It is not separated from the city by any topographic features, and accessed water directly from 'Ayn al-Sultan itself. Its construction perhaps relates to increasing security for Jewish groups in the sixth and seventh centuries CE compared to the early Roman period, or the low degree to which the powerful Byzantine Christian city felt threatened by them. On the other hand, the location of the Na'aran Synagogue in Zone 9 is clearly separated from the urban core. In the early Islamic period, of course, it is directly connected to Khirbet al-Mafjar, raising the interesting possibility that a Jewish community may have played a role in the maintenance or protection of the starting point of the Mafjar Conduit, representing two outsider groups working together away from Christian Jericho.

East of the Shahwan Synagogue and south of Khirbet al-Mafjar lies the site of Tell Deir Abu Ghannam.⁶⁴ F. J. Bliss visited the site in the late nineteenth century and observed a main

⁶² Baramki, "An Early Byzantine Synagogue Near Tell Es Sultān, Jericho," 75.

⁶³ Sayej, "Tell es-Samrat (Jericho Region)," 14.

mound of debris with thick stone walls forming a quadrangle seventy-eight paces square, with higher heaps of debris in the northwest and southwest corners. His brief survey led him to believe the ruins comprised a complex with an open court, a building in the northwest corner, and a gate or tower in the southwest corner.⁶⁵ Bliss suggested excavation of the site would be fruitful, but it seems the site was forgotten for over one hundred years. In 2004, Palestinian Department of Antiquities Jericho inspector Wael Hamamra excavated eight five meters by five meters square trenches in advance of a government building project. These excavations exposed parts of two churches dating to the Byzantine period, including mosaics with color and geometric designs. Overall, the weight of the evidence suggests that the site was a monastery built in the Byzantine period. Occupation continued in the early Islamic and Crusader periods, but the extent of such occupation is unclear.

Thus in this small area we find Jewish, Christian, and Muslim communities. Archaeological evidence from both excavations and survey indicates the sites continued into the early Islamic period without interruption. The mixed character around Jericho and its hinterland was a result of its importance to many ethno-religious groups and the early Muslim policies towards non-Muslims. Fred Donner has demonstrated that Muhammad and his early followers first thought of themselves as a community of believers, composed of all those who shared Muhammad's monotheistic and eschatological beliefs.⁶⁶ For Donner, it was a full generation or more after Muhammad that a distinctly Muslim confessional identity began to develop. Coexistence among different peoples was part of the early Islamic state, and in this way Jericho

⁶⁴ F.J. Bliss, "Notes on the Plain of Jericho," *Palestine Exploration Quarterly* Quarterly Statement 26(1894): 177; Conder and Kitchener, *The Survey of Western Palestine*, 222; Nigro, Sala, and Taha, *Padis I*, 105-6.

⁶⁵ Bliss, "Notes on the Plain of Jericho," 177.

⁶⁶ Fred McGraw Donner, "From Believers to Muslims: Confessional Self-Identity in the Early Islamic Community," *Al-Abhath* 50-51(2002).

was typical of other large cities of Palestine and Jordan, which Muslims, pagans, Christians, Jews, and Samaritans populated.⁶⁷

It is clear, then, that Khirbet al-Mafjar was inserted into a monastic landscape, one filled with monasteries and their religious and economic activities, but also one of political exchange. In addition to the archaeological remains discovered at Tell Abu Ghannam, there is written evidence for monasteries in this area, including possibly a hospice called the Monastery of the Foreigners (Ksenon), mentioned by John Moschus as located near Wadi Betasimos, which some scholars identify with Wadi al-Nueima.⁶⁸ The great number of monasteries, the monastic communities they supported, and the visitors they attracted impelled the Umayyads to establish a significant presence in Jericho to serve as a base from which to launch their own political and religious agenda.

4.4 Beyond the Wadi: Khirbet al-Mafjar as a settlement type

Landscape analysis has demonstrated that ‘Ayn al-Sultan was associated with the urban core of Jericho and that elite settlements used other sources of water along the Wadi al-Qelt and Wadi Nueima. It is clear that especially Herod and his sons were regarded as outsiders by the local population, as imposed kings serving foreign interests. By the Byzantine period, those foreign interests would eventually fully overtake and annex the whole region, becoming true rulers and thus insiders. This transition, which saw the city of Jericho for the first time aligned politically and socio-religiously with the empire under which it was ruled, was accompanied by expanded use of ‘Ayn al-Sultan.

⁶⁷ Gideon Avni, *The Byzantine-Islamic Transition in Palestine: An Archaeological Approach*, 1st ed., Oxford studies in Byzantium (Oxford: Oxford University Press, 2014), 332.

⁶⁸ Augustinovic, *Gerico e dintorni*, 105.

In contrast, the Umayyads appear to have been wary of the Christian population and therefore decided to circumvent or live somewhat distant from the pre-existing urban core. And thus the pattern revealed by our landscape model is reset, with the outsider Umayyads depending on the Nueima springs as their main water source. We suspect that like the Byzantines, the Umayyads too would have eventually permeated the entire Jericho plain, but in the end they didn't last long enough, being wiped out by the 'Abbasids in the middle of the eighth century.



Figure 52: Aerial photo showing the Wadi Nueima dividing Khirbet al-Mafjar (Zone 7) from the rest of the Jericho plain (looking east; taken by author)

Umayyad rulers never fully established themselves within the cities of the Byzantine empire. Jere Bacharach even questions the idea that Damascus was the capital of the Umayyad empire in light of the evidence that the Marwanid rulers spent much of their time outside the city.⁶⁹ The Umayyads sought to establish themselves outside cities and attract new settlers by creating places of economic and political exchange. They sought to sedentarize groups to

⁶⁹ Bacharach, "Marwanid Umayyad Building Activities," 38.

increase dependence on the institutions and infrastructure of the Umayyad state. The Umayyad strategy was to draw support from two major groups found in Syria-Palestine: “predominantly Hijazi and South Arabian settlers, as well as upon indigenous Syrians – both the settled, predominantly Aramaic-speaking, populations of the villages and cities and the Arabic-speaking nomad tribes that occupied the semi-arid Syrian steppes and coexisted with the settled communities on its margins.”⁷⁰

There are many sites, including the desert castles, that are also linked to this pattern, what has been described as a parallaxic model (as opposed to a palimpsest model) or as a separation between *hadir* and *madina*.⁷¹ The Umayyads purposely built many elite complexes near existing cities, at enough distance to provide security, but close enough both to reinforce their power and to take advantage of local populations of workers to cultivate large agricultural estates.⁷² An example close to Jericho is the relationship between the Christian town of Capernaum and the early Islamic estate of Khirbet al-Minya.

Also relevant is the case of al-Ramla, the most significant new urban foundation of Islamic Palestine, initiated by Sulayman in 715 C.E. Al-Ramla is itself a double city, an *ex novo* creation outside the preexisting city of Lud. One account of the location of al-Ramla relates that Sulayman -- then governor of the province of Filastin -- was unable to acquire land within the center of Lud and thus had to build outside the city. This suggests that the power of the early Islamic elite was not without limitations, that there was negotiation over land ownership rather

⁷⁰ Andrew Marsham, *Rituals of Islamic Monarchy: Accession and Succession in the first Muslim Empire* (Edinburgh: Edinburgh University Press, 2009), 81-2.

⁷¹ Arce, "Qasr Hallabat, Qasr Bashir and Deir el Kahf. "

Donald Whitcomb, "An Urban Structure for the Early Islamic City: An Archaeological Hypothesis," in *Cities in the Pre-Modern Islamic World: The Urban Impact of Religion, State, and Society*, ed. Amira K. Bennison and Alison L. Gascoigne (New York: Routledge, 2007).

⁷² Avni, *The Byzantine-Islamic Transition in Palestine*, 92.

than direct confiscation.⁷³ It is likely no major settlement existed in the area of Khirbet al-Mafjar before the Umayyads and claiming this new land was a deliberate choice to avoid conflict. The walls of the *hayr* itself, an area enclosing Khirbet al-Mafjar's downslope agricultural fields – and serving a variety of other possible activities, including hunting and horse breeding or racing – may have been a way of demarcating this previously unclaimed land.

The process of founding a city usually began with an initial investment by the governor or caliph that included the construction of a mosque, palace, and possibly water works or fortifications, after which private citizens and developers would build houses, markets, and baths.⁷⁴ The initial investment thus has many of the same components of the early Islamic *qusur*. The archaeological consequence of this sequence is that many of the desert castles can be interpreted as proto-urban centers, an idea explored by Donald Whitcomb.⁷⁵ The transition from elite complex to urban center has been interpreted by Paul Wheatley as a natural consequence of economic and social integration.⁷⁶

Like the elite settlement of Tulul Abu al-'Alayiq, Khirbet al-Mafjar was designed for and financed by the ruling elite as part of a strategy of political control and economic exploitation. Both represent grand infusions of external capital in a multi-functional complex of structures. At the same time, Khirbet al-Mafjar was connected to Jericho as part of an economic network comprised of nodes spread throughout the Jericho plain. The Umayyads sought to link their new creations with local populations, both by settling new groups and likely by drawing people away

⁷³ Luz, "The Construction of an Islamic City in Palestine," 52.

⁷⁴ Hugh Kennedy, "How to Found an Islamic City," in *Cities, Texts, and Social Networks, 400-1500: Experiences and Perceptions of Medieval Urban Space*, ed. Caroline Goodson, Anne Elisabeth Lester, and Carol Symes (Farnham, Surrey, England ; Burlington, VT: Ashgate, 2010), 62.

⁷⁵ Whitcomb, "An Urban Structure for the Early Islamic City."

⁷⁶ Paul Wheatley, *The Places Where Men Pray Together: Cities in Islamic Lands, Seventh Through the Tenth Centuries* (Chicago: University of Chicago Press, 2001), 270.

from the adjacent cities. Like the peripheral communities and monasteries spread throughout the hinterland of Jericho, Khirbet al-Mafjar served a combination of economic, political, and religious roles.

The variety of possible interpretations of the function of Khirbet al-Mafjar, along with the fact that for the most part only the most monumental areas -- the same three large mounds observed by Bliss back in 1894⁷⁷ -- of the site have been excavated, make fitting the complex into a designated settlement type especially difficult. Through examination of Late-Antique complexes at Antioch, Split, Piazza Armerina, and Thessalonika, Slobodan Curcic demonstrates the link between palace and city, showing that in many cases ancient sources considered these new palatine constructions to be new cities in and of themselves.⁷⁸ Without the aid of historical texts, we have only the archaeological narrative as a clue to how the Umayyads thought about their own palatine complex in Jericho. The theme at the core of this narrative is balance, an interplay between boldness and caution, a reflection of the status of both the Umayyad elite and Arab populations in early Islamic Palestine.

4.5 Summary

A study of a particular archaeological site necessitates analysis of the variety of contexts within which it might be conceptualized. These contexts include both archaeological questions of site location and relationship to other features within the landscape, but also broader questions of cultural history. The overall goal of the landscape analysis carried out in this chapter is to explore the relationship between a Khirbet al-Mafjar's site location and design to the socio-

⁷⁷ Bliss, "Notes on the Plain of Jericho."

⁷⁸ Slobodan Curcic, "Late-Antique Palaces: The Meaning of Urban Context," *Ars Orientalis* 23, no. Pre-Modern Islamic Palaces (1993).

political objectives of its patrons. More specifically, it explores the link between the Umayyad strategy of settlement in Jericho and their aims and cultural objectives, including issues of proselytism and territorial control. Recent scholarship on the early Islamic desert castles has tended to seek an explanation for this settlement phenomenon in the specific structural components of these elite complexes. In this chapter, with Khirbet al-Mafjar as a test case, we applied a new analytical model allowing conclusions to be drawn from specific features of the physical and cultural landscape.

Settlement site choice for Khirbet al-Mafjar was strongly influenced by the preexisting presence of the city of Jericho. In its absence, the Umayyads would likely have chosen a location in the area where the Byzantine city arose; for it was a position that offered clear hydrological and structural advantages. For the parvenu Arab-Islamic elite, on the other hand, still a demographic minority, it was important to choose a site enjoying some physical separation from the city. The easiest way to achieve this was to use the physical landscape to their advantage by building in either Zone 3 or Zone 7, both separated from Jericho by a major wadi. In the end they chose Zone 7.

This chapter has investigated a variety of relationships between the urban core of Jericho and the satellite settlements surrounding it. Tulul Abu al-‘Alayiq represents an earlier example of a foreign elite interested mainly in exploiting the economic potential of cash crop production. This was followed by a Roman strategy of direct military control of the city. The Byzantine period saw a shift, with a close connection between the urban core and its monastic hinterland, a connection based on Christianity and actively strengthened by the Byzantine state. Using landscape-based analysis to fill the absence of written or direct archaeological evidence pointing to links between Khirbet al-Mafjar and the city of Jericho, this chapter argues that Khirbet al-

Mafjar represents a different core-satellite dynamic, one shaped by a set of circumstances unique to the nature of the early Islamic period in general and the Umayyad state in particular.

CONCLUSION

This dissertation has offered a new, comprehensive understanding of Khirbet al-Mafjar through analysis of the physical and sociocultural landscape of the Jericho plain. By starting with the natural and social landscape instead of architectural typology -- the traditional approach applied to Umayyad palaces -- this dissertation has investigated the rationale behind the construction of Khirbet al-Mafjar, its relationship to the pre-existing urban core and other settlements, and its role in a broader Umayyad strategy for the Jericho plain. The process of this analysis laid the foundations of a more general methodological approach to historical archaeology that may well be of wide interest to historians and archaeologists studying a variety of different landscapes.

1) Archaeological methods not previously applied to the Jericho plain:

Chapter One established the methodological framework of this dissertation, which consists of two complementary features of analysis: the physical landscape itself, and the human development of the plain. To support the understanding of Khirbet al-Mafjar, the Jericho plain was divided into ten zones of settlement, identified through topographic and hydrologic features, including factors of water supply, potential uses of land, features affecting travel, connection to routes, and links to the urban core and other populated areas. Separation of the landscape into distinct units revealed spatial associations that were used to paint a broader picture of a composite cultural landscape.

A second level of analysis integrated an array of historical and archaeological data, including a basic settlement typology developed to describe the settlements of the plain.

Typologies are based on comparisons heavily determined by understanding of the cultural practices of the societies that built and settled in the landscape. The basic types identified in this dissertation -- urban core, elite complex, and satellite community -- helped illuminate a system of relationships and interactions between the urban core and its surrounding settlements, including Khirbet al-Mafjar.

Settlement zones in the arid environment of the Jericho plain were, above all, defined by their connection to water, especially to the abundant and continuous water supply of 'Ayn al-Sultan, the biblical Elisha's Spring. Other natural features of significance in defining the settlement zones included: wadis that divide the plain, hills and changes in elevation, and access or proximity to urban centers outside the valley, most notably the mountain passes to Jerusalem. These features were considered in conjunction with elements of the human development of the plain, including the different roads, settlements and other infrastructure.

In a physical landscape free of prior settlements, the clear starting point for optimal site location is supply from 'Ayn al-Sultan, and indeed, both the original urban settlement at Tell al-Sultan and the modern city are located with direct access to the spring. Its waters were most easily delivered to downslope areas and those not separated from the spring by a wadi or other topographic obstacle. It follows that if a settlement did not make use of 'Ayn al-Sultan, as is the case for Khirbet al-Mafjar, cultural factors were at play.

The Jericho plain is consistently referred to as an oasis, but it is unlike the more typical oases of Syria-Palestine like Palmyra, which stands as a remote stop on a caravan route, distant travel from any major urban center. By comparison, Jericho, sitting on a

central axis of the Jordan Valley linking Jerusalem, Transjordan, and important cities to the north, and with abundant arable land watered by a number of springs, is hardly isolated; it is neither a rural nor urban environment, but something in between. It hosts an important city of some size, offering an urban component, but the varied character of the landscape of the Jericho plain means it is able to host a variety of settlement types, increasing in turn the diversity of examples of different ways settlements interacted with each other and the natural landscape.

The Jericho plain does not suffer from the same environmental limitations to growth as other Near Eastern landscapes. Unlike many other areas where the Umayyad elite established their complexes – for example at Qasr al-Hayr al-Sharqi, Qasr al-Hayr al-Gharbi, Qusayr ‘Amra, Qasr Kharana, and others – which were all confined to certain locations by the local hydrology and topography, the Jericho plain offered many potential sites for settlement. Analysis of the physical landscape of the Jericho plain revealed that the Umayyads had multiple choices that could fit their needs and concerns (and, indeed, Khirbet al-Mafjar was not the sole Umayyad development in the area). By seeing the features in the natural landscape side-by-side with socio-political concerns, many of the factors that influenced the Umayyad builders become apparent.

2) Jericho's urban core -- the scope and development of the dominant settlement on the Jericho plain:

The methodology presented in Chapter One was applied to review of the Jericho plain from the Hasmonean to the early Islamic period. The Hasmonean period was chosen as the starting point because it is the point at which major hydraulic projects

began to influence the evolution and pattern of settlement on the Jericho plain, allowing large-scale development of previously marginal zones, a clear precedent to the construction of Khirbet al-Mafjar. The Hasmonean period is also a good starting point because by this time it appears that Tell al-Sultan, the old city of Jericho dating back over ten thousand years, had ceased to be the urban core of the Jericho plain. Archaeological evidence indicates that occupation of the tell was significantly reduced by this time, no longer constituting the urban center of Jericho, the new locus of which was in Zone 1 in the area of modern-day Jericho just over two kilometers to the southeast.

This new post-Tell al-Sultan urban core is the key settlement in the setting that Khirbet al-Mafjar enters and yet, no serious study of the city in the Byzantine and early Islamic periods has previously been undertaken. Until now, the only published archaeological evidence of the urban core is the basilica at Tell al-Hassan, excavated by Dimitri Baramki in 1934. Chapter Two makes use of a wide array of evidence to try to overcome this lack of information, including historical sources, archival documents from the Rockefeller Museum in Jerusalem, and the results of recent archaeological excavations to paint a picture of a prosperous town, the center of which was positioned to take advantage of the natural hydrology of 'Ayn al-Sultan and the road network that emerged in the Roman period. An argument for continuity of the urban core from the Byzantine to the early Islamic period is made based on social and economic analysis of material evidence, especially ceramic and numismatic assemblages.

From concrete empirical work we can move to broader concepts and Chapter Two considers reasons behind the lack of understanding of the urban core. For a place so famously associated with archaeological research, it is ironic that so little is known about

the archaeology of the city itself. Using Tony Wilkinson's notion of landscape as palimpsest, the chapter proposes that the obfuscation of material traces of the urban core is connected to its location. The Byzantine city, the modern city, and all the iterations in between, have occupied the optimal settlement zone in the landscape. As a result, Wilkinson's palimpsest metaphor is particularly apt: what was written on the landscape at an earlier time has been covered with something new, thus obscuring the archaeological past.

Conversely, remains of the surrounding settlements have tended to survive in the landscape. Disparate processes of perseverance must be understood in an environmental context when evaluating historical landscapes, especially implications that the survival of elite complexes is related to their inception in marginal lands. The two palatial settlements on the Jericho plain, Tulul Abu al-'Alayiq and Khirbet al-Mafjar, required major investment in hydraulic infrastructure, and the breakdown of central authority that accompanied the end of the dynasties that built them made these sites unsustainable. It is this very unsustainability that ensured their persistence in the archaeological record.

3) The historical sequence of elite complexes and satellite settlements that preceded

Khirbet al-Mafjar:

Chapter Three investigated pre-Islamic satellite settlements, focusing on access to water and connection to (or, sometimes, separation from) the urban core. Taking hydrology into account, it is observed that some zones of settlement are more conducive to links with the urban core (in Zone 1) than others. One major clue about the relationship between the urban core and its surrounding settlements is whether these settlements were watered from 'Ayn al-

Sultan. Chapter Three presented evidence to support this idea both from the lack of connection between Tulul Abu al-‘Alayiq and the urban core in the Hasmonean/Herodian period, and direct links between monasteries and the urban core under Byzantine rule.

Khirbet al-Mafjar was not the first elite settlement on the Jericho plain. A clear precedent is Tulul Abu al-‘Alayiq, the palatial complex built by the Hasmonean elite and expanded by Herod. Like Khirbet al-Mafjar, Tulul Abu al-‘Alayiq was patronized by a ruler with an uncertain status toward the urban core, and like the Umayyads, the Hasmoneans financed complex hydraulic delivery systems to secure alternative water source to that used by the city of Jericho. Choice of location also reveals strategic parallels, as the location of Tulul Abu al-‘Alayiq offered the Hasmoneans easy access to their power center in Jerusalem in the same way the Umayyad strategy in the Jericho plain involved the controlling of points of access. An understanding of the relationship between settlement location and the objectives and concerns of its builders thus provides the structure for a long-term archaeological and historical narrative.

Chapter Three also discussed the rise of a new type of satellite settlement, the monastery. In parallel to the emergence of Byzantine Jericho as a prosperous Christian city, Zones 4 and 5 were dotted with a variety of monastic settlements. This monastic hinterland was connected directly to the urban core through shared use of ‘Ayn al-Sultan and synchronous investment by Church and State officials in both the urban core and countryside. The growing importance of Christianity made an imprint on the landscape of the Jericho plain. Byzantine emperors conceived of themselves as pious and promoted pilgrimage as a worthy and justifiable Christian function, but it also served as a way of strengthening links and expanding influence in the countryside. Justinian, for example, financed development in both the urban core (for example, the construction of the basilica of Tell al-Hassan), and in the monastic zones (for example, the

Baptism Conduit from ‘Ayn al-Sultan to the monasteries near the Jordan River and infrastructure at those monasteries).

4) Reading the genesis and purposes of Khirbet al-Mafjar from analysis of the Jericho plain:

Analysis of pre-Islamic patterns of interaction between settlements in the context of the physical landscape set the stage for the early Islamic period. Chapter Four explained why the Umayyads built a palace complex in Jericho, why it was built specifically in Zone 7, and why Khirbet al-Mafjar had the particular configuration that it did. It also framed Khirbet al-Mafjar as part of Umayyad strategy of controlling main access points in the Jericho plain around the pre-existing urban core.

An unusual combination of advantages likely made the Jericho plain an early target of Umayyad settlement. Few other places share the remarkable set of features that define the cultural landscape of the plain, including: multiple water sources capable of sustaining large settlements, ample agricultural land this water could reach, connectivity as a nexus of key roads, highlands that provide good defensive positions to control roads and as refuges, and proximity to desert areas home to tribal groups. These features provided a framework for Umayyad economic development, political strategy, and religious aims. The Umayyad economy shows a clear pattern of developing agricultural estates and conditions in Jericho were too favorable to pass up. In addition, Umayyad insecurity from existing Christian communities, along with the need to rely on communities culturally akin to them, drove a policy of political clientelism and religious proselytism that was focused on those tribal communities that frequented well watered cross-road locations like the Jericho plain.

The location of Khirbet al-Mafjar in Zone 7 belongs to trends from both pre-Islamic settlements in the Jericho plain and standard Umayyad settlement patterns throughout Syria-Palestine. Like Tulul Abu al-‘Alayiq, Khirbet al-Mafjar was built away from the contemporary urban core separated from it by a major wadi. At the same time, the settling of marginal lands and projecting the wealth of the new Islamic state on the landscape through heavy investment in hydraulic infrastructure echo the genesis of other Umayyad palaces. The Umayyads built the Mafjar Conduit, an elaborate hydraulic system that brought water from the Na‘aran springs. Its architects designed the site along a north-south axis to optimize water supply coming from the east, which passed through the complex and on to downslope fields.

Khirbet al-Mafjar itself was part of a larger Umayyad building program on the Jericho plain. Evidence of early Islamic occupation has also been found in Zone 9 around the Na‘aran springs and in Zone 3 in part of the area previously occupied by Tulul Abu al-‘Alayiq. Along with Khirbet al-Mafjar, these settlements formed a triangle around the urban core controlling strategic routes and defensive positions. None of them were watered from ‘Ayn al-Sultan, reflecting Umayyad uncertainty in a cultural landscape with a Christian demographic majority and at a time when the Umayyads seem to have been making efforts to separate themselves from Christianity, defining Islam as a distinct religion.

Though the Umayyad Empire might, as the standard refrain goes, have stretched from Spain to Central Asia, at its heart in Syria-Palestine, Muslims were still outnumbered by the preexisting Christian population. This demographic imbalance was especially acute in urban centers, where the Umayyads were seen as outsiders. As a result, Umayyad aims and ambitions were driven by a mix between security concerns – they were, after all, still at war with Byzantium and they knew Jerusalem was a major focus of reconquest – and the goal of clearly

defining Islam as distinct religion from Christianity, a process that had gained new momentum under ‘Abd al-Malik in the 690s CE. The Umayyads were the clear rulers in Palestine, but they sought to avoid conflict when they could and, while it is difficult to know from available evidence, they do not seem to have pushed for mass conversions.

The historical landscapes of Syria-Palestine were the setting for interactions between the new Umayyad elite and pre-existing Christian populations. These landscapes represent a variety of types, defined by different natural conditions and cultural features. The Umayyads settled both in and around older urban centers, and in rural, secluded environments. They seem to have decided where to settle on a case-by-case basis, adapting their strategy as needed. Some centers were too important to avoid, for example Damascus, Jerusalem, and Amman, though even at Damascus they initially established themselves outside the city before moving inside the urban core. Furthermore, in Jerusalem and Amman they made sure not to be surrounded, but to leave access to external lands. These external lands represented both escape in case of future trouble, and access to tribal groups that seem to have been more the target of Umayyad proselytism than the urban Christian populations.

In the majority of cases, the Umayyads chose to build away from pre-existing urban centers. Khirbet al-Mafjar represents this common trend, with other examples in Palestine including Ramla outside Lud, Sinnabra outside Tabariyya, and Khirbet al-Minya outside Capernaum. The roots of Umayyad success can be seen in their not disrupting the urban and social fabric of the lands in which they settled, and the fostering of economic continuity. Landscape analysis illuminates these roots and this dissertation has used Jericho as a model for studying the interaction between Umayyad and pre-existing settlements, which has revealed the

character of the social and natural landscape of Khirbet al-Mafjar to be a way of optimizing settings for settling a new empire.

In designing their palaces and settlements, Umayyad architects responded and adapted to changing conditions. For archaeologists of the early Islamic period, new perspectives are revealed by showing the same flexibility in how we approach problems of cultural history.

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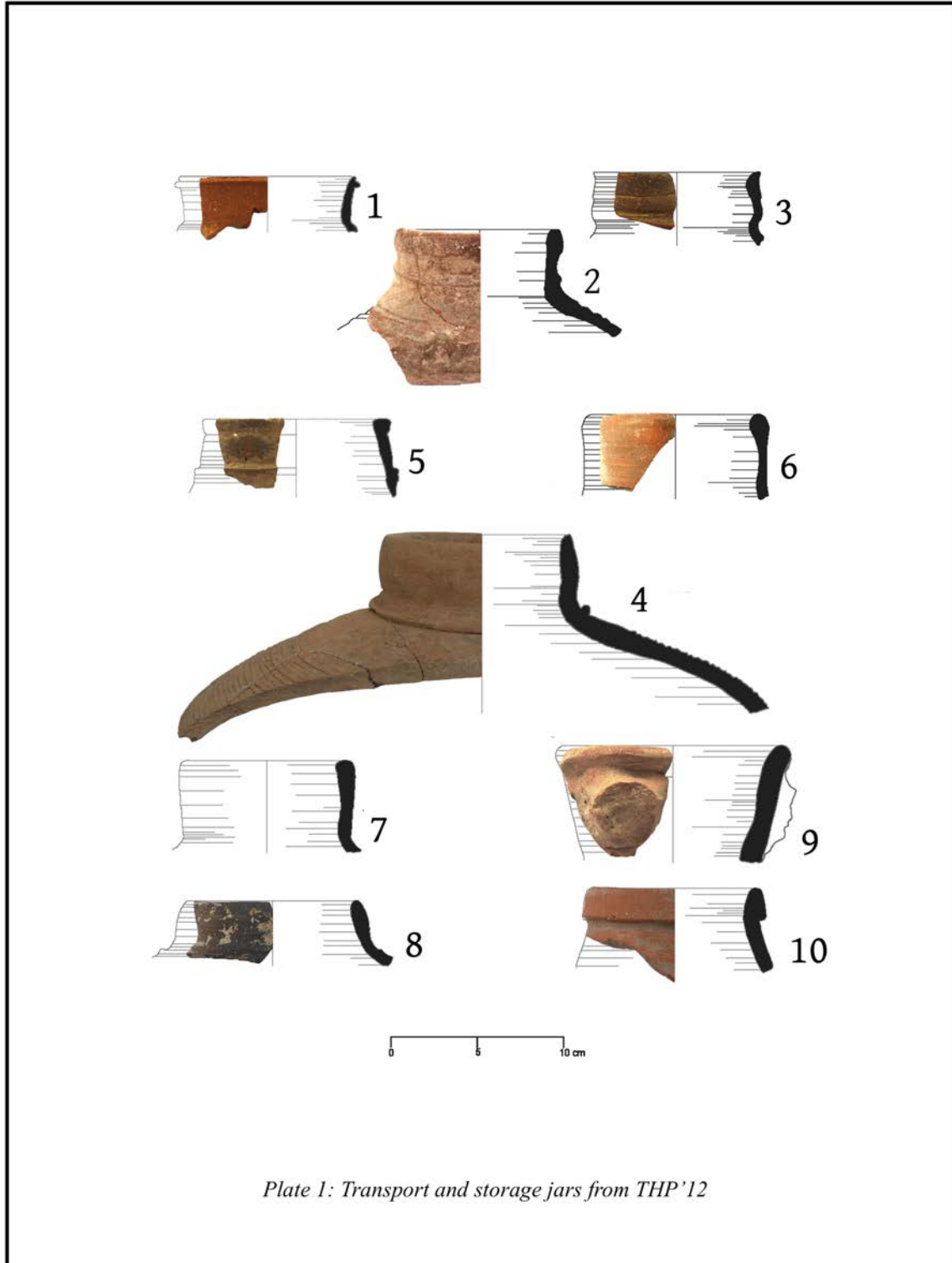
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APPENDIX 1 – CERAMIC FINDS FROM THP'12

**All images in Appendix 1 drawn by Ibrahim Iqtait and photographed and digitized by author*



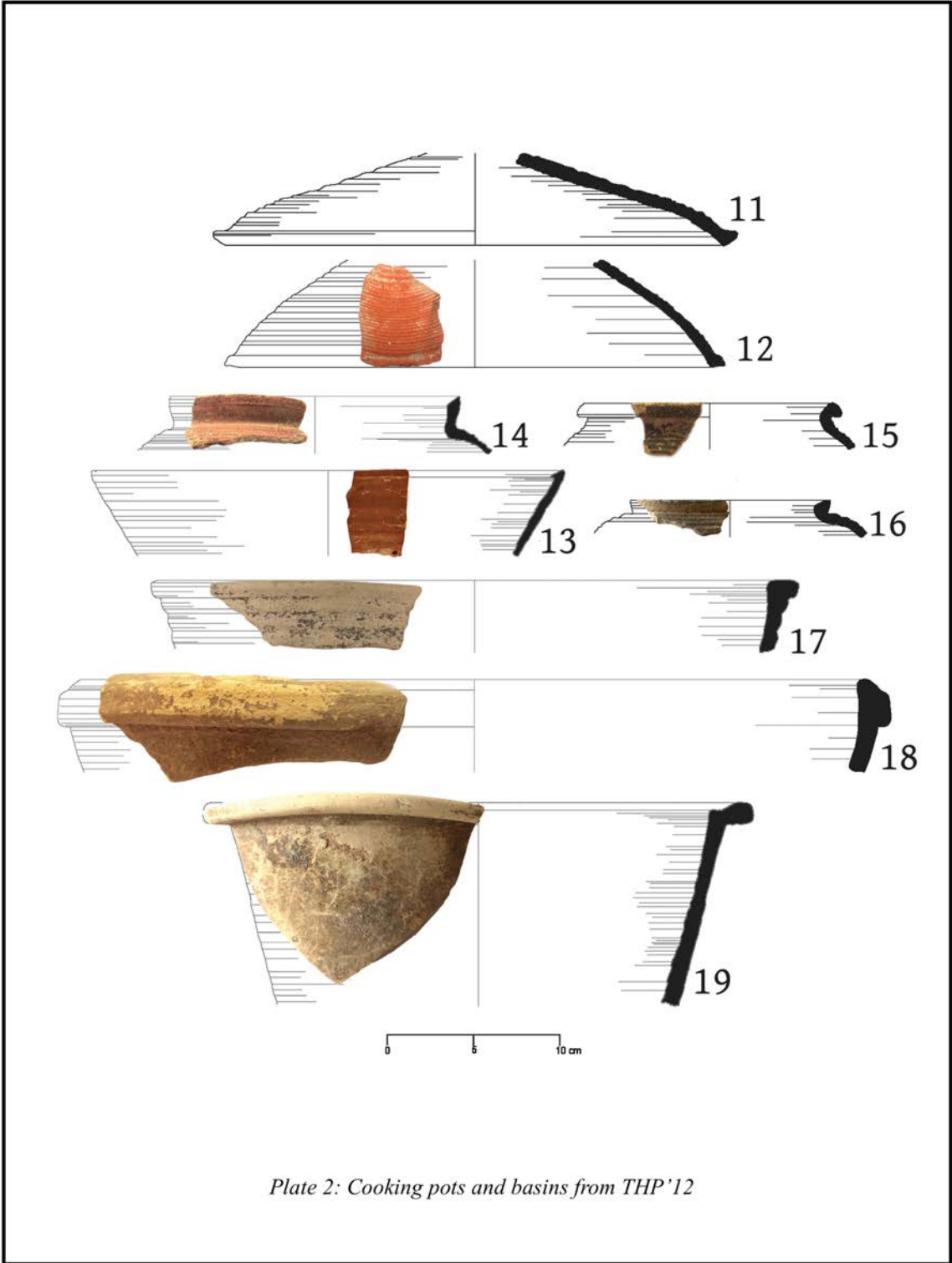
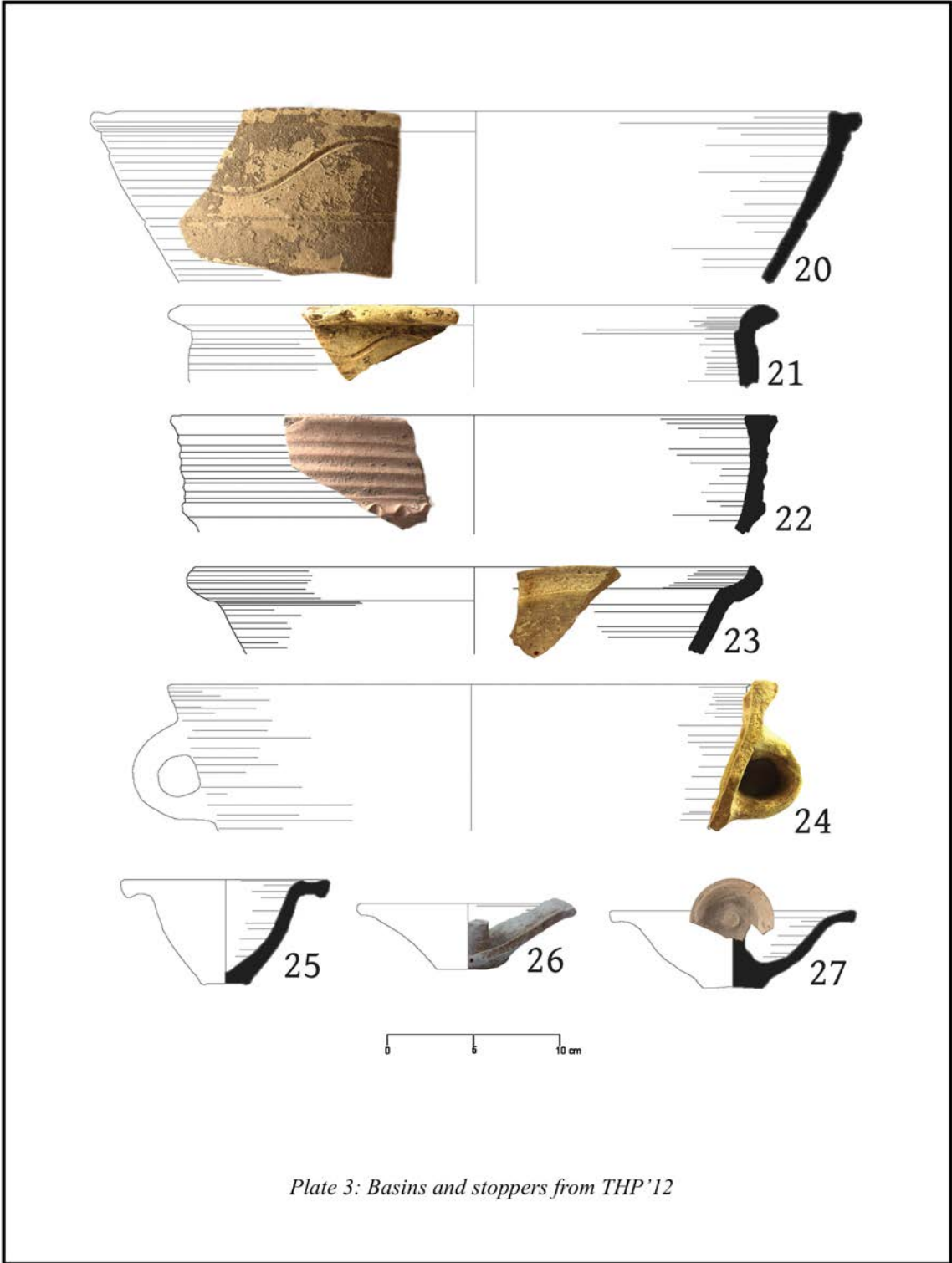


Plate 2: Cooking pots and basins from THP'12



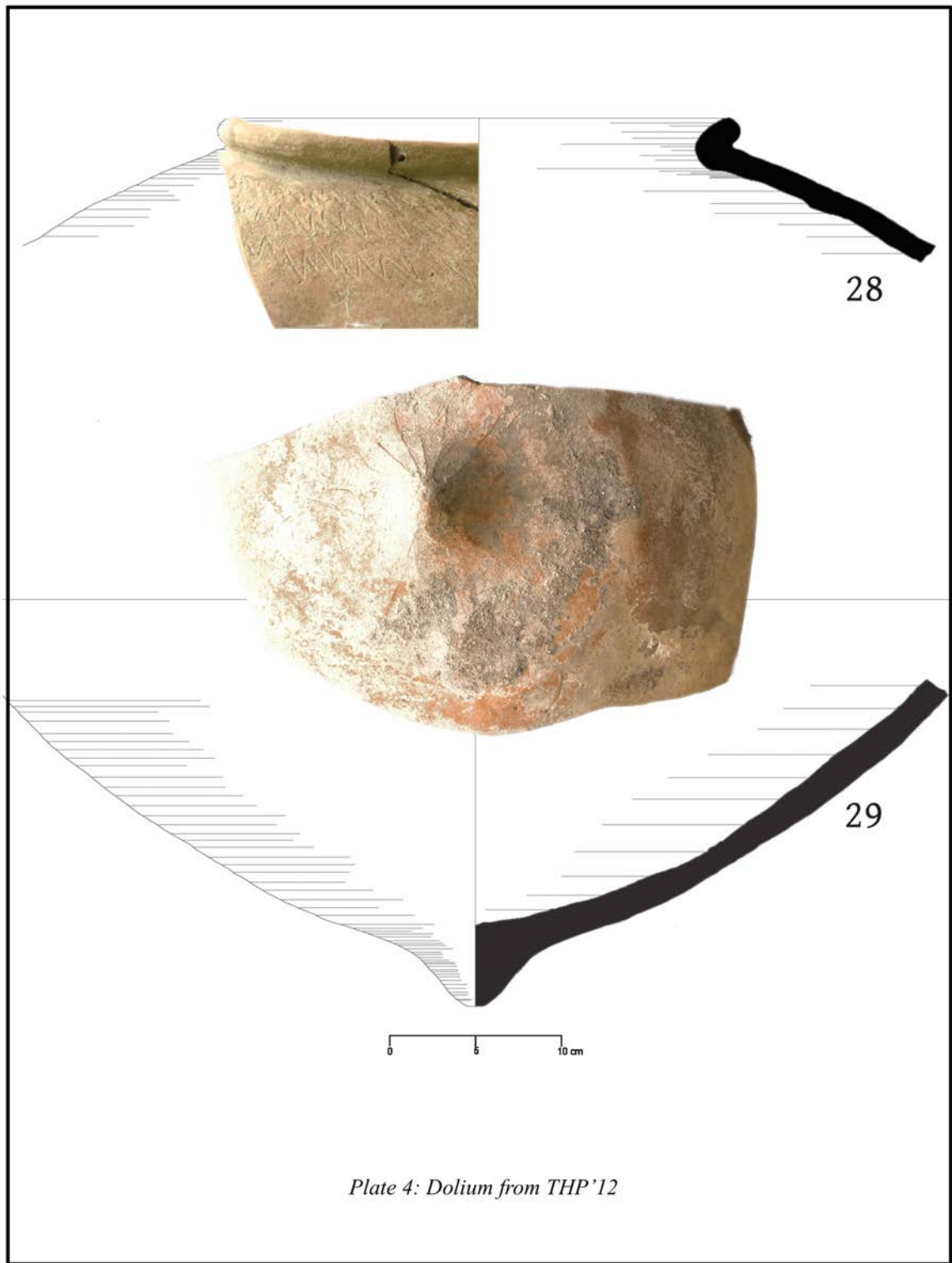
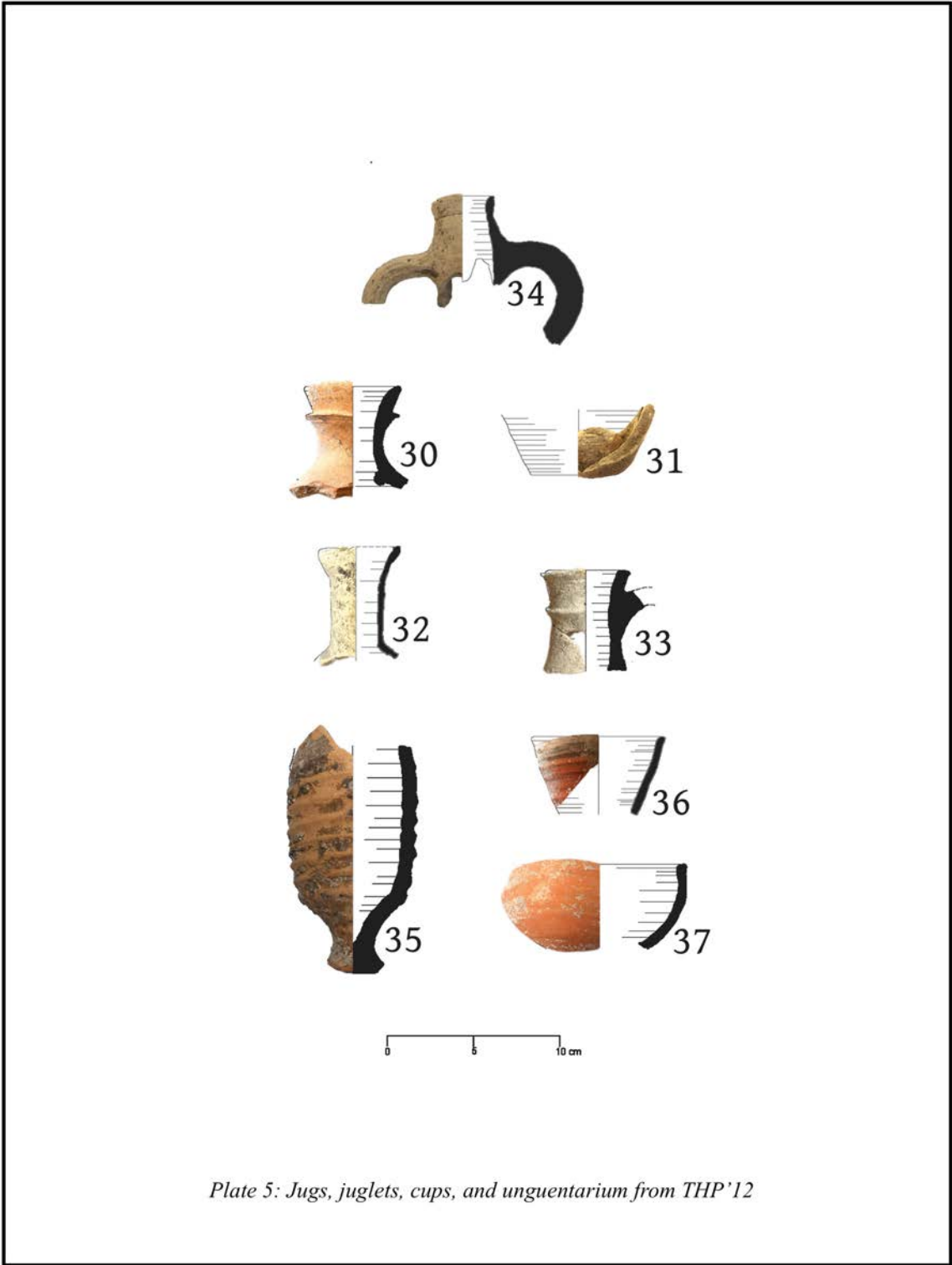


Plate 4: Dolium from THP'12



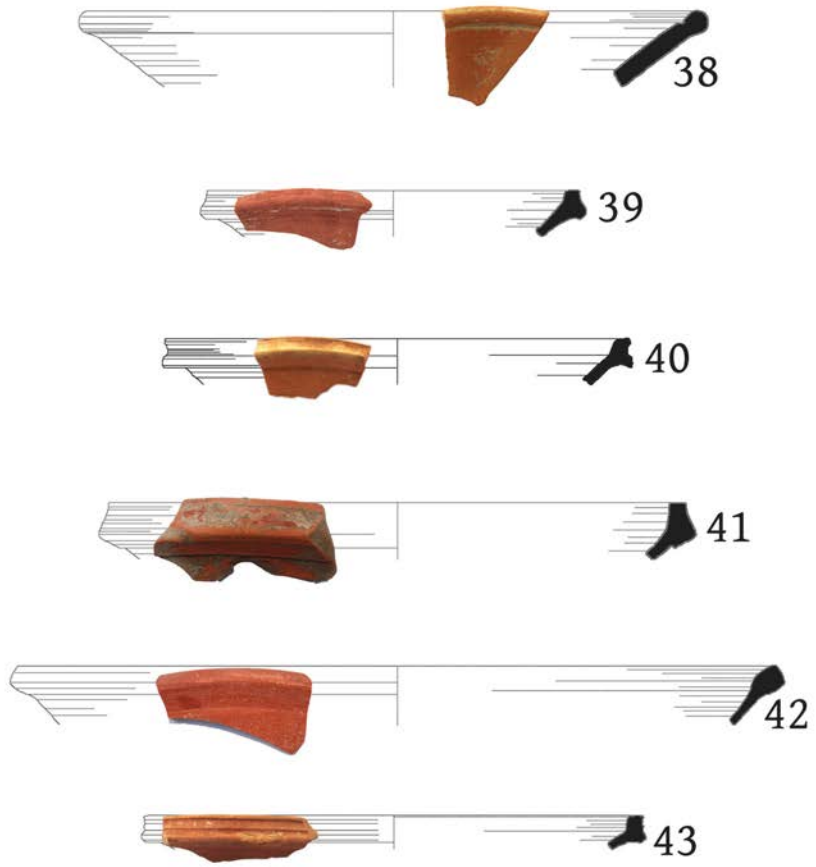


Plate 6: Tableware from THP'12

APPENDIX 2 – COIN FINDS FROM THP'12

**All photographs in Appendix 2 by Tasha Vorderstrasse and prepared by author*



Plate 7: Byzantine coins from THP'12 minted at Constantinople



Plate 8: Byzantine coins from THP'12 minted at Nicomedia



Plate 9: Byzantine coins of THP'12 (Maurice)



Plate 10: Early Islamic coins of THP'12



Plate 11: Coins of THP'12 with Arabic writing



Plate 12: Standing caliph and Post-reform Umayyad coins of THP'12