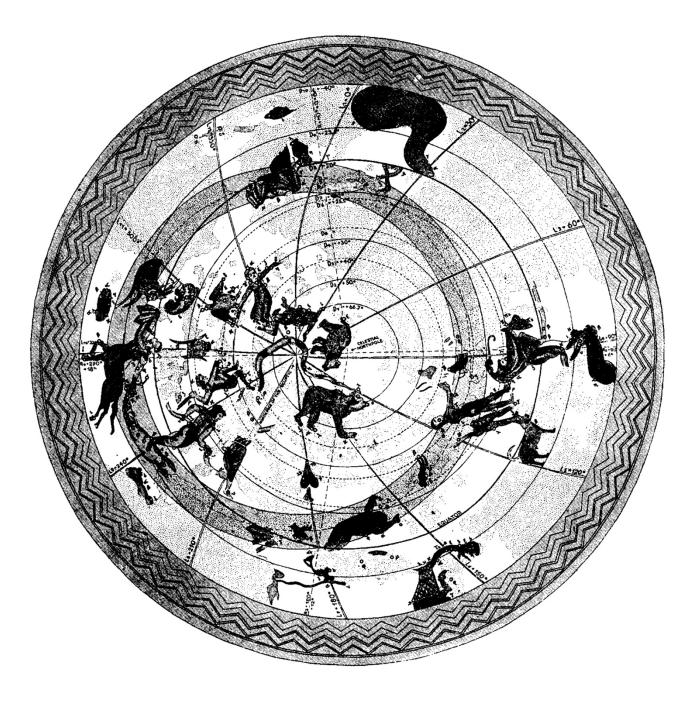
MIT—SA+P Spring 2024 4.154 Architecture Design Option Studio The Umayyad Route



Reconstruction of the caldarium at Qusayr 'Amra, designed by Maddalena Stein-Dalla Torre and reinterpreted by Arthur Beer. The fresco represents the earliest known portrayal of a night sky on a spherical surface.

THE UMAYYAD ROUTE

Instructor:

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in partnership with the Aga Khan Program for Islamic Architecture at MIT.

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Schedule: TF 1:00 – 5:00 pm EST

3-415

Credits: 0 - 10 - 11 G

INTRODUCTION

When the Balfour Declaration was signed on November 2, 1917, its promises echoed across the globe, ultimately shaping the world we have inherited today. These echoes resonated more loudly in one particular room than in any other, bouncing across its arches of black basalt quarried from the surrounding volcanic landscapes. For this was no ordinary room, but the military headquarters of Colonel Thomas Edward Lawrence, the future Lawrence of Arabia, during his mission to arm Arab Forces against the Ottoman Empire. His promise of Arab independence, of course, would later prove short-lived. Lawrence's chamber was situated within the ancient al-Azraq fortress, originally built by the Romans in the third century, and later expanded by the Umayyads, the first Muslim dynasty, in the seventh century. The al-Azraq fortress is among the many desert castles either constructed or modified by the Umayyads across Greater Syria. And our focus in this studio will be on a tight cluster of seven castles located in present-day Jordan.

These castles, known as *qusur* in Arabic, are connected today by a multi-lane highway originally designed to unite them. But it has, paradoxically underscored their isolation, effectively severing them from the broader history of the Arabian desert. This sense of isolation has been further deepened by the architectural typologies employed to engage with them—a combination of parking lot and an air-conditioned visitor center, deployed either in the middle of the desert or awkwardly adjacent to other towns or large-scale infrastructures. Amidst increasing global temperatures, these visitor centers have become customary, enabling the occasional tourist to comfortably capture images of the *qusur*. But while this inability to imagine alternative forms of engagement with the *qusur* has been worsened by the highway and the effects of climate change, its underlying cause is different. Although we are well-informed about the events surrounding the castles in the last century or so, the original motivations behind their construction and operation remain mysterious.

As you will see below, scholars have put forward several theories about the origin of the *qusur*. Some have argued that they served as hunting retreats for the Umayyad aristocracy, private havens where princes could indulge in the pleasures of intimacy, music and wine amidst the arid wilderness. Others suggest that the *qusur* are best understood as part of a network, particularly serving as waystations to facilitate desert travel, with locations on major lines of communication that existed between Syria and Arabia. Other interpretations propose that the *qusur* served as fortified residential settlements, with a typology reminiscent of earlier Roman fort plans or villas. This typology features a portico surrounded by apartments, all part of a larger complex for individual leaders and their extended families, militaries, and employees. Others have positioned the *qusur* as extensions of pre-Islamic buildings and economies, or as temporary residences to control tribes in the Syrian and Jordanian deserts. Others have even declared them as prosperous centers for agricultural exploitation, with evidence of extensive irrigation systems, canals, and aqueducts, as well as storage and distribution cisterns, all aimed at generating a surplus of marketable crops. The conflict among these theories is substantial, yet it is also remarkably rich with potential, especially for architecture and its allied fields.

Our studio is organized into three main parts. In the first part, our goal is to test the various theories concerning the function of the Umayyad *qusur*. This will involve employing methods such as drawing and model-making, as well as combining archival research with building simulations to construct a compelling argument. Moving on to the second part, we will embark on a journey to Jordan to collaborate with colleagues and students at the University of Petra. During this visit, we will have the opportunity to explore the different castles firsthand and work towards identifying commonalities and intersections among their seemingly conflicting origins. Finally, in the third and central section of the studio, our focus will shift towards imagining alternative futures for the *qusur*, integrating both technical and historical arguments into the design proposals. This studio, then, follows the tradition of 'cross' studios in our department, with the primary objective of building connections among various discipline groups. *The Umayyad Route* represents a joint effort between AKPIA and A+U. It is also dedicated to establishing links with the BT group and exploring responses to the climate crisis that encompass technological, aesthetic, and cultural dimensions—at both the architectural and the urban scales. To fortify these connections, the studio will run concurrently with a seminar led by Professor Nasser Rabbat, who serves as the director of the AKPIA program, and will draw upon the insights of Professor Christoph Reinhart, director of the BT group.

1. QUSUR AS WAYSTATIONS BETWEEN SYRIA AND ARABIA

Recent scholarly discourse has challenged the perception of qusur as remote retreats of the Umayyad aristocracy, asserting that they must have been integral to a broader organizational network. In his article, "The Distribution of Sites and Routes in the Jordanian and Syrian Deserts in the Early Islamic Period," King proposes a relationship between the qusur's locations and major north-south lines of communication that existed between Arabia and Syria. He highlights that European scholars, often entering the desert from the west, tended to overlook this directional connection. According to King, there were three significant routes that impacted the distribution of Umayyad buildings in Jordan: Wadi al-Sirhan, Tariq Ubayr, and Darb al-Sham. The first route, for example, extending along the low depression of Wadi al-Sirhan, has been emphasized by historians for its numerous perennial water sources. These sources played an important role in facilitating the emergence of the barid (mail service), the coordination of the Damascus Hajj caravan, and the management of transhumance expeditions. King argues that the arrangement and regularity of Umayyad sites along a line connected to the Wadi al-Sirhan valley confirms their role in enabling communication across the region. After providing an overview of all three routes, he concludes, "The courses of these routes between Syria and Arabia suggest that the Umayyad sites along them were directly related to the routes themselves. In the past Creswell among others gave expression to the view that the Umayyad qusur were the result of the love for the desert life, the badiya, felt by the ruling family. My hypothesis, on the basis of the evidence gathered here, is that many of the qusur served as waystations or caravanserais in the state communication system, as well as meeting whatever local role each qasr played. If this was indeed the case, the distribution of the Umayyad qusur suggests coherent planning by a regime concerned to improve and ease travel as much as possible on the important roads to the Hijaz." This conclusion has been recently echoed by a team of engineers and historians who, after conducting a topographic analysis of the region connecting the structures, uncovered clear lines of sight between them.2

2. QUSUR AS ELEMENTS OF PRE-ISLAMIC TOWNS, TRADES, AND TRAILS

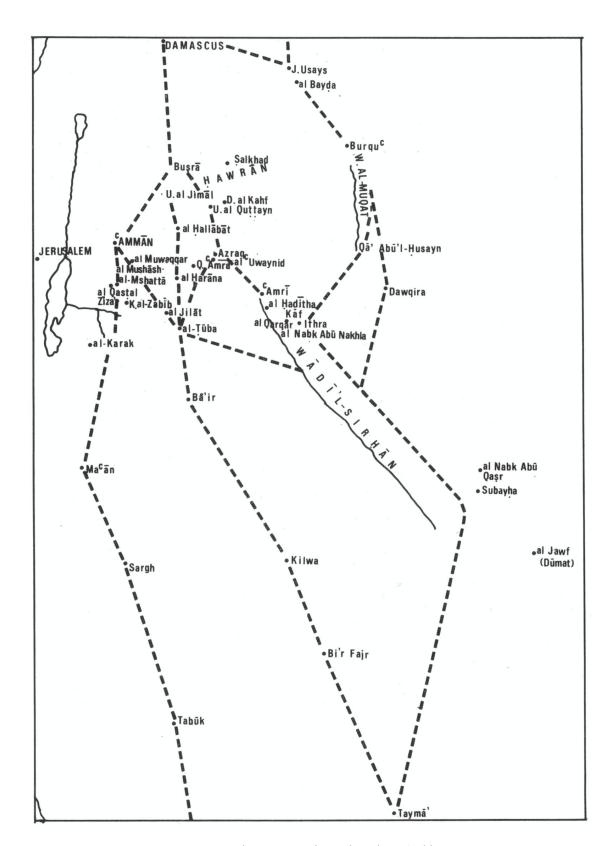
In "Umayyad 'Palace' and the Abbasid 'Revolution," Grabar contends that understanding the arrangement of the qusur requires positioning them in relation to what existed before the Muslim conquest, rather than viewing them merely as creations of the late seventh and eighth centuries.³ Drawing on Sauvaget's hypothesis that many of these buildings had ties to older structures and settlements,4 Grabar notes the prevalence of stones, foundations, and hydraulic infrastructures from an earlier era in almost every qasr. But beyond these physical traces, he also argues that these settlements were intricately linked to the economic organizations of the pre-Islamic world, a network that Muslims needed to maintain for their empire to thrive. Referring to Tchalenko's work on ancient villages in northern Syria, which emphasized their focus on olive tree monoculture and oil pressing, Grabar suggests a similar pattern (with the possibility of a wine monoculture) in the regions around the qusur. He proposes that the prosperity of these towns before the Muslim conquest, much like in the north, might have been tied to aspects of Christian Syria and Palestine, particularly the growth of sanctuaries and pilgrimage routes. The substantial establishments necessary to accommodate and sustain the multitude of travelers to the Holy Land undoubtedly demanded significant investments in hydraulic and transportation infrastructures. Grabar observes that the nature of these agricultural settlements and their probable connections to several institutions of pre-Islamic Syria and Palestine could explain why a considerable number of Muslims, including the ruling families, chose to settle there during Umayyad times. This hypothesis could also justify why, following the establishment of the Muslim dynasty, several of these towns declined drastically. Grabar writes, "These settlements could not survive, even though the Umayyad princes and their clients had at their disposal the capital needed for their exploitation. For, as Tchalenko has shown in the instance of north Syria and as has been suggested for the rest of Syria and Transjordan, the economic usefulness of these settlements depended on their relationship to markets outside the Muslim world, or on wine, which lost much of its significance, or on Christian religious establishments which weakened considerably."

¹ King, G. R. D. "The Distribution of Sites and Routes in the Jordanian and Syrian Deserts in the Early Islamic Period." *Proceedings of the Seminar for Arabian Studies* 17 (1987): 91–105.

² Alhasanat, Mahmoud Bashir, Shahid Kabir, Wan Muhd Aminuddin Wan Hussin, and Erin Addison. "Spatial Analysis of a Historical Phenomenon." *GeoJournal* 77, no. 3 (2012): 343–59.

³ Grabar, O. "Umayyad 'Palace' and the 'Abbasid 'Revolution." *Studia Islamica*, no. 18 (1963): 5–18.

⁴ Sauvaget, J. "Remarques sur les monuments omeyyades." Journal Asiatique 1941-1995 232 (1940): 19-59.



Desert routes in eastern Jordan and northern Arabia. G. R. D. King in "The distribution of sites and routes in the Jordanian and Syrian deserts in the early Islamic period."

3. QUSUR AS HEDONISTIC RETREATS

Some scholars reject the notion that the *qusur* reflect a centralized vision for developing the desert or countryside. Fowden, in particular, argues against their homogeneity by reintroducing evidence that positions them as individual retreats for pleasure, hunting, and relaxation. He attributes the waning popularity of this view to a "new post-First World War generation of scholars" determined to "show itself hard-nosed about so-called romantic sensibilities."5 In "Qusayr 'Amra: Art and the Umayyad Elite in Late Antique Syria," Fowden maintains that the connection between the qusur and certain transportation routes cannot justify the assumption that they served as resting points for people crossing between Arabia and Syria. Instead, he contends that, rather than being deliberately built in proximity to communication networks, they were located near the well-watered depressions that were conductive to animal migrations (along which many human routes also evolved). This, according to Fowden, supports the hypothesis that the qusur operated as recreational hunting lodges. In further substantiating his claims, he also disputes the idea that the structures served as watering points for caravans by arguing that certain examples are far too sophisticated to have been designed as part of a road system or for ordinary travelers. Instead, he suggests that although some might have been large enough to function as caravanserais for the elite, their main purpose was as residences providing privacy from those critical of certain princes' lifestyles, particularly their enjoyment of wine. In concluding his argument, Fowden writes, "Among these beneficiaries of the ruling house's largesse, certain individuals were particularly inclined to savor the qasr's hedonistic aspects, and the delicious paradox of being able to enjoy singing girls and wine amidst the arid wilderness an earlier poet had seen—understandably—as their polar opposite...One gets the feeling that country estates—like monasteries—were thought of as particularly propitious places for erotic encounters, or at least for catching sight of pretty girls...Perhaps life was more relaxed in the qasr than in one's own house, and women circulated slightly more freely."

4. QUSUR AS FORTIFIED RESIDENTIAL COMPOUNDS

Several other scholars advocate the notion that the qusur primarily served a residential function,6 urging caution against an exaggerated portrayal of hedonistic and erotic tendencies. Examining the plans and scales of specific structures, Grabar, in "Umayyad Palaces Reconsidered," opposes the simplistic but tempting image of an easygoing, fun-loving life attributed to Umayyad princes and aristocrats, which is a picture "of an unstable equilibrium between formality and fun, between rigidity and freedom, all of it bathed in virile sensuality." In his view, such portrayals should not be generalized to represent the entirety of Umayyad aristocratic culture. This is because they are mainly found in poetry references of the time and largely focus on Walid II, who is known for his eccentricities and disinterest in politics or the achievements of his ancestors. Northedge, in "Umayyad Desert Castles and Pre-Islamic Arabia," supports this stance, suggesting that the qusur form a coherent architectural typology premised on introducing amenities of a wealthy private life into an agrarian and/or arid landscape.8 Building on the work of several historians, he notes that the qusur adopt the lineage of a fortified residence with a characteristic square plan, buttresses, and a central courtyard, reminiscent of earlier Roman fort plans or villas. The courtyard often features a portico and 'Syrian bayts,'9 apartments with a central room and surrounding chambers, potentially for permanent employees or armed retainers. The main living and formal units seem to have been on the upper floor, which is not preserved in many sites. Arguing against the conclusion that the qusur were caravanserais or military forts guarding roads, Northedge suggests they could imitate fortifications to resist tribal raids. Rather than spaces for princes to step away from the moral foundation of a new dynasty, the qusur might have acted as havens from frequent plague outbreaks in Damascus or as estates to escape rising political unrest. In any case, Northedge and fellow scholars find the assertion that the qusur operated as semi-private estates for individual leaders, along with their families, employees, and militaries, more plausible than considering them as public structures or wayfinding buildings for general traffic.

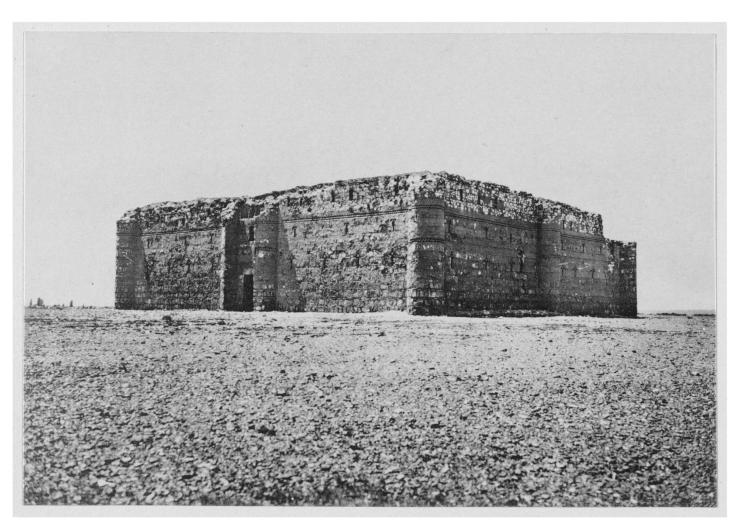
⁵ Fowden, Garth. "Quṣayr Amra Contextualized." In *Qusayr Amra: Art and the Umayyad Elite in Late Antique Syria*, 1st ed., 248–90. University of California Press, 2004.

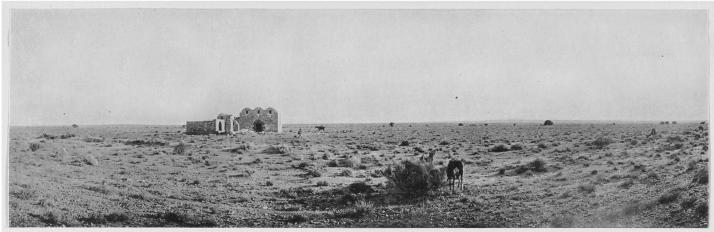
⁶ Genequand, Denis. "Umayyad castles: the Shift from late Antique Military Architecture to early Islamic Palatial Building". In *Muslim Military Architecture in Greater Syria*, (Leiden, The Netherlands: Brill, 2006)

⁷ Grabar, Oleg. "Umayyad Palaces Reconsidered." Ars Orientalis 23 (1993): 93–108.

⁸ Northedge, Alastair. "The Umayyad Desert Castles and Pre-Islamic Arabia." Orient Archäologie Vol 24 (2008): 249.

⁹ Creswell K. A. C and James W Allan. 1989. A Short Account of Early Muslim Architecture. Aldershot: Scolar Press.





Qasr Kharana: From south. Umayyad castle, built before 692. 1906. Moritz, B. (Bernhard), 1859-1939. Qasr 'Amra: From northwest. Small castle of an Umayyad caliph or prince, c. 720 AC. Moritz, B. (Bernhard), 1859-1939.

5. QUSUR AS MAJOR ECONOMIC ENTERPRISES

From his 1939 article "Remarques sur les Monuments Omeyyades" onward, 10 Sauvaget pioneered the proposition that the majority of Umayyad sites in Syria and Jordan were centers for agricultural exploitation. He supported this claim with evidence of extensive irrigation systems, canals, aqueducts, as well as storage and distribution cisterns associated with the qusur. Such sophisticated infrastructures, too elaborate to serve merely for supplying water for residential use, must have sustained fields and meadows dedicated to agriculture and pastoralism. Sauvaget argued that similar to other agricultural projects in nearby regions, which established farms and manors in landscapes deprived of water, the qusur acted as relatively uniform estates surrounded by early Islamic settlements. These observations were subsequently adopted by various authors, notably King, Lenzen, and Rollefson in their 1983 work "Survey of Byzantine and Islamic Sites in Jordan," where they not only highlighted the qusur's independent hydraulic installations but also their role in activating nearby dams. 11 Expanding on these ideas, Grabar, in "Umayyad 'Palace' and the Abbasid 'Revolution," further argued that the extensive water use and conservation techniques, still visible in most locations, could only be explained by external sponsorship, either from governmental or private capital, given the substantial investments and the need to cover losses in unfavorable years.¹² The revenues generated might have been invested to modify the features of certain qusur, incorporating not only mosques but also baths, opulently decorated houses, and elements of luxurious living. Thus, contrary to being merely retreats and pleasure spots for powerful families, Sauvaget and subsequent proponents suggest that the qusur were central developments within well-planned agricultural ventures, designed not only for self-sufficiency but also to serve nearby urban centers. By generating a surplus of marketable crops, then, the qusur, according to Sauvaget and others, became profitable economic enterprises. These businesses, they suggest, must have relied on a systematic agricultural colonization of the Syrian and Jordanian deserts.

6. QUSUR AS POLITICAL AND DIPLOMATIC PROJECTS

Disputing the previous conclusions and advising against interpretations that view Umayyad qusur primarily as agricultural centers or exotic country estates, Gaube argued in 1979 that they had a predominantly political purpose. 13 Serving as temporary residences for nomadic Umayyad kings in allied tribal territories, they aimed to influence tribal shaykhs by granting them access to the privacy and luxury of these elaborate houses. He writes, "While A. Musil and H. Lammens saw the Syrian desert castles as country estates where the caliphs could amuse themselves and escape the bad air...J. Sauvaget ascribed a mostly economic purpose to these buildings. A. Musil's and H. Lammens' ideas can be 'corroborated' by texts in the familiar way. However, what do these texts look like? They may well be valuable as the images of particular situations, in this instance of life in the desert castles. They are, however, unable to answer the question of why the castles were built in the first place. Sauvaget's approach, which takes into account archaeological and economic considerations, is not able to offer a satisfactory answer either, as it was not aimed consistently at quantifying the results. If Sauvaget had simply calculated the proceeds the Umayyads received from their investments in and around their desert castles, his interpretation would have led him [to realize that] the ratio between investment and revenues was simply not sustainable." Hillenbrand, in 1981, supports this observation by highlighting the lack of significant agricultural remains in the areas surrounding some of these sites, particularly al-Mushatta.¹⁴ Fowden later emphasizes the need to scrutinize Sauvaget's assumptions, stating, "The homogeneities of the *qusur* are easy to exaggerate when one starts from what is shared rather than assessing each building on its own terms."15 Gaube's key argument in "The Syrian Desert Castles: Some Economic and Political Perspectives on their Genesis" suggests that the abandonment of qusur after the fall of the Umayyads can be justified by the Abbasid rulers' lack of political use for them. This change is attributed to the Abbasid empire's reliance on a centralized administration and a mercenary army, allowing them to discard the role of nomad kings and the need to control tribes in the Syrian and Jordanian deserts, which were crucial for Umayyad dominance.

¹⁰ Sauvaget, J. "Remarques sur les monuments omeyyades." Journal Asiatique 1941-1995 232 (1940): 19-59.

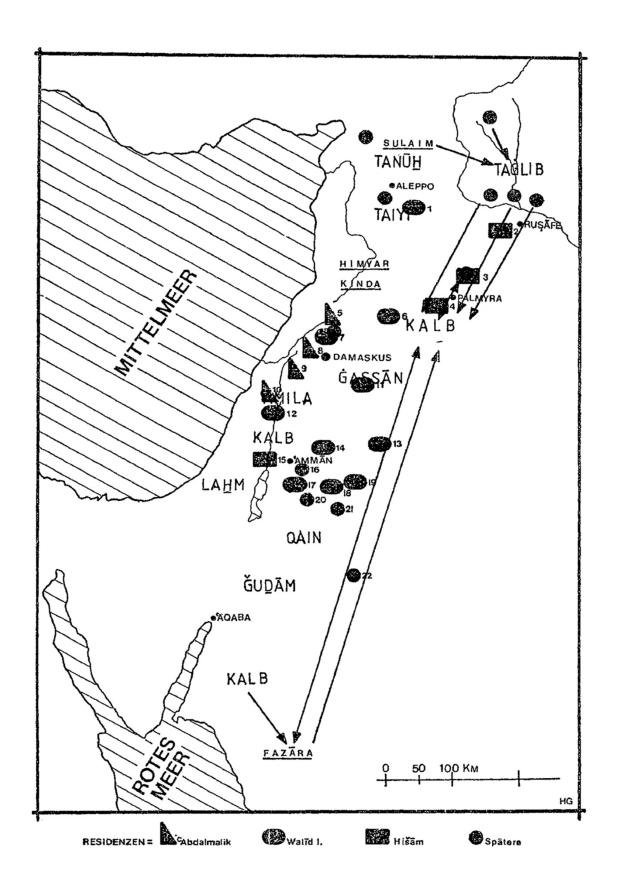
¹¹ King, G., C. J. Lenzen, and G. O. Rollefson. "Survey of Byzantine and Islamic sites in Jordan: Second season report (1981)." *A.D.A.J.* 27 (1983) 385–436.

¹² Grabar, O. "Umayyad 'Palace' and the 'Abbasid 'Revolution." *Studia Islamica*, no. 18 (1963): 5–18.

¹³ Gaube, Heinz. "The Syrian Desert Castles: Some Economic and Political Perspectives on Their Genesis." Routledge.

¹⁴ Hillenbrand, 'Islamic Art at the Crossroads: East Versus West at Mshatta', in *Essays in Honor of Katherine Dorn*, ed. A. Daneshvari (Malibu, 1981), 63-86.

¹⁵ Fowden, Garth. "Quşayr Amra Contextualized." 248–90.



Umayyad residences and tribal relationships in the 7th and 8th centuries. Heinz Gaube in "The Syrian Desert Castles: Some Economic and Political Perspectives on Their Genesis."

PART I (4 WEEKS): OPPOSING ORIGINS

In this first part, our aim is to evaluate the validity of the six hypotheses presented above, some of which are complimentary while others are conflicting. To achieve this, the studio is initiating an architectural competition. Whether working individually or in groups, each participant will be assigned one of the six theories concerning the origins of the Umayyad *qusur* in Jordan and will be tasked with demonstrating its plausibility in comparison to the others. The competition is designed with three primary objectives: (1) To critically examine and present various historical and archeological theories surrounding the Umayyad *qusur*. (2) To employ design tools, such as drawing and model-making, to visually articulate, substantiate, and develop the chosen hypothesis. (3) To underscore the role of archival research, historical analyses, archeological surveys, GIS, and other pertinent sources in constructing a compelling argument. The assessment of this initial part will be carried out anonymously by a panel of designers and historians. Their focus will be on the caliber and clarity of the argument, along with the participant's ability to spatialize and validate it through integrated sources.

Each entry, whether created individually or collaboratively, must consist of two panels, a model, and a brief text. The panels should contribute to the overarching hypothesis by incorporating drawings at different scales. The decision on how and which structures to group together is left to the participant(s). While some may choose to examine the *qusur* collectively, arguing for a broader organizational system, others might decide to concentrate on the intricacies of a single *qasr* or a combination of *qusur*. Ultimately, the entries that navigate and integrate both scales will be deemed most successful. As highlighted in the introduction, our attention will not be directed towards all the Umayyad *qusur* in Jordan, but specifically those forming a loop across the Eastern desert. They include *qasr* al-Hallabat, *hammam* al-Sarah, *qasr* al-Azraq, *qusayr* 'Amra, *qasr* al-Kharana, *qasr* al-Mshatta, and *qasr* al-Muwaqqar. While you are advised to confine your explorations to these *qusur*, the option to add more to the list is open if you believe the addition is integral to your position.

Just like the drawings, the model is open to any scale. Please refrain from creating miniature models of the *qusur* solely for representational purposes. Instead, you are encouraged to use the model—its scale, orientation, material, and cut—as a means to further articulate the assigned argument. For instance, some participants may choose to investigate how the desert's nature and topography influenced the arrangement of the *qusur*. Others might opt to model the extensive irrigation infrastructure that once sustained many of these structures. Another approach could involve unfolding the interior elevation of a *qasr* and analyzing the frescoes and drawings adorning it. Alternatively, some may decide to delve into the thermal qualities of a single wall, demonstrating how the *qusur* might have functioned climatically and, consequently, how they could have served various political or economic purposes. Given the anonymity of this competition, the text you submit holds significant weight. Please use it to present the original hypothesis, outline your methodology, cite your sources, and elaborate on your drawings and model.

Deliverables: (1) Two panels measuring 36 x 50 inches each*. (2) A physical model. (3) A 500-word text.

PART II (3 WEEKS): ENTANGLED ORIGINS

While the first part of the studio aimed to juxtapose the six hypotheses presented above, this second part seeks to uncover ties and alliances between them. In "Desert Castles, Umayyad," Genequand writes: "Umayyad desert castles have been diversely interpreted as either desert retreats for a hedonistic court life or as agricultural estates on the model of the Roman villa, as political and diplomatic centers designed to maintain close ties between the caliphate and the main Syrian tribes, or as related to the official road network used by the caliphs. If none of these interpretations is to be rejected, it seems now that a single interpretation is unlikely. They fulfill different functions according to the geographical situation, the size, and the layout of the compounds. First and foremost, they represent the visibility of the new Islamic power and the residences of a wealthy elite investing in landed property. For the caliphs, they are the necessary seats for exercising a form of mobile power. Then, at different levels, they are places for court life, profitable agricultural enterprises, or a way of creating new settlements." Following Genequand's observation, we will move in this section from using different qusur as case studies supporting distinct

^{*}A template will be provided by the studio.

theories to demonstrating how each *qust* provides dense entanglements of several hypotheses. In other words, Part II will foreground the *qusur* as architectural products through which various territorial, historical, technological, cultural, political, and economic forces converge differently.

To accomplish this, we will launch the second part with presentations summarizing each of the preceding submissions, initiating discussions and identifying common threads. Subsequently, each student or group will select one of the *qusur* and demonstrate how it brings together some of the earlier hypotheses while opposing others. Although each *qasr* will naturally embody several arguments, the aim here is to articulate a hierarchy that provides insight into the primary and secondary functions of each site. The ultimate objective is to group the *qusur* differently, whether based on function, geography, typology, or other relevant criteria. Part II's extension into our trip to Jordan will involve reinforcing and challenging the work through visits to each *qasr*, conversations with guides, historians, and archeologists, as well as our own observations. During the trip, you will have time to update and rethink the entanglements associated with each of the sites. You will also have the opportunity to present your work and receive feedback from the various stakeholders we will encounter. This part holds particular significance for the remainder of the semester as you will individually select a *qasr* or combination of *qusur* that will be the focus of your design work in Part III. It's worth noting that you are not obligated to choose the *qasr* you have studied thus far, and you are encouraged to explore different options, documenting them during our time in Jordan.

Deliverables: (1) Two panels measuring 18 x 25 inches* (for each qasr). (2) A 500-word text.

*A template will be provided by the studio.

PART III (6 WEEKS): ALTERNATIVE FUTURES

The studio's third and primary phase will capitalize on our collective understanding of the qusur and their interconnections to envisage alternative futures for them. As mentioned above, each proposal in this phase will focus on a single qasr or a combination of qusur, with the goal of integrating them within both their historical contexts, as articulated in the first two parts of the studio, and their contemporary contexts. This presents a significant challenge, as both these contexts will often present conflicting possibilities. Mediating between them through an architectural proposition is the primary aim of this third part. Central to this endeavor is recognizing the qusur not only as elements of a larger system but also as distinct architectural entities, each distinguished by its own aesthetic, structural, material, and environmental properties. How can we envision the qusur as active participants in the desert rather than objects to be observed from a distance? Numerous case studies from around the world offer us examples of how communities across different cultures and localities have reinscribed ancient archeological ruins into their modern customs and economies. Our challenge in this studio parallels theirs, and by exploring how the qusur might have functioned in the seventh and eighth centuries, we will work to imagine how new architectural possibilities could enable them not only to endure but also to thrive and enrich their surrounding towns and villages in the centuries to come. At the core of our approach will be our capacity to suggest alternative roles that transcend their depiction as secondary tourist destinations or historical landmarks. Instead, we will aim to propose ways in which these sites could stimulate local economies, generate employment opportunities, enhance agricultural output, accommodate residents, and so forth. In other words, the studio will frame the design proposals not as endeavors to immortalize the past, but rather as attempts to echo the transformative influence that the qusur exerted on past civilizations. And we will accomplish this by acknowledging both the merits and drawbacks of this stance, as well as how it contrasts with other forms of preservation.

Deliverables: We will discuss the deliverables for Part III in detail in the second half of the semester.

SCHEDULE*

F 02/09: Introduction/Part I Launch

T 02/13: Desk Crits **F** 02/16: Desk Crits

T 02/20: Presidents' Day—No class

F 02/23: Desk Crits

T 02/27: Desk Crits **F** 03/01: Desk Crits

T 03/05: Desk Crits

F 03/08: Part I Final Review

T 03/12: Part II Launch

F 03/15: Desk Crits

T 03/19: Desk Crits

F 03/22: Part II Presentations

T 03/26: Jordan Trip F 03/29: Jordan Trip

T 04/02: Part III Launch

F 04/05: Desk Crits

T 04/09: Desk Crits **F** 04/12: Desk Crits

T 04/16: Desk Crits

F 04/19: Part III Midreview

T 04/23: Desk Crits **F** 04/26: Desk Crits

T 04/30: Desk Crits **F** 05/03: Desk Crits

T 05/07: Desk Crits

T 05/13: Final Review (tentative)

^{*} The schedule will include lectures and workshops arranged by the AKPIA and BT programs, with their respective dates announced at the start of the semester.

GRADING DEFINITION

The final grade will represent the balance of attendance, participation, engagement in class discussions, incorporation of feedback, completion of assignments, individual growth over the semester, and quality of work produced in studio. The following criteria will be used for assessment and evaluation:

- 1. Thesis: How clearly are you articulating your conceptual intentions?
- **2. Translation of Thesis:** How well are you using your thesis to develop an architectural response to given problems?
- 3. Representation Quality: To what degree do your representations convey what they ought to?
- 4. Oral Presentation Skills: How clearly are you presenting your ideas orally?
- **5. Participation in Discussions:** How actively are you involved in class discussions?
- **6. Response to Criticism:** How effectively do you take advantage of criticism from instructors, your classmates, and outside jurors?
- 7. Auto-Critical Skills: To what extent are you able to critique your own work?
- **A. Excellent:** Project surpasses expectations in terms of inventiveness, appropriateness, verbal and visual ability, conceptual rigor, craft, and personal development. Student pursues concepts and techniques above and beyond what is discussed in class.
- **B.** Above Average: Project is thorough, well researched, diligently pursued, and successfully completed. Student pursues ideas and suggestions presented in class and puts in effort to resolve required projects. Project is complete on all levels and demonstrates potential for excellence.
- **C.** Average: Project meets the minimum requirements. Suggestions made in class are not pursued with dedication or rigor. Project is incomplete in one or more areas.
- **D. Poor:** Project is incomplete. Basic skills including graphic skills, model-making skills, verbal clarity, or logic of presentation are not level-appropriate. Student does not demonstrate the required design skill and knowledge base.
- **F. Failure:** Project is unresolved. Minimum objectives are not met. Performance is not acceptable.

ABSENCE POLICY

Work in the studio will build sequentially. Therefore, your commitment to incremental development on a daily basis is of paramount importance. Charrettes before reviews will not suffice. The demanding nature and pace of this studio course necessitates regular attendance and requires that deadlines are consistently met. Group reviews are collective for a reason, as students have a lot to gain from their peers. Therefore, attendance for the duration of all formal reviews is mandatory. Greater than two absences from the studio without a medical excuse supported by a doctor's note or verifiable personal emergency could result in grade reduction.

GRADING DISTRIBUTION

1. Class Participation	15%
2. Part I	15%
3. Part II	20%
4. Part III	50%

STUDIO CULTURE

The Department of Architecture promotes a learning environment that supports the diverse values of the entire MIT community of students, faculty, administration, staff, and guests. Fundamental to the mission of architectural education is the stewardship of this diversity in a positive and respectful learning environment that promotes the highest intellectual integrity and cultural literacy. As architectural design learning is often accomplished through project-based activities during and outside of class times, maintaining this environment at all times is the responsibility of the entire community. Faculty and students should strive to understand and mutually respect the varied commitments of each other and work together to manage expectations of time and effort devoted to assignments, pin-ups, and public reviews.

ACADEMIC INTEGRITY

Massachusetts Institute of Technology students are here because of their demonstrated intellectual ability and because of their potential to make a significant contribution to human thought and knowledge. At MIT, students will be given unusual opportunities to do research and undertake scholarships that will advance knowledge in different fields of study. Students will also face many challenges. It is important for MIT students to become familiar with the Institute's policies regarding academic integrity, which is available at Academic Integrity at MIT: A Handbook for Students.

DIVERSITY

MIT values an inclusive environment. We hope to foster a sense of community in this classroom and consider it to be a place where you will be treated with respect. We welcome individuals of all backgrounds, beliefs, ethnicities, national origins, gender identities, sexual orientations, religious and political affiliations—and other visible and nonvisible differences. All members of this class are expected to contribute to a respectful, welcoming, and inclusive environment. If this standard is not being upheld, please feel free to speak with us.

LAND ACKNOWLEDGEMENT STATEMENT

We acknowledge Indigenous Peoples as the traditional stewards of the land, and the enduring relationship that exists between them and their traditional territories. The lands which MIT occupies are the traditional unceded territories of the Wampanoag Nation and the Massachusett Peoples. We acknowledge the painful history of genocide and forced occupation of these territories, as well as the ongoing processes of colonialism and dispossession in which we and our institution are implicated. Beyond the stolen territory which we physically occupy, MIT has long profited from the sale of federal lands granted by the Morrill Act, territories stolen from 82 Tribes including the Greater and Little Osage, Chippewa, and Omaha Peoples. As we honor and respect the many diverse Indigenous people connected to this land from time immemorial, we seek to Indigenize our institution and the field of planning, offer Space, and leave Indigenous peoples in more empowered positions.

ADDITIONAL READINGS

Bacharach, Jere L. "Marwanid Umayyad Building Activities: Speculations on Patronage." *Muqarnas* 13 (1996): 27–44. https://doi.org/10.2307/1523250.

Foote, Rebecca M. "Commerce, Industrial Expansion, And Orthogonal Planning: Mutually Compatible Terms in Settlements of Bilad Al-Sham During the Umayyad Period." *Mediterranean Archaeology* 13 (2000): 25–38. http://www.jstor.org/stable/24651828.

Beer, Arthur. "Astronomical Dating of Works of Art." *Vistas in Astronomy* 9 (January 1967): 177–223. https://doi.org/10.1016/0083-6656(67)90028-1.

Genequand, Denis. "Elites in the Countryside." In *The Umayyad World*, edited by Andrew Marsham, 1st ed., 240–66. Routledge, 2020. https://doi.org/10.4324/9781315691411-15.

Urice, Stephen K. Qasr Kharana in the Transjordan. Durham, N.C: American Schools of Oriental Research, 1987.

Pinto, Karen C. (2018) "Fit for an Umayyad Prince: An Eighth-Century Map or the Earliest Mimetic Painting of the Moon?" *The Medieval Globe*: Vol. 4: No. 2, Article 3. https://scholarworks.wmich.edu/tmg/vol4/iss2/3.

Kennedy, D. (2014). 'Nomad Villages' in north-eastern Jordan: From Roman Arabia to Umayyad Urdun. *Arabian Archaeology and Epigraphy*, 25(1), 96-109. https://doi.org/10.1111/aae.12033.