

## II. Designer's Claims

### Part 1, Territory: Mediation & Domination

The Alhambra and its garden palaces perch over the city of Granada where the *vega*, Andalusia's fertile lowland, meets the Sierra Nevada, Spain's highest mountain range. It sits on the 70-meter tall *Sabika*. This foothill is separated by its parent mountain ridge, the *Cerro del Sol*, by a small gorge called the *Rey Chico*. The Sabika drops off sharply on its northern edge toward the *Río Darro* (Darro River) and is terraced



Figure 2<sup>1</sup> General Plan of the Fortress of the Alhambra (Goury, Jones and Gayangos)

Figure 2<sup>2</sup> Plan of Granada and the Vega, with the fort of the Alhambra

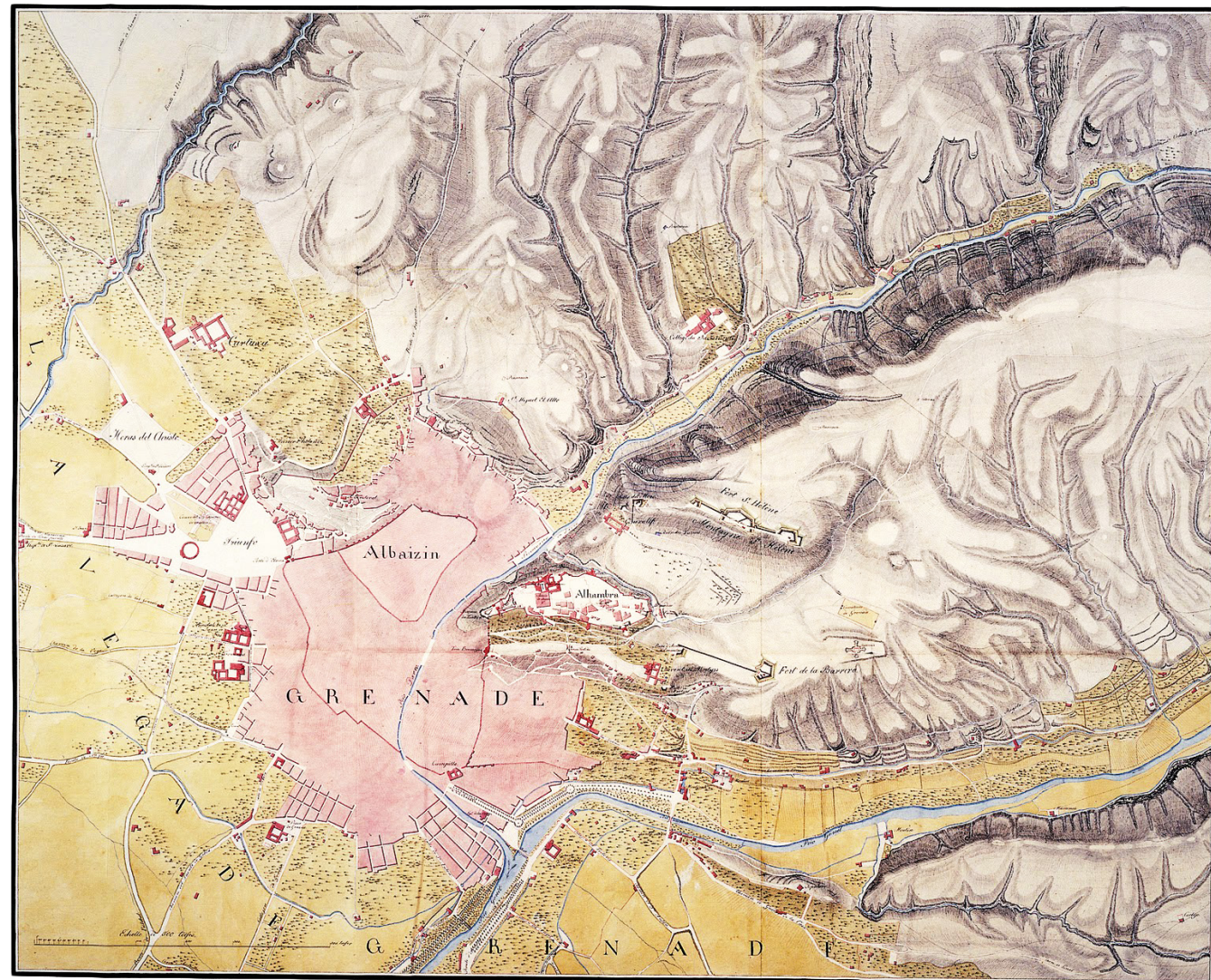


Figure 2<sup>3</sup> General Plan of the Fortress of the Alhambra (Murphy & Horne)

gradually southward to the *Río Genil* (Genil River). This citadel-esque formation suggests that it was chosen as a defensive measure, but its rulers suggest broader intentions. Abd Allah, the last Zirí king of Granada, in fact gave explicit reasons for choosing this hill site: “the promised land and safe dwelling.”<sup>1</sup> We might understand his first point as a sort of manifest destiny—likely referring to his entitlement to the agricultural potential of the land—and his second point as the protection provided by elevation. Both points are rooted in two convergent attitudes toward territory, without which the Alhambra would not have been possible: *mediation* and *domination*, corresponding respectively with the architectural typologies of the agricultural

*agricultural munya* and the opulent *Near Eastern palace*. A brief exploration of each will reveal a great deal of how and why the Zirids, and later the Nasrids, were so intent on this particular site.

The *agricultural munya*, or country estate, was created to mediate between city and countryside. It has its origins in Ancient Persia, when hunters first settled the Iranian plateau.<sup>2</sup> Much later, Imperial Rome adopted the concept and developed it as both an agricultural endeavor (*villa rustica*) and imperial pleasure palace (*villa urbana*, which transferred into the city “the values of a countrified atmosphere”).<sup>3</sup> As the Roman Empire included much of the Near East, its *villa rustica* was “topologically and

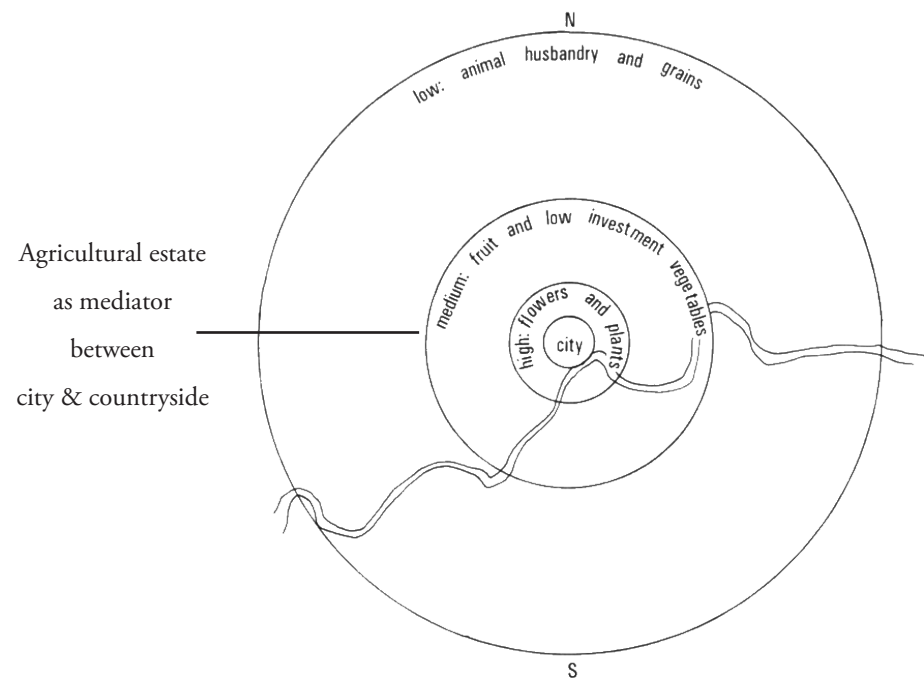


Figure 2<sup>4</sup> The Von Thunen model of agricultural development (Ruggles)

formally” at the root of the early Umayyad munya in Syria.<sup>4</sup> As an artificial oasis, the Near-Eastern agricultural estate was the economic, cultural and political mediator between the desert, which consisted of nomadic tribes who either herded livestock or plundered towns and caravans, and the city, consisting of markets for selling agricultural produce and a dense population of consumers to sell it to. This tactical positioning would allow estate owners to “entertain” autonomous tribal chiefs and simultaneously mark their territory.<sup>5</sup>

Since the Roman Empire had encompassed *Hispania*, or Iberia, Abd al-Rahmān I’s *Madināt al-Rusāfa* could not exactly claim to be its first estate<sup>6</sup>; however, it was certainly the peninsula’s first *Islamic* estate. Subsequent Umayyad munyas followed

Syrian precedents by locating outside of the city of Córdoba in the fertile valley along the Guadalquivir River.<sup>7</sup> Like Roman villas, these estates were designed for inward-looking views and included gardens, pavilions, and living areas used for pleasure and income. Because of lack of preservation after the fall of Córdoba (1010-1011), these munyas mostly disappeared during the early 11<sup>th</sup> Century.

The opulent *Near Eastern palace*, developed in Samarra, Iraq in the 9<sup>th</sup> Century, introduced the concept of exploiting topography for the purpose of dominating the surrounding territory. Elevated belvederes in Baghdad and viewing stations that allowed the caliph to look down over the city’s four entrances perhaps awakened the Abbasids to the advantage of elevation

for defense and visual spectacle.<sup>8</sup> Consequently, they began to construct their palaces with a throne room in the center, often elevated,<sup>9</sup> and garden terraces would become a mediating element—an intermediate focal length—between the palace and the landscape beyond. Feeling confined by the rigid circular plan of Baghdad, the caliph al-Mu’tasim (833-42) constructed *Dar al-Khilafa* (836) outside Baghdad on a raised bluff overlooking the Tigris River.<sup>10</sup> He positioned his throne over the main portal and his terrace sat 17 meters above his gardens, pool and pavilion<sup>11</sup>. The nearby *Balkuwara Palace* (849-59) similarly exploited natural topography, and its view to the south over the tops of lower buildings included “the halls, the garden, the river, and the limitless undulating plain of the Jazīra.” This clearly reflected the Abbasids’ novel “understanding of the power implied by far-reaching visual perception.”<sup>12</sup>

Due to increased transmission of ideas between Islamic kingdoms in the 9<sup>th</sup> and 10<sup>th</sup> Centuries, the two disparate attitudes toward territory—mediation and domination—finally converged in a “typological union” between the agricultural munya and the Near Eastern palace at *Madināt al-Zahrā* (936-1010). Abd al-Rahman III built it into the sloping foothills of a mountain 7 kilometers west of Córdoba.<sup>13</sup> He positioned his throne room, the Salón Rico, slightly above the upper garden. In contrast to the existing munyas, the upper garden was not enclosed by walls, but

Figure 2<sup>5</sup> The Bab al-’Amma and its view (H. Viollet) at Dar al-Khilafa (Ruggles)

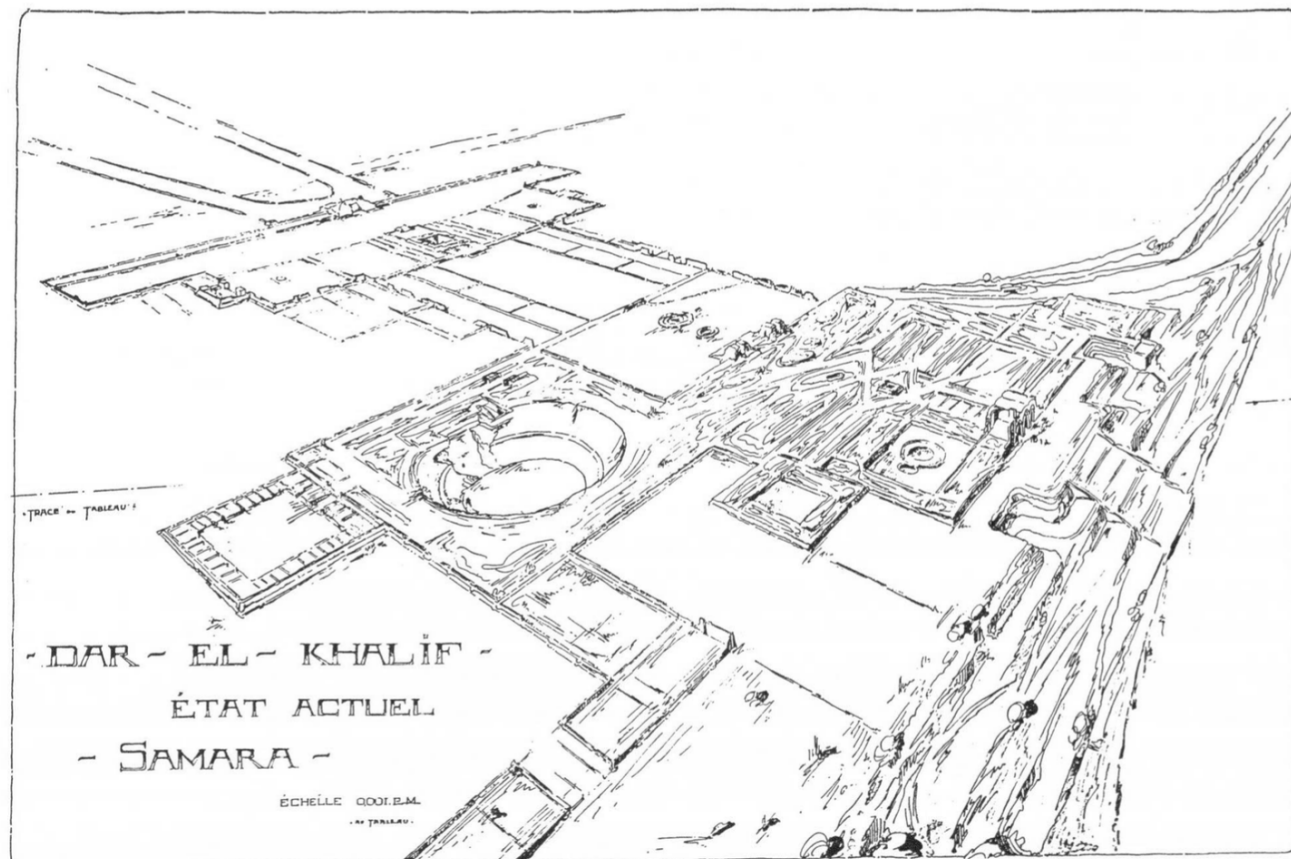


Figure 2<sup>6</sup> Plan of Cordoba and surrounding estates, 711-936 (Ruggles)





Figure 27 Madinat al-Zahra' (Dodds)

opened up to the lower gardens and the landscape beyond. This opening up of the garden to the landscape may have reflected the political stability achieved by the Umayyads in conquering an entire peninsula, as suggested by British and Japanese garden typologies that opened to the landscape in response to political stability achieved by conquering entire islands.

After the Caliphate of Córdoba fractured into dozens of warring Taifa kingdoms, palaces reverted to the more typical Medieval condition of a fortress within the city. However, fortress-palaces at several sites, including Málaga, Almeria and Granada, preserved the advantages of elevation. Both

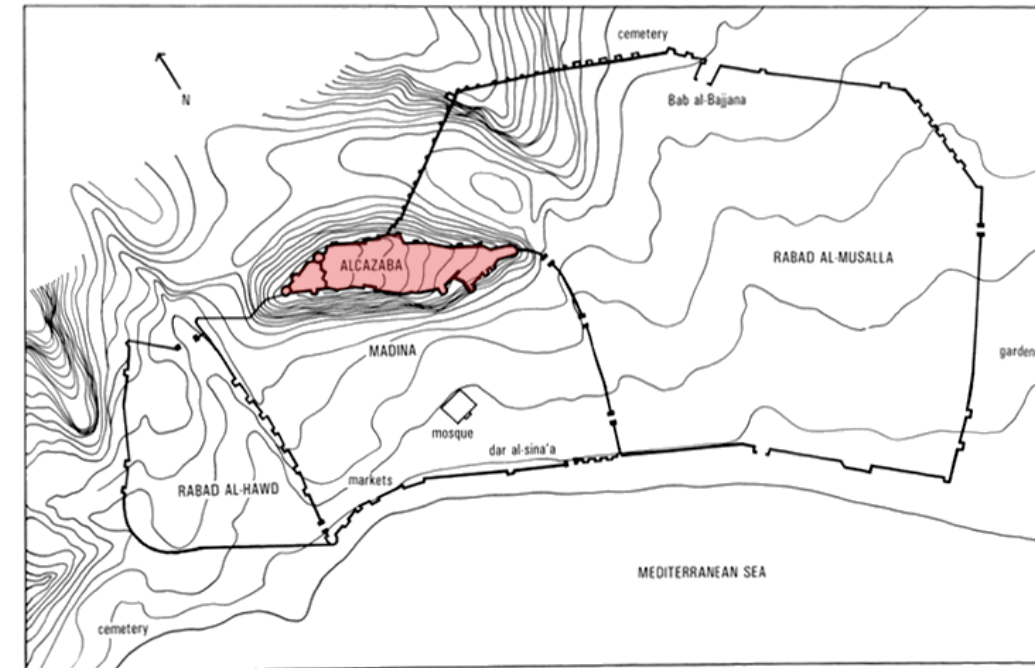


Figure 28 Plan of Almeria (Ruggles)

*alcazabas*, or fortresses, built in Granada during the Zirid dynasty were sited on top of hills. *Hisn al-Hamra*, or the Red Fort, would only start to resemble the garden palaces of *Madinat al-Zahra'* as it grew into the Alhambra during the more stable Nasrid period. What may be the most obvious climatic advantage of an elevated site—better breezes (as suggested by Moore et al., 1993: 14)—is largely left out of the official literature on elevated Islamic palaces until discussions of the Alhambra. Fortunately, we will be able to explore this in Chapter 3.

Figure 29 Hypothetical structure of Granada at the beginning of the 11th Century (García-Pulido)

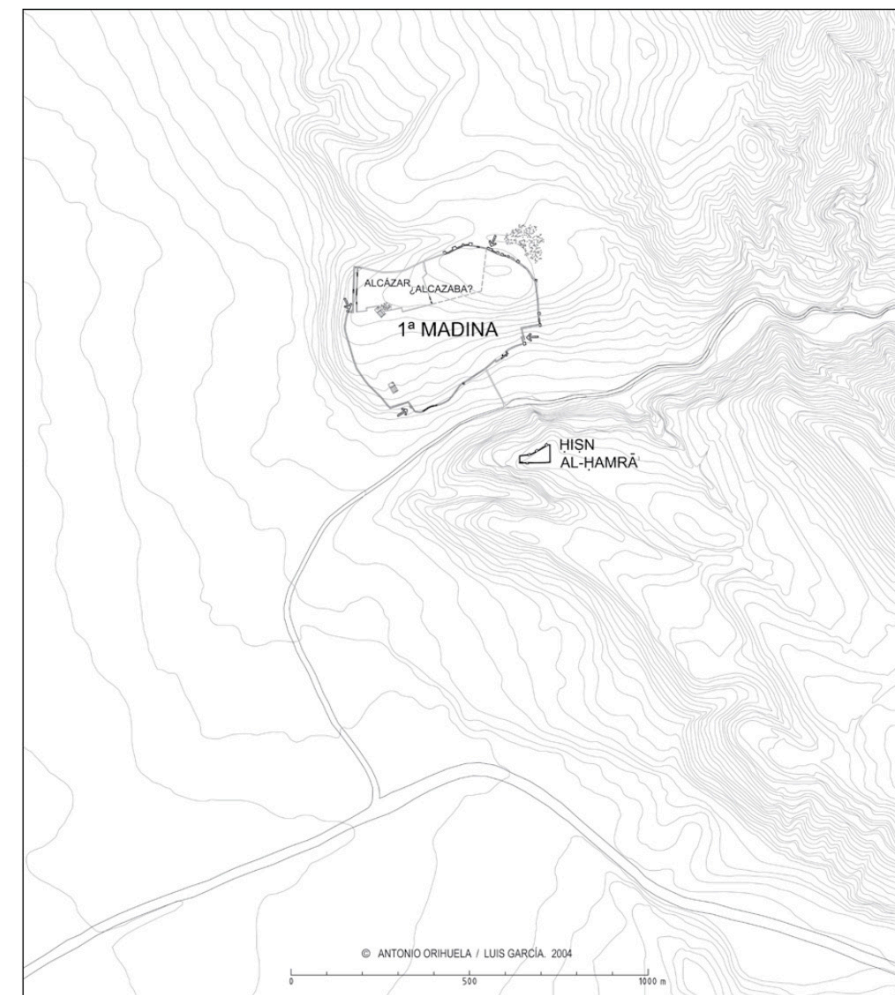


Figure 210 Hypothetical structure of Granada at the end of the 15th Century (García-Pulido)

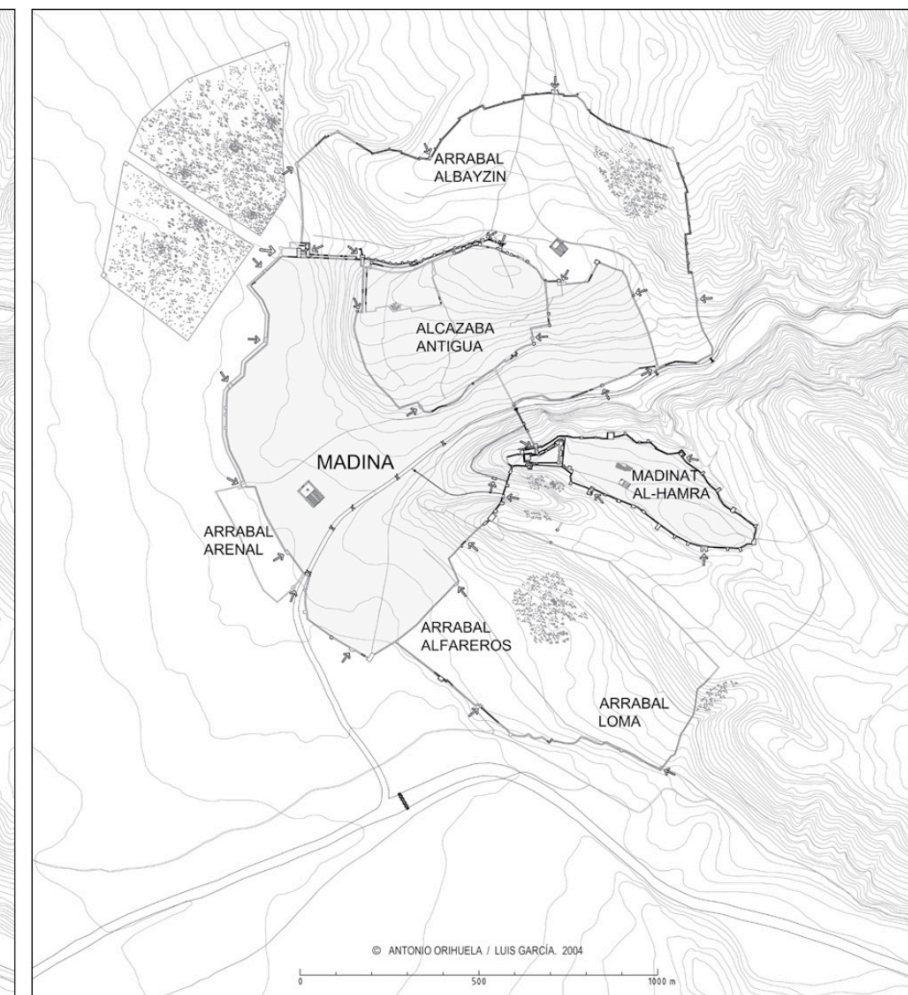




Figure 2<sup>11</sup> Section of the Acequia Real (T.F. Editores)

## Part 2, Water Infrastructure: When in Rome...

Since the Sabika is an isolated mountain spur, with no access to runoff or exploitable groundwater levels,<sup>14</sup> the Nasrids needed to collect water from somewhere else in order to sustain the Alhambra. They therefore “tapped” icy river waters from Sierra Nevada snowmelt by damming the Darro River at an upstream location above the elevation of the Alhambra<sup>15</sup>. In 1238 Muhammad I opened the *Acequia Real*, a *qanat*-style aqueduct, to supply water to his new palatine city as well as the farms and the Generalife along the same path. To increase the Alhambra’s water supply in the late 1300s, Muhammad V opened a parallel qanat, the *Acequia de los Arquillos*.<sup>16</sup> The Nasrids stored collected water above the Alhambra, next to the highest part of the Generalife, in a 400 cubic meter *alberca* called the *Alberc3n de las Damas* (The Ladies’ Pool). It supplied the adjacent 1.5-hectare orchard,

Figure 2<sup>12</sup> Acequia Real.



the *Huerta de la Merceria* (Haberdasher’s Orchard), and the Alhambra below. An animal-powered *saqiya*, or waterwheel, pumped out water for the Alhambra from a 19-meter deep cistern below the reservoir, which was covered by a protective tower. A bridge would then shuttle the water over the *Rey Chico* and water would enter the Alhambra through the *Torre del Agua* (The Water Tower). Limestone channels at ground level would distribute water gravitationally to various parts of the complex.



Figure 2<sup>13</sup> Alberc3n de las Damas water tank (T.F. Editores)



Figure 2<sup>14</sup> Acequia Real (T.F. Editores)

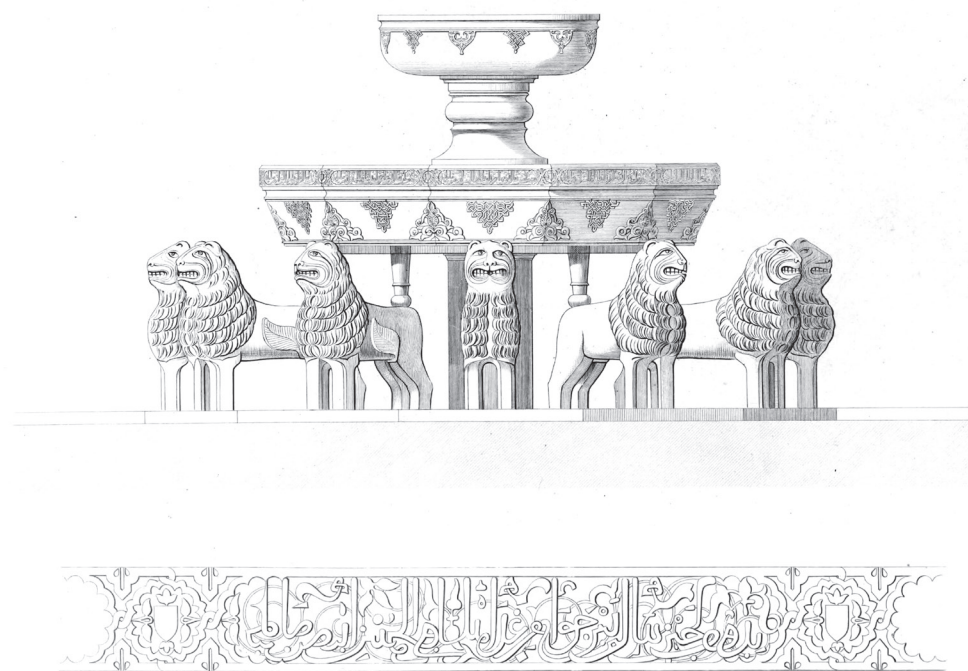


Figure 215 Fountain of the Lions (Goury, Jones and Gayanos)

Evidence inscribed within the Alhambra suggests that water was not just meant for basic uses like drinking, cooking, washing or irrigating. An excerpt from the poem on the Fountain of the Lions in the *Palacio de los Leones* speaks to this:

*...Melted silver flows through the pearls,  
to which it resembles in its pure dawn beauty.  
Apparently, water and marble seem to be one,  
without letting us know which of them is  
flowing.  
Don't you see how the water spills on the basin,  
but its spouts hide it immediately?  
It is a lover whose eyelids are brimming over  
with tears,  
tears that it hides from fear of a betrayer.  
Isn't it, in fact, like a white cloud  
that pours its water channels on the lions ...*

Indeed, within the Islamic tradition, water has always had broader use and carried deep symbolic meaning. From immersion pools in bathhouses to fountains in courtyards, Muslims would use water to cleanse soul and body, create visual and aural sensations to animate an arid climate, symbolize purity, and cool the hot air through evapotranspiration and aeration<sup>17</sup>.

Techniques used at the Alhambra for collecting, storing and moving water originated with techniques to convert the parched lands of the Middle East and North Africa into verdant oases. The basic infrastructure

for water collection was a type of aqueduct called the *qanat*. Contrary to the conventional Roman aqueduct, which was often elevated and expensive to build, the qanat runs underneath the ground to prevent evaporation in the desert sun. Where rainfall is scarce, a vertical mother well at a high elevation collects water from a stream, a spring, a dam or a volcano. Vertical siphons, positioned every 50 meters or so, provide aeration and air for miners.<sup>18,19</sup> Qanats first appeared in Iran during Achaemenid Empire (a Mesopotamian dynasty between 4<sup>th</sup> – 6<sup>th</sup> Centuries BC) but probably existed even earlier. In later centuries, the Romans propagated the qanat for the purposes of both irrigation and mining, carried it through North Africa, and calculated the perfect slope for the steady flow of water.<sup>20</sup> Other components of this hydraulic system included reservoirs called *albercas*, which would simultaneously store, cool, and decant the water of impurities<sup>21</sup>; and wells to extract and redistribute the water using *saqiya*.<sup>22</sup>

When nomadic Arab culture became sedentary, it internalized the value of water.<sup>23</sup> In the 7<sup>th</sup> Century, Muslim Arabs conquered an arid territory that encompassed the Arabian Peninsula, Syria, Jordan, the Anatolian Plateau, much of Iran, and much of North Africa. In these regions only ten percent of water penetrates the ground and irrigation is required to grow anything beyond drought-tolerant crops like dates and olives. To begin growing fruits, grains and vegetables they built upon Roman precedents and became skilled at collecting and using water. This led to agricultural surplus, which in turn led to trade that created a strong link between the country and urban market centers. Consequently, Syria and Jordan “bloomed” with agricultural estates.<sup>24</sup>

In the dry Andalusian climate, collection still depended on wells or aqueducts. Once they reached Iberia, the Umayyads similarly utilized and improved upon derelict Roman infrastructure. The palatine *Madinat al-Zabra'* obtained water from a branch of

Figure 216 Diagram of how a qanat functions to collect water (Sullivan)

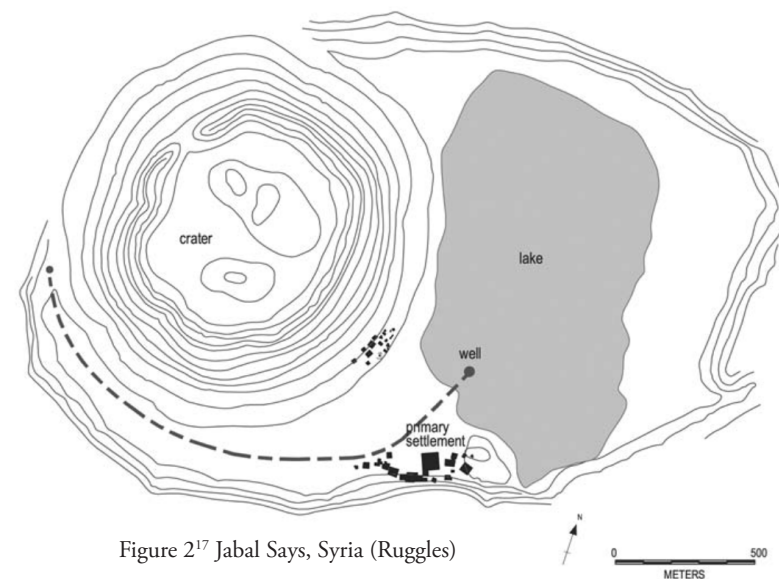
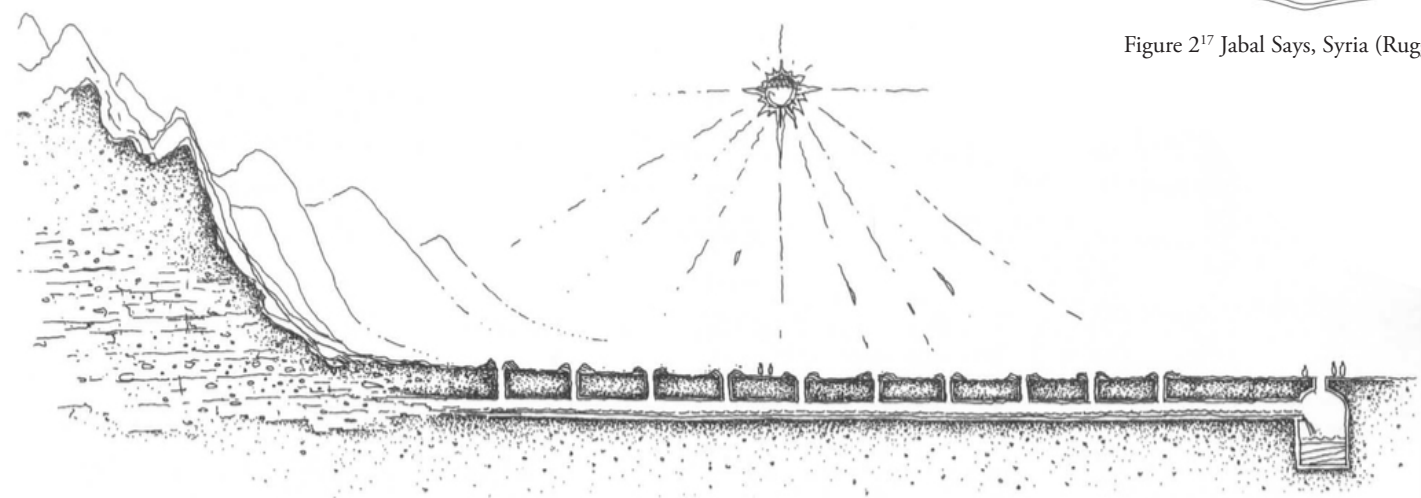
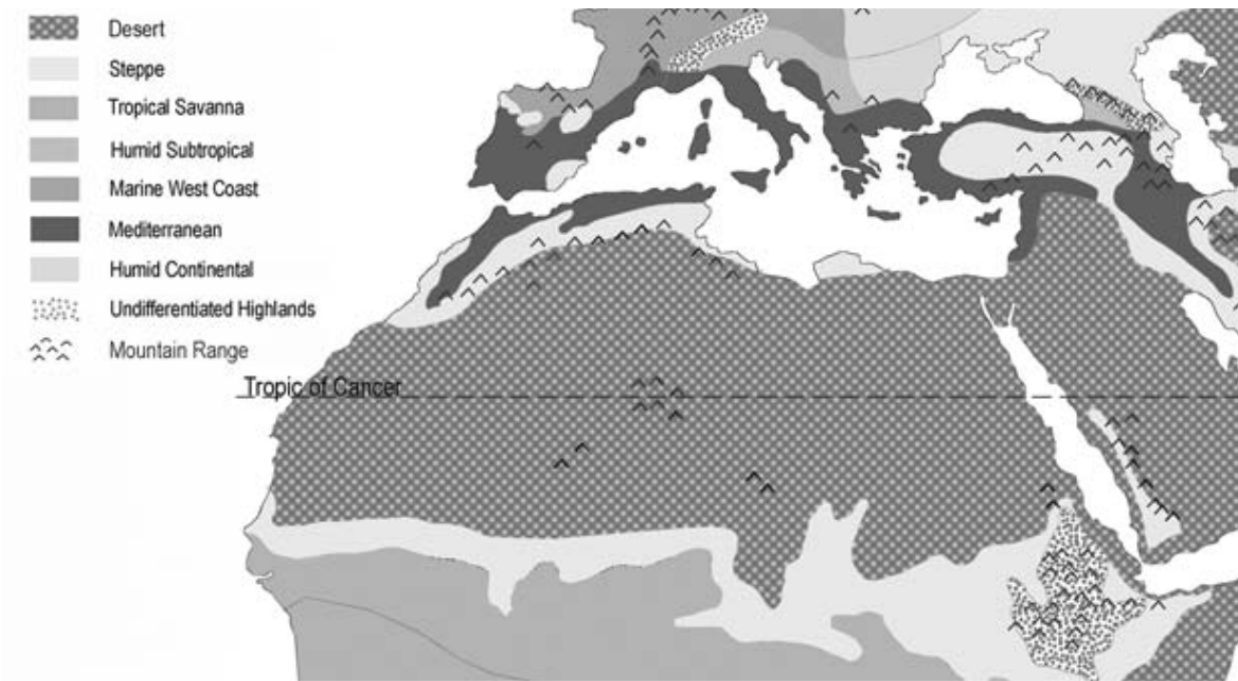


Figure 217 Jabal Says, Syria (Ruggles)

Figure 218 Climate map of Islamic world (Ruggles and Variava)



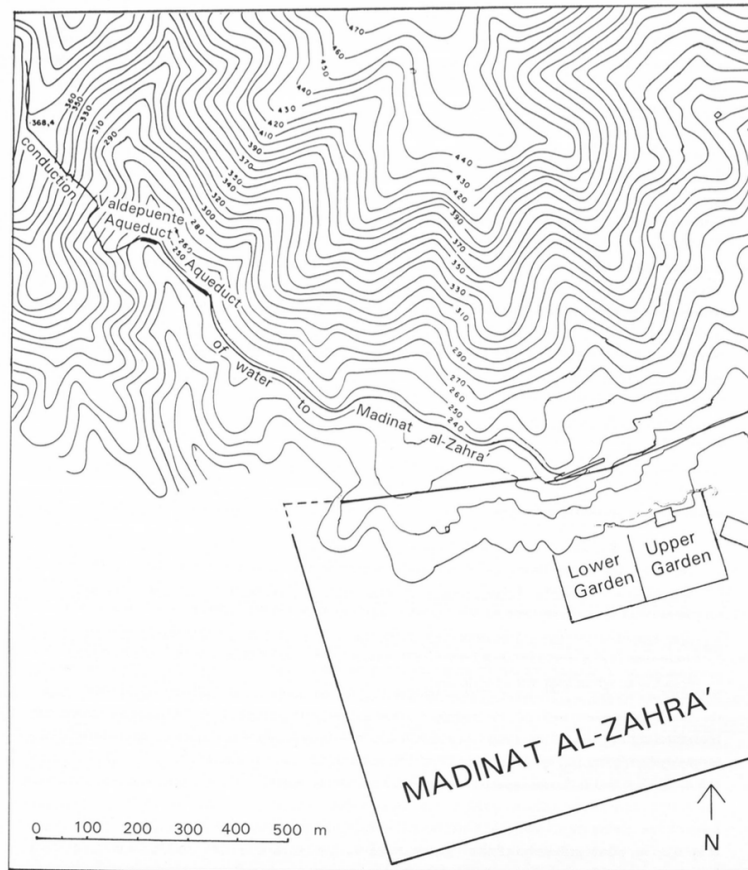


Figure 219 The Conduction of Water to Madinat al-Zahra (Ruggles)

the *Vadepuentes*, an improved version of a 18.6 km-long Roman aqueduct that had been graded to flow at a steady rate.<sup>25</sup> Eventually, all Andalusian homes had a central water feature and water was considered public property.<sup>26</sup>

In Granada, the Arabs similarly revitalized old infrastructure that the Romans had used to mine the *Cerro del Sol* starting in the 2<sup>nd</sup> Century BC.<sup>27</sup> Before there were any palaces on the Sabika, water was supplied to the *Alcazaba Cadima* and hillside neighborhood of the Albaicín via the *Aynadamar* channel, diverted from the Darro River eight kilometers upstream<sup>28</sup>. The *Acequia Real* and *Acequia de los Arquillos* simply echoed techniques used by the *Aynadamar* channel to the north of the river.



Figure 221 Alhambra. Elevation view from the Torre de las Infantas to the Torre de la Vela.

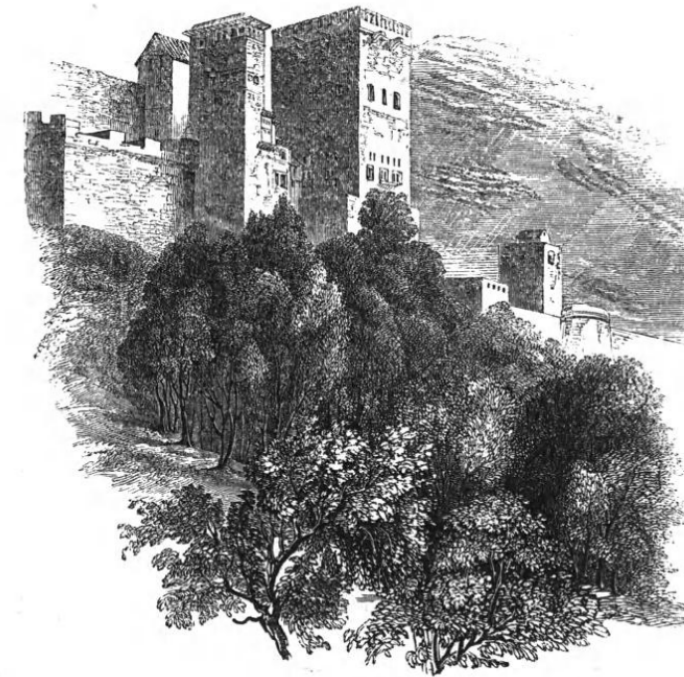


Figure 222 Tower of Comares (Goury, Jones and Gayanos)

### Part 3, External Structure: The Shell of the Geode

From below the Sabika, all that a visitor to Granada can see of the Alhambra is a fortress-like stone, stucco and turreted exterior. But if Nasrid Granada survived primarily based on diplomacy, the explanation for the Alhambra's walls as a formal defense mechanism only stretches so far. To be fair, its military aesthetic did originate in its beginnings as an Almohad military outpost in the turbulent political climate of the 10<sup>th</sup> Century. Its first structure, the *Alcazaba*, was exclusively military, and most of the Alhambra's "defensive" outer walls were erected well before the main palaces.<sup>29</sup> But during the Nasrid era, its only use for formal defense would have been as a refuge for aristocracy while the Alhambra's Berber guard would squash popular uprisings in the lower city.<sup>30</sup> Muhammad V's court poet Ibn Zamrak offered an alternative interpretation: "the Sabikah is a crown on Granada's forehead...and the Alhambra (may God watch over it) is the ruby on top of that crown."<sup>31</sup> Since the "ruby" was essentially hidden on top of the "crown," the structure of the Alhambra functioned similar to a geode, with a rough, impenetrable outer crust that masked its inner brilliance<sup>32</sup>. The purpose of this outer crust was then twofold: *hierarchical separation* and *climatic enclosure*.

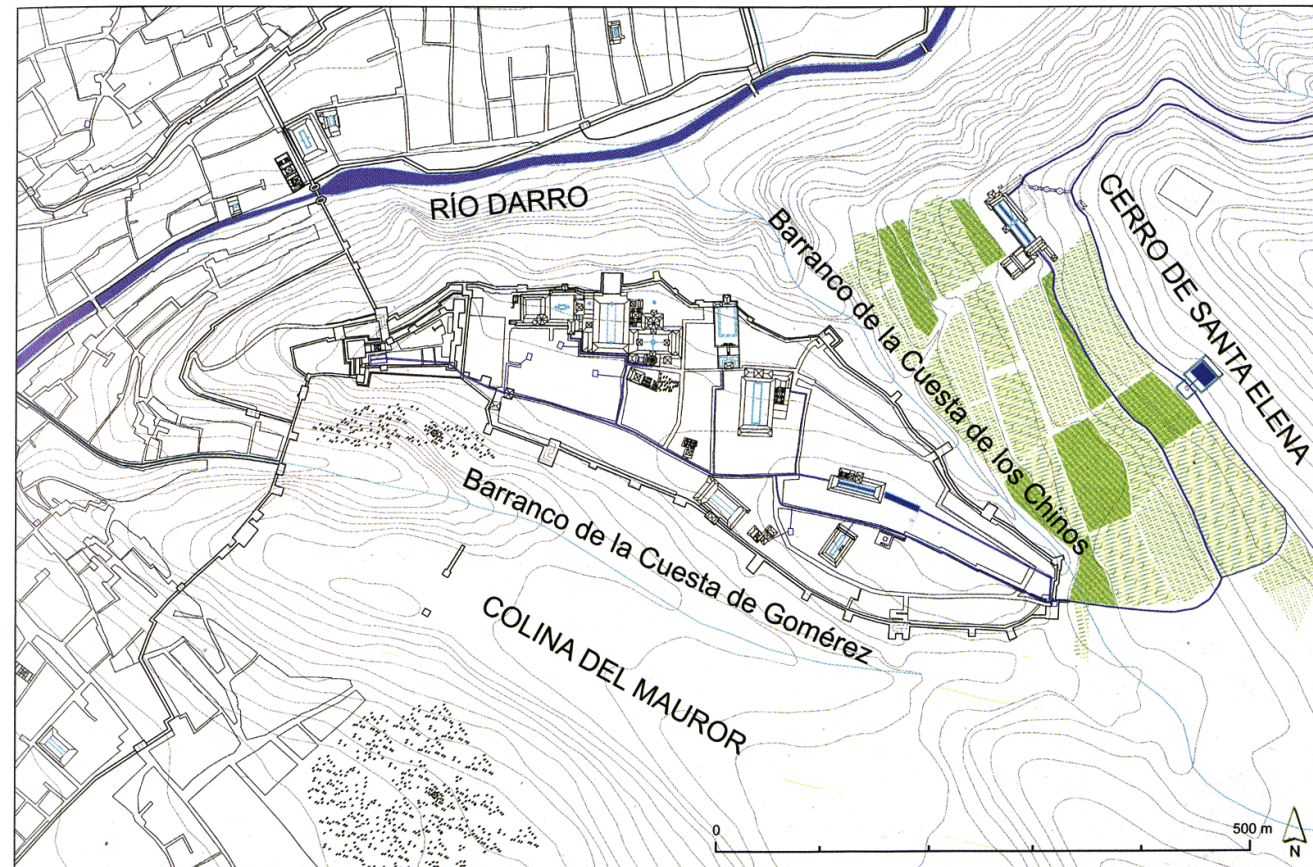


Figure 220 Landforms that delimit the walled fort of the Alhambra (García-Pulido)

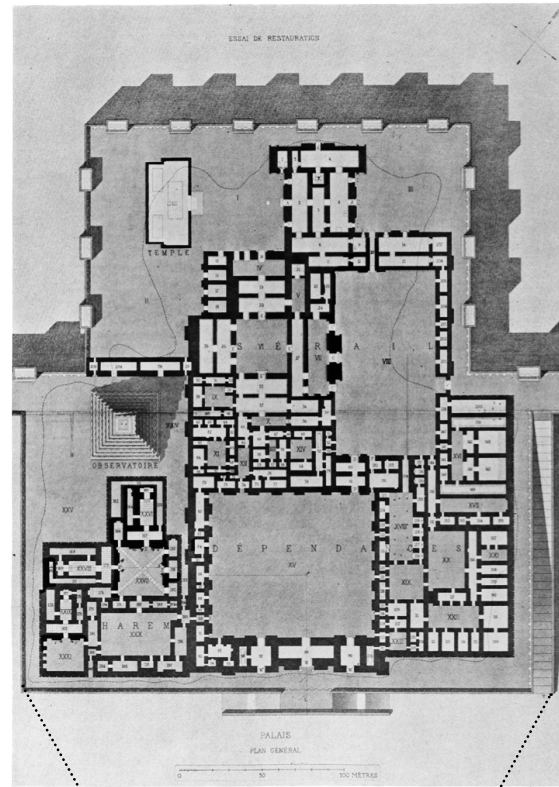


Figure 2<sup>23</sup> Restored plan of Sargon's Palace (Loud)

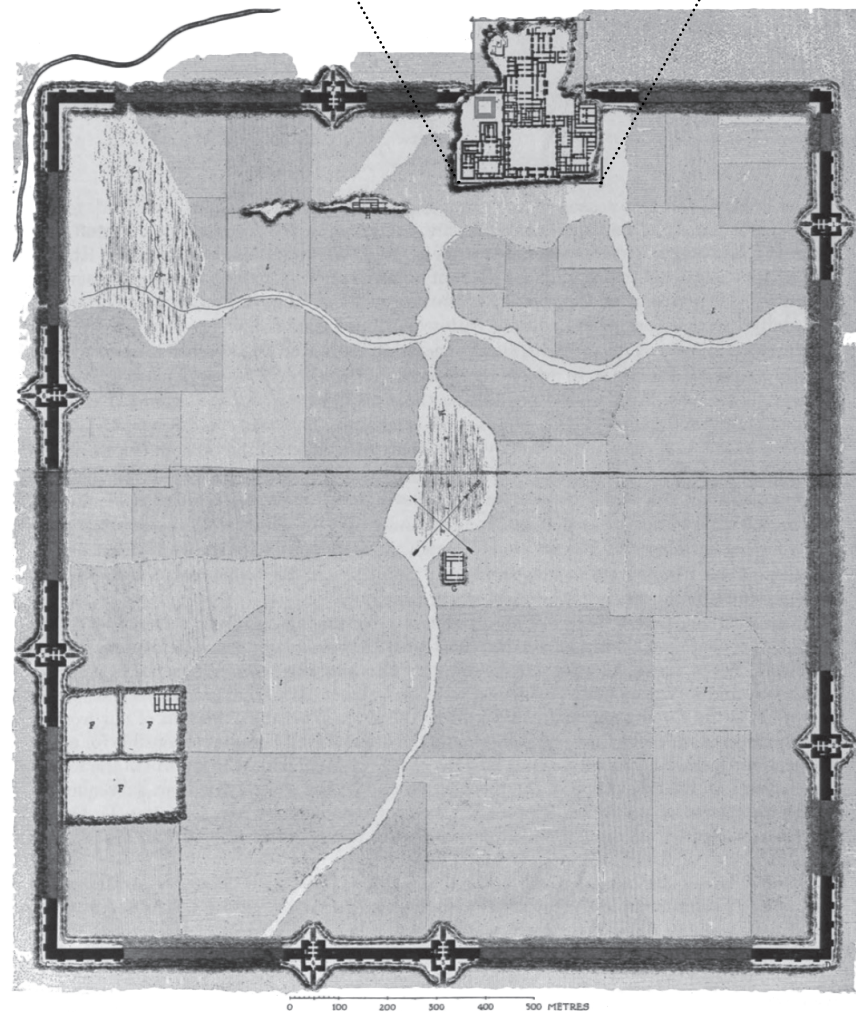


Figure 2<sup>24</sup> Plan of the City and Palace of Khorsabad (Loud)

The use of fortress-like walls for *hierarchical separation* at the Alhambra echoed the tradition of the royal city within a larger urban center.<sup>33</sup> By the nature of urban agglomeration, cities in the ancient and medieval worlds were composed of different ethnic stocks and sectarian allegiances.<sup>34</sup> Separating them spatially signified power and authority of one group over another. One of the earliest examples of this structural separation was the palace of *Dur-Sharrukin*, built by Sargon II in Khorsabad, Iraq in 717-706 BC. Furthermore, the advent of emperors who began as soldiers starting in the late 2<sup>nd</sup> Century AD led to a militarization of architectural taste.<sup>35</sup> Cities containing walls that were not fortifications but designed to isolate the royal world from the world of mere mortals subsequently appeared in Rome, Byzantine Constantinople, Ottoman Istanbul, and Abbasid Samarra.<sup>36</sup> In the 10<sup>th</sup> Century, “princely life of occasionally high luxury in fortified citadels” appeared in the walled cities of Aleppo, Jerusalem, Damascus, and Fatimid Cairo.<sup>37</sup> In the context of the Alhambra, its fortifications and elevation made very clear the distinction between Arab and Jewish administrators and the Berber and Christian proletariat of the lower city.

Additionally, the thick walls of the Alhambra served to *enclose a microclimate*. It helps to conceptualize the massive structure as an artificial cave full of cavities and chests.<sup>38</sup> The masonry around the palaces—crafted by ramming the clay found in the Sabika into a sort of concrete that would fit together with the hill using a Velcro-like friction—was excellent for storing and tempering the sun's radiant heat.<sup>39</sup> Because the mass of this masonry would take a long time to cool or heat up, in summer months it would maintain the cool of night well into the day, while in winter months its southern and western surfaces would store the heat of the sun and re-radiate to immediate areas throughout the day and night.<sup>40</sup> Until at least the early 14<sup>th</sup> Century, its external walls also had a whitewash coat that would reflect the heat of the sun.<sup>41</sup> Window perforations in the walls were kept small to facilitate ventilation.

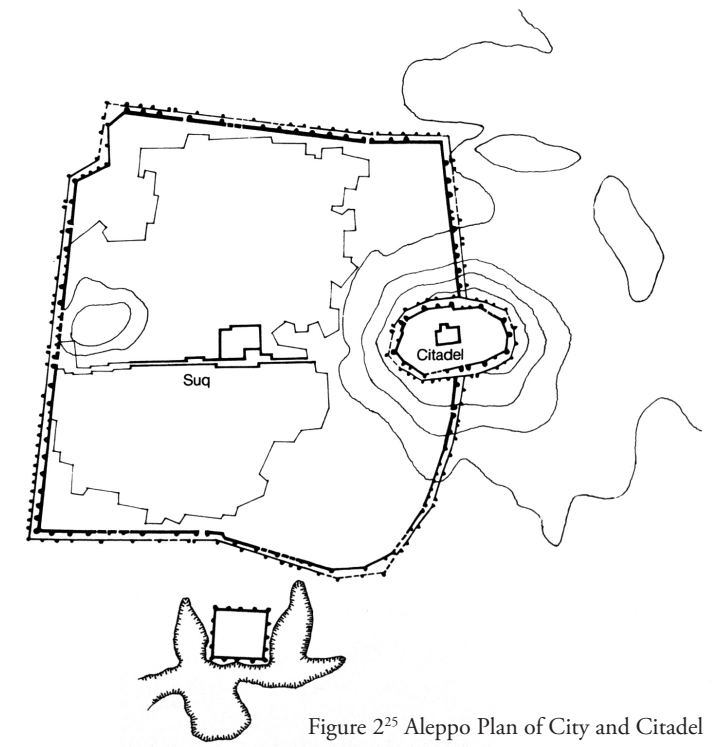


Figure 2<sup>25</sup> Aleppo Plan of City and Citadel (Grabar)

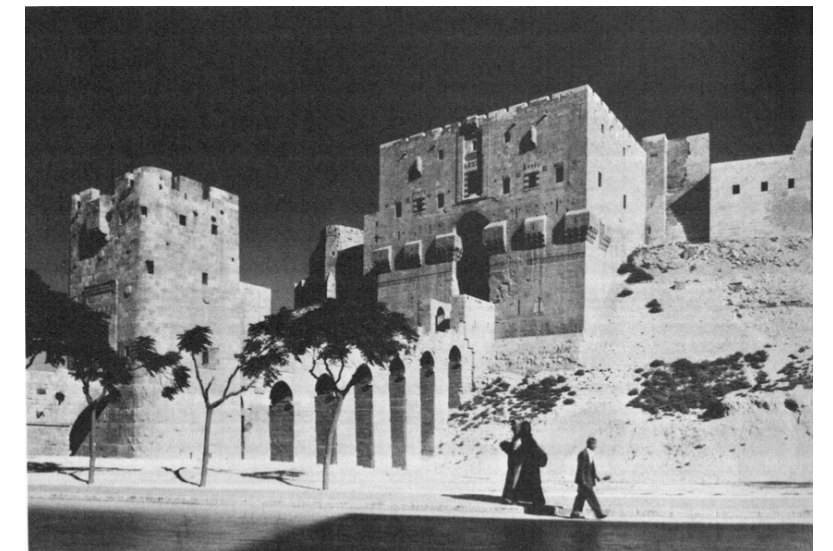


Figure 2<sup>26</sup> Aleppo, Citadel (Grabar)



Figure 2<sup>27</sup> Nasrid rammed earth wall in the Alcazaba fort (Grabar)

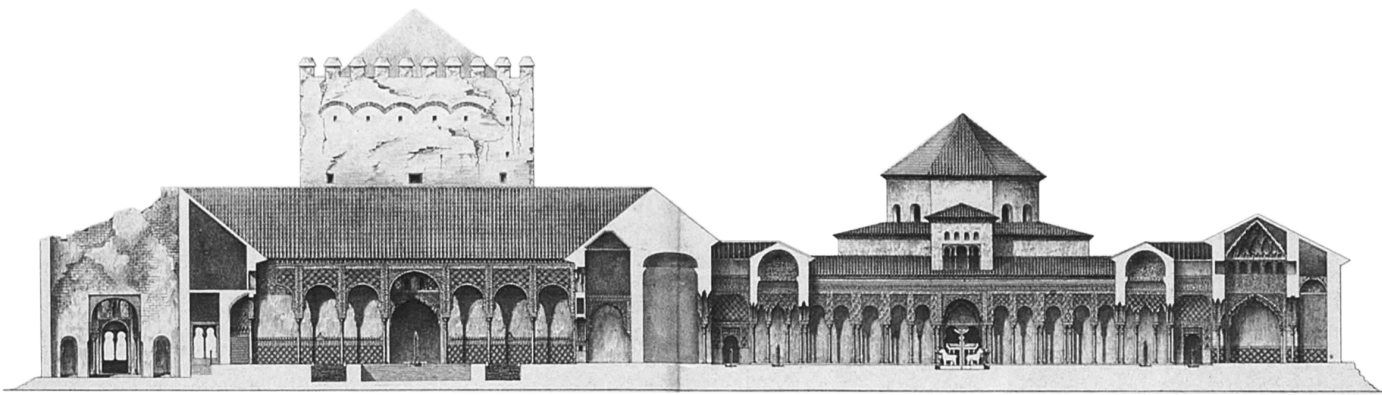


Figure 2<sup>28</sup> Section of Alhambra Palaces (Prangey)

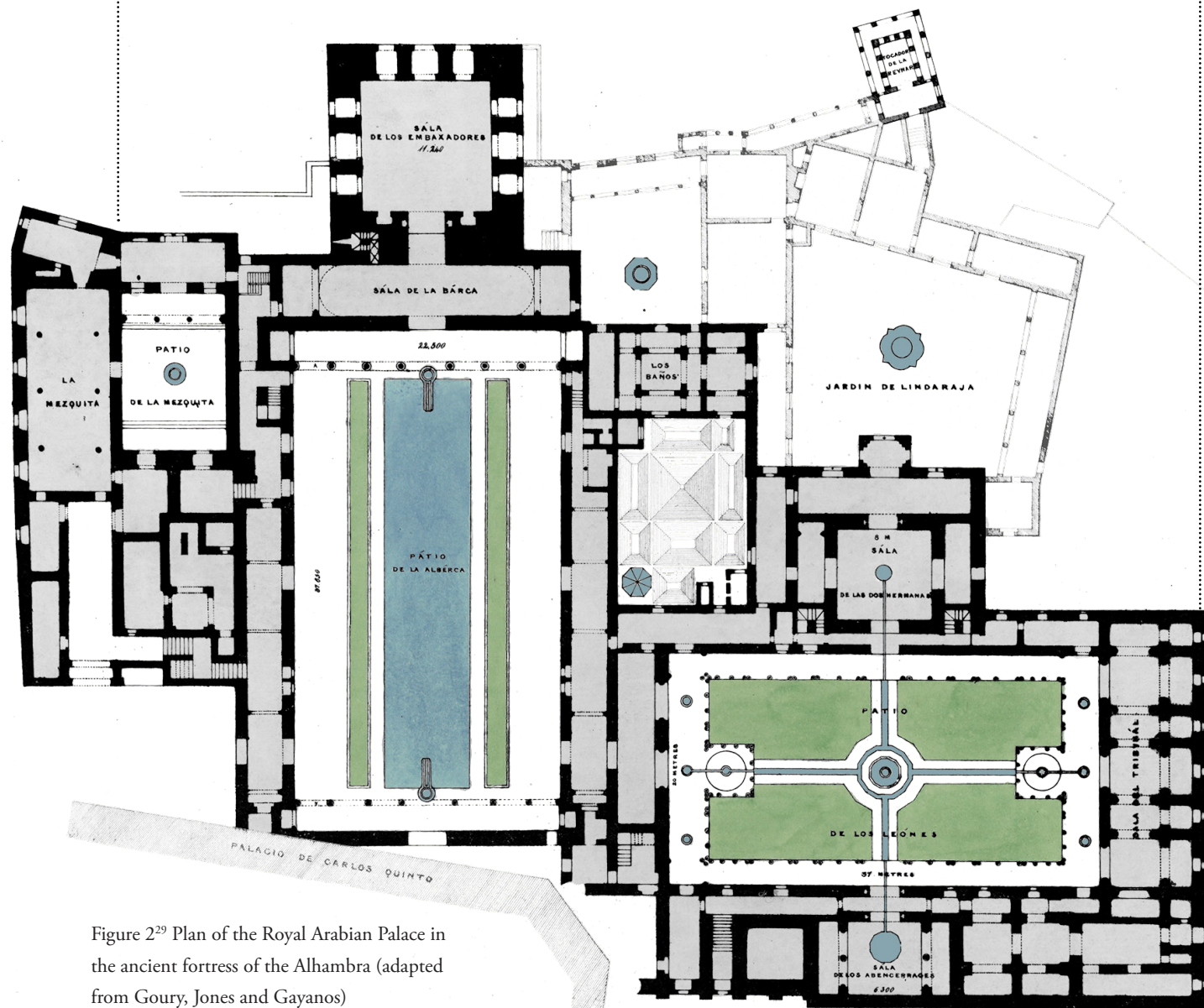


Figure 2<sup>29</sup> Plan of the Royal Arabian Palace in the ancient fortress of the Alhambra (adapted from Goury, Jones and Gayanos)

Escala de 0 5 10 20 30 metros.  
Scale of 0 5 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150 feet.

## Part 4, Internal Structure: The Garden Dwelling

The magnificent center of this geode is the garden dwelling: a complex system of shady *riyad*, or courtyard gardens, alternating with open-air interior spaces. These dwellings were built iteratively over centuries, often on top of earlier structures. The most worthwhile examples for us to study exist within the Alhambra's two most complete and latest Islamic palaces, the *Palacio de Comares* and *Palacio de los Leones*.



Figure 2<sup>30</sup> Morshed, Alhambra, Palace of the Myrtles, Court of the Myrtles.

### *Palacio de Comares*

(Comares Palace, finished in 1370)

The grand interior of the *Palacio de Comares* contains the *Patio de los Arrayanes* (Court of the Myrtles), an enclosed garden courtyard measuring 35 by 20 meters. Muhammad V built this on top of an older garden that had the same plan,<sup>42</sup> similar to the courtyard at the earlier *Palacio del Partal* built by Muhammad III in 1302-1309. Galleries (also known as loggias or arcades) with 9-meter tall arches frame the short ends of the courtyard. Its orange trees and rows of myrtles probably reflect the original plantings. Two vertical jet fountains shoot up from the short ends of a large rectangu-

lar pool in the center in the center of the space that, if gazing into it from the south, will reflect the *Torre de Comares* (Comares Tower) to the north. This tower, at 45 meters tall, is the largest and highest external tower of the Alhambra. Inside the tower is the *Salón de los Embajadores* (Hall of Ambassadors), Muhammad V's 11.3-meter square, 18.2-meter high reception hall and throne room.<sup>43</sup> Its walls are 3 meters thick. It is open to the Andalusian landscape at 2-meter wide arched viewing alcoves, or *miradors*, in its eastern, western, and northern walls, both at floor level and up high.

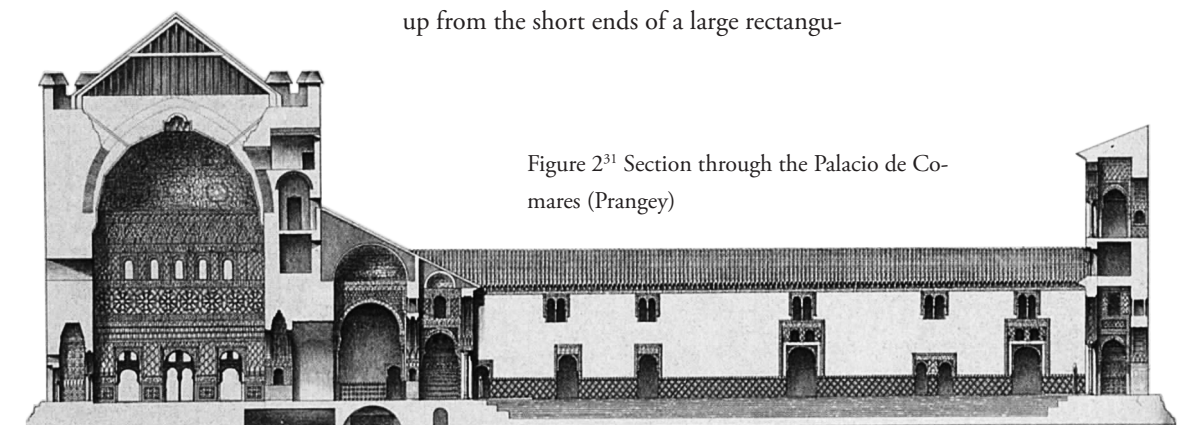


Figure 2<sup>31</sup> Section through the Palacio de Comares (Prangey)





Figure 2<sup>32</sup> Patio de los Leones (Moody)

### Palacio de los Leones

(Palace of the Lions, built 1370 – 1390)

Inside the *Palacio de los Leones*, Muhammad V constructed the *Patio de los Leones* (Court of the Lions)—also over an earlier garden.<sup>44</sup> At 28.5 by 15.7 meters, it contains a classic *chahar bagh* quadripartite layout, with four rectilinear channels and narrow walkways dividing the court into four sunken quadrants. Beginning at small circular ground level pools, water cascades down steps in the channels to the central water feature, a large basin supported by 12 stone lions. Today the quadrants are shallow with little vegetation, but historically they were deep-

er and planted so that from a seated position a person's view would skim the tops of flowers.<sup>45</sup> Surrounding galleries sport 124 white marble columns and each side projects a pavilion, or a kiosk, that offers additional shade. On its northern end, a series of rooms end in a projecting viewing pavilion called the *Mirador de la Lindaraja* that, in the 14<sup>th</sup> Century, looked over a lower garden and beyond to the hills of the Albaicín.

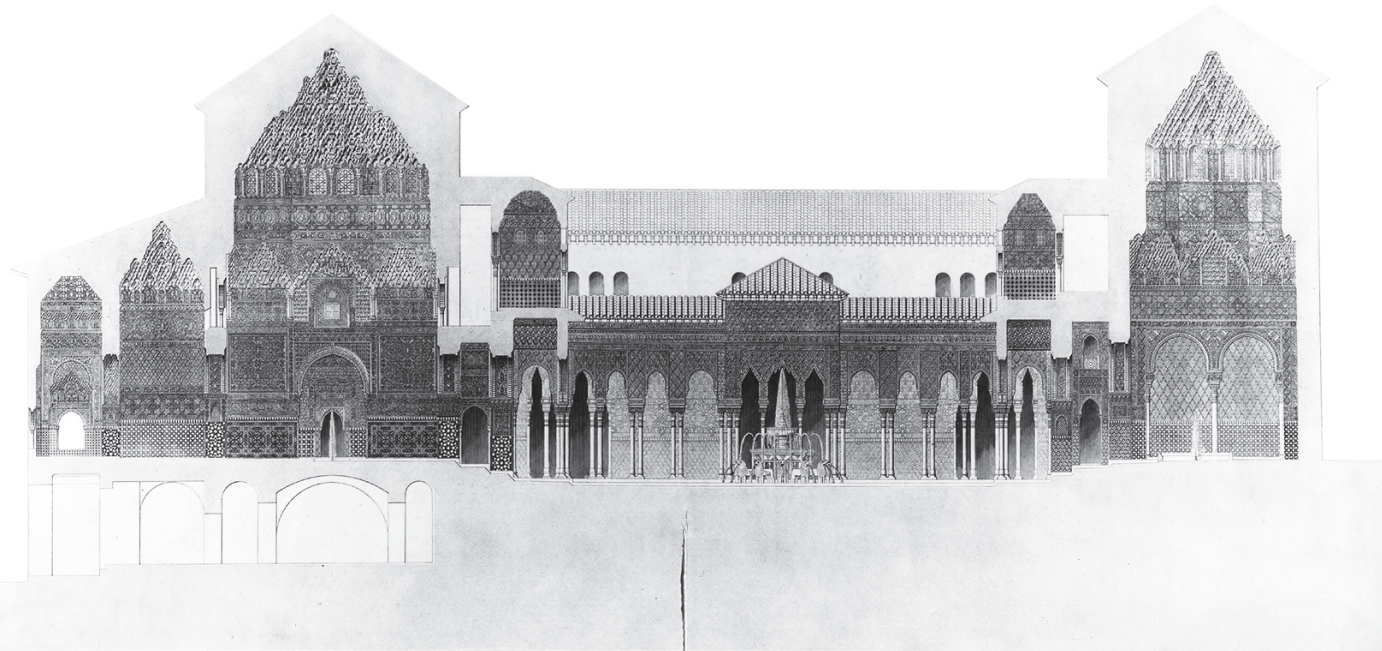


Figure 2<sup>33</sup> Section through the Hall of the Two Sisters, Court of Lions, and Hall of Abencerrages (Goury, Jones and Gayanos)

To begin to “read” the language of these royal dwellings, we must again venture back in time. Both palaces echo another historical, “typological union;” this time between the the *chahar bagh*, the *Bedouin campground*, and the *mirador*.

Contrary to the Japanese garden, which is balanced asymmetrically around compositions of *yin* and *yang*, the Alhambra's *chahar bagh* gardens depend on a concentrated source of water and radiate “from cool, shady centers to become dense, symmetrical, inward-looking oases.”<sup>46</sup> They not only symbolize the concept of paradise in the Qur'an, but they also symbolically reflect a lineage of geometric efficiency in irrigating arid landscapes.

In the *chahar bagh*'s most formal quadripartite shape, as in the *Patio de los Leones*, cross-axial walkways or watercourses intersect at the center and radiate in four directions. It is often further divided or simplified by reducing its symmetry to a single long rectangle with central watercourse, as in the Generalife's *Patio de la Acequia* (Court of the Aqueduct), or its canal widened to a reflective pool, as in the cases of the Alhambra's *Palacio del Partal* or *Palacio de Comares*.<sup>47</sup>

Ruggles claims that the Islamic version of the *chahar bagh* seen in the Alhambra was Syrian in origin, not Persian as previously supposed. However, as Gharipour asserts,

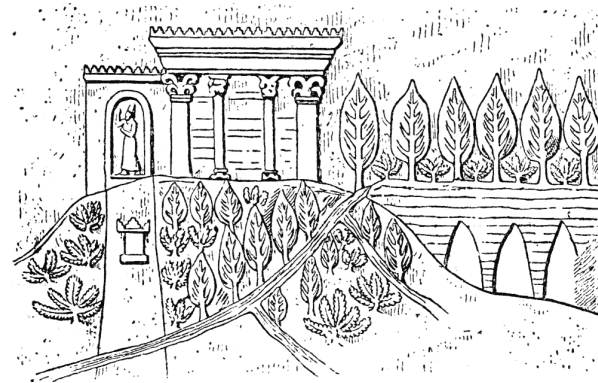
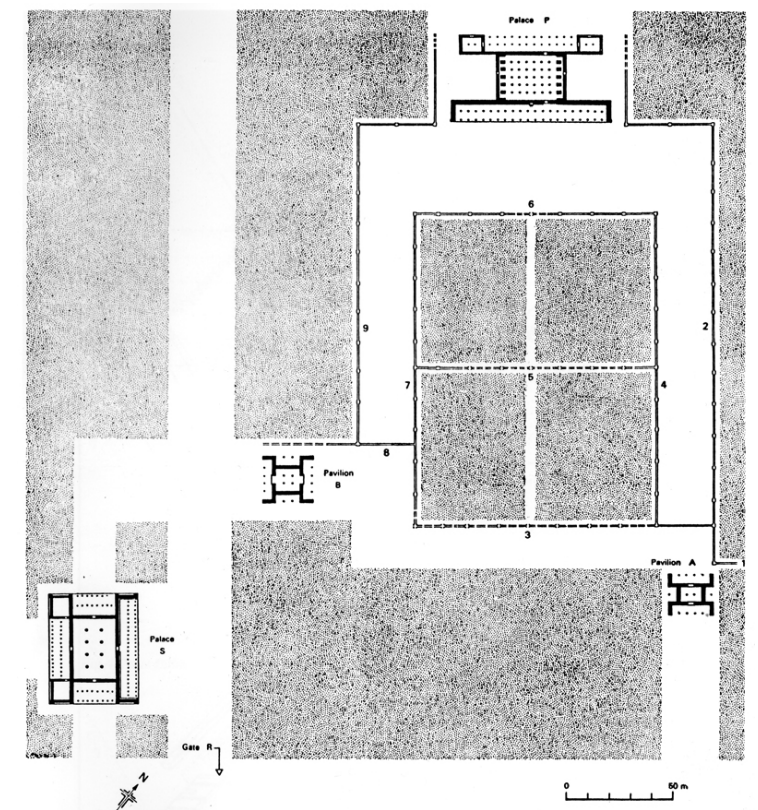


Figure 2<sup>34</sup> Hanging gardens, bas relief from the North Palace of Ashurbanipal (669–631 BC) at Nineveh

“different cultures in the Near East have always influenced one another through trade, travel, immigration, and war.”<sup>48</sup> The Ancient Egyptians supposedly constructed the first gardens, inspired by their lush fruiting oases, irrigated orchards, and farm fields. Repetition and straight lines required for Egyptians to efficiently irrigate their arid lands had a profound influence on garden form.<sup>49</sup> Mesopotamian and Egyptian texts do not make specific reference to structural elements in gardens, but they provide evidence for pleasure gardens and hunting parks as independent retreats or micro-paradises.<sup>50</sup> The *Epic of Gilgamesh* (2650 – 2550 BC) mentions palm gardens enclosed by walls, while the *Enuma Elish* (1700 BC) emphasizes the sacredness of water and

watering plants. The *Code of Hammurabi* (1792-1750 BC) actually gives specific rules for gardens and fields as resources for money (via subdivision and ownership) and food. Zoroastrian texts (13<sup>th</sup>-6<sup>th</sup> Century BC), such as the *Vendidad*, bless trees, plants, flowers and rivers and strongly encouraging people to cultivate. The *Story of Genesis* (late 7<sup>th</sup> or 6<sup>th</sup> Century BC) specifies a “river flowing from Eden, to water the garden, branched into four streams”; this is the first instance where the concept of heaven was attached to the garden and natural elements like water, plants and trees.<sup>51</sup> Some reconstructions suggest that the Pasargadae royal garden (546-29 BC), built by Cyrus the Great (ca. 600-530 BC) of the Achaemenid Empire (the first Persian empire, 550-330 BC), contained the first quadripartite *chahar bagh* design.

Figure 2<sup>35</sup> Pasargadae (Stronach and Gopnik)



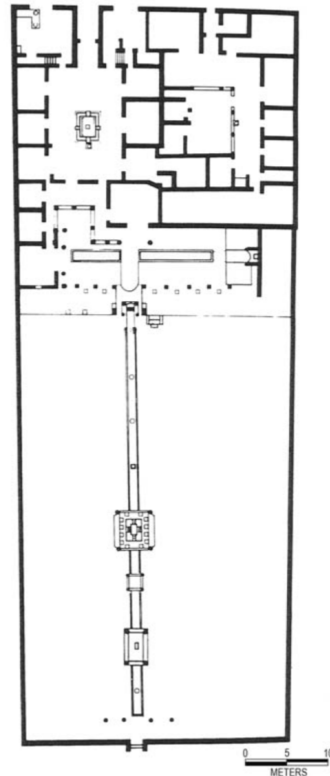


Figure 2<sup>36</sup> House of Marcus Loreius Tiburtinus in Pompeii (Ruggles)

The Persian *chahar bagh* made its way into the Roman courtyard by way of the Parthian Empire (247 BC - 224 AD), which had borrowed traditions from Classical Greece, itself influenced by Persian culture. In the Roman Empire, it was expected that grand houses would contain a garden. These would often be organized on a single linear axis, contain fountains, and be surrounded by porticos or colonnaded loggias leading to open-air rooms. A nuanced gradient between indoor and outdoor spaces would start to challenge the concept of home and garden as separate entities. Frozen in time in the eruption of Mount Vesuvius in 79 AD, the garden dwelling of Marcus Loreius Tiburtinus contained a central feature suggesting a lateral axis, and therefore, a formal cross-axial garden.<sup>52 53</sup>

Gardens mentioned in the Qur'an reflected the contrast between the hot and dry desert of the Prophet's homeland with a shady paradise of flowing water and cool breez-

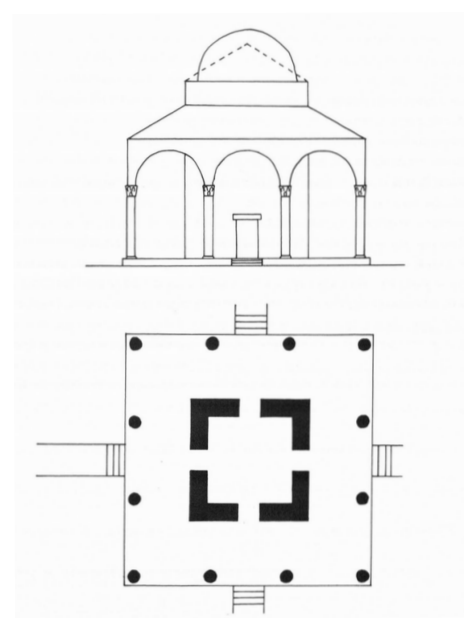


Figure 2<sup>37</sup> Central pavilion in garden in Rusāfa, Syria (Ruggles)

es.<sup>54</sup> This paradisiac connotation comes directly from the pre-Islamic Sasanian Empire (224-651 AD), which integrated the concepts of heaven and hell with the Garden of Eden under the influence of Christian thought. In this context, heaven became equated with comfort and pleasure. The Qur'an finally integrated the concepts of paradise as garden and Garden of Eden, and gave a clear description of the paradise garden as a reward for the righteous.<sup>55</sup> It even mentions pavilions and specific places where people could have pleasant views of the garden.<sup>56</sup>

Architectural articulations at the edges of the central pavilion in Hishām's *Madināt al-Rusāfa* in Syria (724-743) indicate the earliest dated cross-axial example in Islamic world.<sup>57</sup> Abd al-Rahmān I probably transmitted the cross-axial plan to Iberia, since Córdoba's first Islamic estate, *Munyāt al-Rusāfa*, was named and modeled after his grandfather's palace.<sup>58</sup>

It is important to note that by the 12<sup>th</sup> and 13<sup>th</sup> Century, Islamic and Christian gardens in al-Andalus were hard to distinguish from each other.<sup>59</sup> The peristyle garden simultaneously evolved in Christian Europe into the *cortile* and monastic *cloister*, as monks often inhabited derelict Roman structures with a central courtyard and sometimes a fountain or a well. Similar to the Hispano-Islamic context, the purpose of these spaces was flexible; it could function for both physical or mental health, study or meditation.<sup>60</sup>

Organization of Alhambra's internal structure into multifunctional, partitioned spaces is an inspiration from the *Bedouin campground*. Despite structural distinctions between the Alhambra's spaces, it is "almost impossible to assign precise functions to individual parts of the ensemble."<sup>61</sup> For example, Muhammad V's *Salón de Comares* was both throne room and event space, while his *Sala de la Barca* was both bedroom and lounge. The only single-use exceptions within the Alhambra's palaces are the *Cuarto Dorado* entryway, the bathhouse, and the oratories. The reason for this was that Islam's earliest converts were Bedouin Arabs, nomadic tribes that historically traversed the deserts of Arabia and Syria. Bedouins dwelt in tent campgrounds which were organized spatially based on hierarchy and trade.<sup>62</sup> They conserved tent space by maintaining that the only useful spaces were those with different uses.<sup>63</sup> During Islam's expansion into post-Roman territory and qanat technology allowing the garden into more remote areas, the

campground concept merged with the inward-facing garden courtyard. The Islamic garden was therefore an incredibly flexible space, hosting anything from supreme relaxation and secret conversation to major cultural and political events.<sup>64</sup>

*Miradors* for surveying the Andalusian landscape from within the Alhambra can be traced directly to *Madināt al-Zahra* (936-1010), Abd al-Rahman III's game changing palace at Córdoba. Located where two axes of the garden meet or where one of them terminates, the mirador seriously challeng-



Figure 2<sup>38</sup> Encampment in the Sahara near the Atlas mountains (Facts and Details)

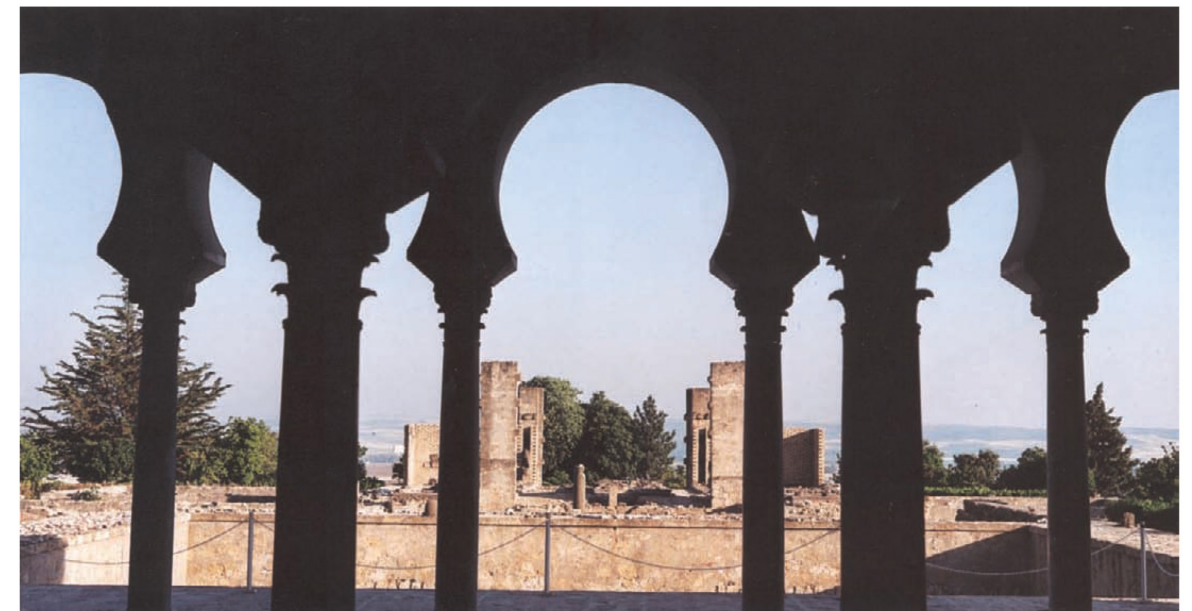


Figure 2<sup>39</sup> Madināt al-Zahra', Salón Rico, view onto Upper Garden (Ruggles)

es the idea of the garden as "an enclosed, private space." Born of the Abassid taste for "spectacle and spectatorship," it objectified the view of the garden and landscape and replicates social centrality of king as its

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