The Archaeology of Medieval Europe

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by Julio Navarro Palazón & Pedro Jiménez Castillo

For a map and historical framework of al-Andalus, please see Ch 1, p 19.

Houses: History of Research

While some written records do mention the medieval Andalusian house, they are not very informative. Chronicles and poetry refer mainly to princely dwellings and legal documents tend to be ambiguous. Other texts, such as the inventory of properties belonging to the churches of Granada in the beginning of the sixteenth century, contain relevant information, but must be used with caution as they reflect the situation after the Castilian reconquest. However, the form and function of the Islamic house is becoming better known through archaeology. Archaeology can establish the plan of a house, the use of the rooms and the way the house interacts with the rest of its settlement area, in both town and country. These studies should lead to a greater understanding, not just of practical and technical matters relating to construction, but of the social organization that reflect the way space was structured.

We still know very little about the houses of the Emirate period (eighth-ninth century). In recent years archaeologists have made contact with remains in the countryside at Majada de las Vacas (Granada) and Peñaflor (Jaén) and in modern cities such as Valencia, Mérida and, especially, Córdoba, where a large area of the Segunda district has been uncovered, abandoned in the early ninth after the notorious “revolt of the suburbs” (revuelta del arrabal). The information available from the Caliphate (tenth
century) is significantly fuller, provided especially by the splendid courtly city of Madinat al-Zahra, the site of Pechina (Almería) and, more recently, traces of houses that have appeared in urban excavations in Córdoba and Murcia. The Taifa period (eleventh century) includes houses in Vascos (Toledo) and the interesting urban complexes recently unearthed in Zaragoza.

Archaeological knowledge of architecture in the twelfth and thirteenth centuries, including that of citadels and palaces, has experienced a quantum leap (Navarro 1995), and the domestic residence in particular has been illuminated by the study of dwellings in the abandoned town of Siyása (Navarro 2002; Navarro & Jiménez 2007b) (Fig 4.12). There are other sites known in the countryside, such as Yecla (Ruiz 2000) and Calasparra (Pozo 2000) – while in towns most contact has been via rescue archaeology, for example in Valencia, Denia, Orihuela, Elche, Lorca and Murcia. In Gharb al-Andalus (the West) the most important archaeological sites for domestic architecture are Saltés (Bazzana & Bedía 2005; see AME 1, 157), Mértola (Macías 1996) and Silves (Varela & Varela 2001), the last two in Portugal.

In the later phase, corresponding to the Nasrid kingdom of Granada and the Marinid kingdom of the western Maghreb (thirteenth to fifteenth centuries), there are more

Plan of the excavated area at Siyása (Cieza, Murcia).
examples of domestic buildings still standing on either side of the Straits of Gibraltar. To these may be added the information provided by archaeological excavations, some classic such as the Alhambra itself (Orihuela 1996), others more recent, such as the annexe to the Cuarto Real at Santo Domingo and the housing complexes at Ceuta (Hita and Villada 1996 and 2000), Qasr as-Saghir (Redman 1986) and Belyouneh (Cressier, Hassan Benslimane and Touri 1986), the latter two in Morocco.

The territory of Al-Andalus, as all medieval Islam, inherited the Mediterranean courtyard house, the origins of which can be traced back to Mesopotamia. By 2000 BC courtyard houses in the city of Ur already featured rooms on two storeys opening onto a central courtyard with an elaborate water collection system. We see the same arrangement twenty-five centuries later in Sassanian examples. In the Aegean world we know of courtyard houses at Gurnia (Crete) abandoned around 1200 BC, and from the fourth century BC courtyards are found flanked by lobbies (prostas) or perimeter porticos (peristylon). By the third century BC, paved patios surrounding houses are featured in Phoenician Kerkuan and Carthage, on the coast of Tunisia.

**Layout**

While Islam adopted the courtyard house, it took it to fresh levels of development, largely aimed at improving privacy, especially in towns. Modifications included the reduction of openings to the street and measures to prevent a direct view of the interior, either through an open door or from the roof-tops or terraces of adjacent houses. However, the courtyard house was not universal under Islam: courtyards could become redundant or inconvenient in cold wet climates. Muslims living in the Balkans, on the shores of the Caspian Sea, northern Iran, Afghanistan, Yemen or some mountainous areas of the Maghreb preferred houses without doors leading onto patios, and employed openings that were high up, narrow slits or arched windows with stained glass or shutters to achieve ventilation and maintain privacy.

In al-Andalus, the courtyard house was the main type, but simpler forms can be encountered in the countryside, the direct heirs of pre-Islamic traditions, in which the structural units grew (with the family) as contiguous cells. Rooms with a number of different functions might be added and eventually surround an open central space, thus in effect creating a courtyard plan. It is sometimes difficult to draw a clear line between these examples and houses with an original courtyard design, just as written sources fail to distinguish between occupancy by single or multiple family groups.

A surviving house-plan that has a central courtyard surrounded by four wings often means that it was built at a time when there was plenty of space available – as in large farms or early houses in towns. Small plots and the absence of one or more wings may imply a more recent construction adjusted to fit the land available (Fig 4.13). A plot may subsequently be transformed by inheritance. The medieval Islamic house developed on the ground floor, and an upper floor, by no means universal, was the result of the search for more space on a cramped plot, or in consequence of partition of the property.
Interiors

To appreciate the interior of the Medieval Islamic house, we might pay it an imaginary visit, beginning by handing over one’s horse to an ostler at the entrance. Houses were equipped with stables (as determined at Siyásas by the presence of mangers), situated away from the main living area of the house, to keep the noise and odour at a distance. In some cases, the stables formed an annex to the house and had their own door opening directly onto the street. In towns, it was never necessary to go through the living space to get to the stables.

An L-shaped entrance hall, the *situwan*, leading from the street into the courtyard, was the feature that did most to transform the Mediterranean house for Muslim use. The door leading in from the street, and the door leading out into the courtyard were offset, so that it was not possible for passers-by to see into the courtyard or beyond into the house, even when both doors were open. The entrance hall served as a holding bay for visitors before they were admitted to the main house and often had a stone bench for them to sit on while waiting.

Regardless of the size of the Andalusian house, the central courtyard (*sahn*) was its essential feature (Fig 4.14). It let light and air into the rooms and was the focus of most
of the daily activity – a role that led to its being the chief subject for architectural ornament. Where the house was laid out on a spacious plot, the courtyard had a generous size and was symmetrical in form; but on small plots it might amount to less than 4 or 5 square metres. In the palaces and richest households, the shape is generally rectangular, running north-south, but in more modest homes it may be square. On at least one side, usually the north, it was usual to have a portico, intended to dignify the range containing the principal reception room and to link the upper floors by the gallery that the portico supports. Where a water supply was available, the courtyard provided the site for a sunken garden, sometimes occupying almost the whole space (see below).

The Andalusian house was characterized by the presence of a long and narrow salon that acted as a reception or living room (majlis). Its location was typically in the north wing, looking south to catch the early sun. It was intended for family gatherings and the reception of guests, and at night it could be used for sleeping. Larger houses might acquire a second salon in another wing, and the two rooms might be used alternately, depending upon the seasons (as in Houses 4 and 6 at Siyāsa), although they might also be intended to serve separate branches of the family.

The living room occupied the central part of a wing, and their ends were often stopped by partition walls, leaving small enclosed areas beyond known as alhánías or alcobas. This word is glossed as ‘bedroom’ in the Diwan of Ibn Quzman (d.1160 AD), in the Leiden Glossary of the late twelfth century and in the Arabic Vocabulary attributed to Friar Raimon Martí of the thirteenth century. Sebastian de Covarrubias, in his
dictionary of 1611, states that the alhania is a "chamber, place of rest and sleep, where you sleep and the bed is located, because the alhania, says Father Guadix, is as good as the bed." There is evidence that the floor was higher than in the living room and in some cases, there was a platform on which was installed a wooden structure or tarima (a term of Arab origin) that served as a bed.

The kitchen was an essential element, and occurred regularly in the twelfth and thirteenth century houses of Siyāsā. There the kitchens have three main characteristic features: the hearth, the cupboard and the work surface. The main hearth, rectangular with an apsidal end, was usually paved with slabs of stone and sunk about 10 cm into the floor in order to contain the ash and cinders. The cupboard, containing the cooking pots and other utensils, was constructed of stone or wattle-and-clay, and plastered, and it was located adjacent to the hearth. The bays of the cupboard (or dresser) were formed by ornamental arches, consisting of at least two shelves and a variable number of compartments. The work surfaces took the form of L-shaped benches built around the hearth, with a height ranging between 10 and 30 cm, and were designed to function as tables for processing food.

According to Fray Pedro de Alcala's Arab Dictionary, the name given to a latrine was the euphemistic bayt al-ma, or water-closet (as it is still called in Morocco). At least since the Caliphate period it had the same characteristics: a small building usually located in a corner of the courtyard, and entered through an L-shaped passage. The better-preserved examples have a high narrow window to admit air and light.

Conclusion

The design of the house was practical, drawn from centuries of experience in living in Mediterranean climates. But it was also influenced by a concern for privacy common to all Islamic societies irrespective of their geographical location. Controlled breeding (endogamy) and the concept of family honour ('ird) characteristic of Arab society, confined women to private quarters (harum, literally 'forbidden'), which must be carefully preserved from strangers. These precautions were particularly needed in the city, where promiscuity among individuals, families and clans was much higher than in rural areas. Therefore, the house, where women spent most of the day, was a building that had to be well guarded against any uncontrolled physical or visual relationship with the outside world.

This architectural scheme was applied to simple houses and to palaces alike. In the palaces, it characterized the domestic areas of courtly buildings, where the king and his family lived, together perhaps with noble associates. The same model was also adopted for ceremonial areas, those that genuinely represent the power and the government, but on a larger scale and adding specific elements such as the throne hall and a developed courtyard, featuring gardens, qubba, pavilions and large ornamental pools (see below).
The Gardens of Al-Andalus, History of Research

The conquest of the Kingdom of Granada in 1492 introduced Europeans to the orchards and gardens located on Andalusian soil, in particular at the palaces of the Alhambra and the Generalife. The unanimous appreciation of their striking beauty and amenity was celebrated in many chronicles at the time, an admiration maintained throughout the seventeenth and eighteenth centuries. James Cavanagh Murphy (1815) carefully described and drew attention to those “Moorish” elements that seemed typical of the gardens, all very different from those known in the rest of Europe. Of the authors of the first half of the twentieth century, Valladar and Forestier exposed for the first time the elusive nature of the Andalusian garden, and the need to draw on new sources to discover its medieval origins. Forestier (1915) recognized the difficulty of extracting the essence of the medieval garden from those preserved in the Alhambra and the Generalife, which had been modified over five centuries. Forestier’s insights were influential; for example, he claimed that medieval gardens had raised walkways or promenades, a design only seen in traditional Moroccan courtyards; these features have been subsequently confirmed by many archaeological excavations. Intuitively he suggested that medieval gardens featured architectural topiary, an attractive hypothesis not yet endorsed. However, he also promoted the idea that edible and ornamental plants would grow on the same parterre, which seems unlikely, especially in the palaces.

The second half of the twentieth century saw the continuation of interdisciplinary attempts to recover and to analyze the early Islamic garden. Researchers such as the eminent architect L. Torres Balbás refrained from making speculative reconstructions, but not so Prieto Moreno (1952), who based his image on tenuous conjecture and personal impressions. G. Marçais’s 1941 lecture (published 1957) entitled “Les jardins de l’Islam,” introduced a strategy that was to be followed in future investigations on the subject; it would be necessary to use sources as diverse as literature, iconography and archaeology, all embedded in the broader context of the history of gardening. James Dickie (1965-1966, 1992) took a traditional line, exploiting the limited information contained in the written sources combined with the testimony of the standing architecture. In 1973 an international congress on Islamic gardens was held in Granada, at which were presented several studies relating to gardens in al-Andalus. Some were general and some more specific topics, such as the use of water in Nazari gardens, references in the poetry of the time, the Geoponica texts and even the contribution of palaeontology (AAV. 1976).

At the end of the twentieth century, the character of the Islamic garden was encapsulated in a suite of ideas originally owed to Forestier, namely that it had a spiritual purpose, evoking paradise; it instilled tranquillity through standing water (with occasional fountains); it combined ornamental and vegetable plants in the same garden; and, in general, that the form and character of the inherited Medieval Islamic garden can be read from the gardens of the al-Andalus area.

These diagnostics were challenged and critiqued by modern scholars, especially Tito Rojo (2001, 2007). Although the early authors, and later romantic travellers, had regarded the surviving gardens as ‘Islamic’ this was not strictly true, since they had been developing in a local milieu for two or three hundred years before the lands were con-
quered by the northern Christian Kingdoms. Much of the later literature on the medi-
eval Islamic garden in general, and al-Andalus in particular, has simply repeated the list
of defining attributes without demonstrating their validity. Most are simplistic, or even
in contradiction with the reality that we now know better, thanks to a small group of
specialists who, following Tito Rojo’s lead, have been extensively studying the writing,
illustrations and materiality of the garden.

The archaeology of gardens

In addition to the interdisciplinary harnessing of Arabic studies, history, ethnobotany
and literature, much of the new reality of the medieval garden is owed to archaeol-
ogy. Recent syntheses which reflect these developments are Tjion Sie Fat and de Jong
(1991), Petruccioli (1994), the doctoral thesis of Rafael Fernández García (1995), Rugg-
gles (2000), Navarro (2005) (on the archaeology of garden architecture in al-Andalus),
Antonio Almagro (2007) (on the visual analysis of such spaces), Zangheri, Lorenzi &

Unlike architecture, a garden is a living organism composed of things which flourish
and die, sensitive to changes in fashion, neglect and abandonment. Archaeology, there-
fore, reports principally on architectural elements such as the provision of flower beds
and promenades, porticos and pavilions, pools, fountains, wells and ditches supplying
water for irrigation, all of which were part of the garden landscape. The enormous volume
of new information provided by medieval archaeology includes not only the gardens of
palaces, but also details of the little-known domestic garden. New techniques applied
to archaeological research, especially palynology and paleobotany, are yielding valuable
first-hand information on the species planted through the analysis of pollen and seeds, as
demonstrated by the work at the Generalife (Casares, Tito & Socorro 2003).

The garden has been linked to power in a special and intimate manner: it provides
pleasure to its owners, and becomes a sign of distinction and authority. In al-Andalus,
there was virtually no palace without a garden. In most cases, the garden was built
inside the palace, within available courtyards of sufficient size to allow the planting of
trees, shrubs and ornamental plants. Water was provided for irrigation as well as being
itself a garden feature. In many cases, gardens and surrounding orchards also lay outside
the buildings, enhancing the glories of the royal house and adding the production of fruit
to the simple pleasures of ambience.

Thanks to archaeology, we now know that, in addition to palaces, domestic dwell-
ings from the humblest houses to the richest exhibited the Andalusian taste for gardens
in their residential courtyards. They were almost always square or rectangular, equipped
with perimeter gutters to collect rain-water and sunken to prevent flooding. Larger
houses might also feature ornamental ponds and fountains. In more humble domestic
properties, conditioned by the small size of the courtyards, the garden shrank to a
square in which only one tree could be planted.

It will be convenient to present now a summary historical synthesis, intended both
to offer an assessment of current knowledge and pointers for future work.
A History of the Andalusian garden

The oldest known Andalusian gardens in a town, now in ruins, is at Madinat al-Zahrá' built by the Umayyad caliphs of Al-Andalus in the tenth century. It featured both large landscaped open spaces and smaller, more formal parterres with pools, fountains, promenades and water-channels. The gardens of al-Zahrá were seen as part of its geography of reception. In the garden fronting the reception hall of 'Abd al-Rahmán III stood a central pavilion on a raised platform with promenades and pools. At the end of one of the promenades of this enormous garden was another pavilion, which looked out over another stretch of pasture and a garden lying at a lower level divided in the shape of an axial cross. The presence of water, both moving and still, in the gardens of the palace of Madinat al-Zahrá' was important. Large pools, still and silent, formed mirrors that varied in tone depending on the depth of the pool. They reflected the architecture and threw light back into the interior of the rooms. By contrast, the streams were incorporated into the architecture by means of systems of channels, watering the flower-beds while their murmuring sound filled the garden space. On a terrace at a higher level still was a residential area known as Casa de la Alberquilla, structured around a square courtyard faced with two porticos and a central garden, with a cruciform layout of promenades, interrupted on one axis by a pool. This first example provided a model of the design to be adopted later in family houses and palaces.

From the late eleventh century, after the brilliant but unstable period of the first Taifa (tenth-eleventh century AD), the African dynasties began to develop the courtyard gardens first known from the Umayyad period. The Taifa Palace of Aljafería (eleventh century), built by King Abu Jafar Ahmad Ibn al-Hád Muqtadír Billah, near the city of Zaragoza, provides an important link in the evolutionary process of the Andalusian patio garden. This now has two pools, one appearing before each portico, but each of different sizes. Scarcely any remains of Almoravid (eleventh century) residences exist, and we know only the walls of the palace that Ali Ibn Yusuf ordered to be built in Marrakesh, exhumed when the site of the first Kutubiyya was excavated. This is a small cross-shaped courtyard which possibly formed part of his private premises and that was possibly preceded by two pools, similar to what was to be constructed few years later in Castillejo de Monteagudo.

The Castillejo de Monteagudo, known in Arabic sources as Qasr Ibn Sa'd, palace of Ibn Mardanish, or King Lobo, is the best surviving example of Andalusian residential architecture from the mid-twelfth century. Although dated to the second Taifa period, we can consider it, from its architectural decoration, as a late example of an Almoravid building. Situated a few kilometres from Murcia, this recreational residence was laid out around a cross-shaped rectangular courtyard, fronted by small pools on the shorter sides. The remains of another Mardanisí palace, the Dar al-Sugrà, discovered beneath the monastery of Santa Clara at Murcia, comprised part of a garden of two broad platforms with small longitudinal water channels at whose intersection stood a pavilion or qubba. This courtyard was three times bigger than that of Castillejo de Monteagudo.

The Almohad caliphs (c. 1147 - c. 1269) came to exercise control over a vast territory extending between Africa and the Iberian Peninsula, and inaugurated an era of demon-
strative building. They had their capital at Seville, notable for its magnificent homes, especially those built within the palace complex of the Alcázar of Seville. Their gardens all adopted the courtyard cross formation, now combined with pools arranged at each end of the long axis. The first and best known is called the Crucero, a large courtyard divided into four gardens, each subdivided in turn into four. The gardens lay 4.70m below the level of the house, the deepest we know. Another courtyard garden in Seville, completely destroyed in 1356 to build the residence of King Don Pedro, has been rediscovered under the Patio de la Monteria (Fig 4.15). Exceptionally, the garden here was square and appears to have featured a high platform surrounding its perimeter. On each side of the garden, steps descended from the platform to the paths of the cross-formation, located one metre down, while the surfaces of the four garden areas were 0.30 m below that. A channel at the base of the platform collected rain-water from the roofs and prevented it flooding the cultivated areas.

Between the period of the Alcázar palace complex of Almohad Seville and the first buildings of the Alhambra, there is a gap of a century in which we have only one single example, – the residence erected in Murcia for Ibn Hűd al-Mutawakkil (1228 – 1238). This building, known in the thirteenth-century Christian sources as “Alcacer Ceguir” (al-Qasr al-Sagir), is still partially standing in land that now belongs to the Monastery of Santa Clara. Its architectural organization and decoration are essential for under-
standing the birth of Nasrid art in Granada. The new plan was laid over the ruins of the Dār al-Sugrā (above). One of the most innovative aspects of this garden is a central large rectangular pool running north-south, with garden spaces placed on each long side, a design that was to be adopted in the Nasrid palaces of the Abencerrajes, and Comares, both of them located in the Alhambra.

The Nasrid emirs established their capital in Granada in 1238 and maintained a kingdom in its name for more than two and a half centuries – until 1492. Most of the gardens and orchards preserved from this period are in the palace-city of the Alhambra and the Generalife. El Patio de la Acequia in the Generalife, whose construction may have started in the last quarter of the thirteenth century, is noted for its exceptional state of preservation (Fig. 4.16). The rectangular shape is more elongated than usual and the four gardens in the cross arms, each 48.60 x 12.70 metres, contained plants typical of the genre. Recent palynological studies have indicated that the beds were occupied by meadow grass with colourful flowers enclosed with myrtle hedges. Also indicated is the presence of citrus fruits (bitter orange, lemon, citron), pomegranate, jujube, grape vines, and other ornamental types of trees such as the cypress, laurel, jasmine and roses (Casares, Tito & Socorro 2003).

The most common type of garden now being adopted for palaces and houses of this period had a tripartite organization, in which two rectangular parterres flank a large central pool that occupies the entire elongated length of the courtyard, with porticos standing on the shorter sides. The most famous example of this type of garden is in the Comares Palace, the ruling sultan’s private residence built by Yusuf I (1333-1354). Currently, the parterres are occupied exclusively by myrtles on raised platforms, but a wealth of iconographical evidence shows that they had once contained fruit trees. Drawings and antique prints also show fountains in the centre of the pool, now disappeared, and on the short sides, now levelled.

Of the Nasrid dynasty of Granada, Sultan Muhammad V (1354-1359 and 1362-1391), had a great interest in architecture, and in the Palacio de los Leones he set out to do something new, influenced by the architecture of his ally Peter I (1350-1369), king of Castile. But even today there is no consensus that there was a garden there during the Middle Ages. However, archaeological excavations since 1995 at Cuarto Real de Santo Domingo, located in the historic centre of Granada, have discovered a new garden of the greatest interest, with elements indicating a date in the Nasrid period, and probably the reign of Muhammad II (1273-1302). It was rectangular, measured 42.30 x 34.40 metres and was bordered on three sides by a high wall. The lower south side was flanked by a portico with five arches in front of a qubbā, perfectly preserved, with two small outbuildings on either side. The garden was divided into two large parterres by a central promenade running from the portico, opening into a square platform containing an octagonal pool of 1.43 metres a side. The pool was fed by water led via a channel from a fountain of white marble located in the portico. The edge of the pool was surrounded on all sides by a raised promenade, which, like the base of the pool, was composed of bricks laid in a pattern (Fig. 4.17).
The palaces and gardens of Al-Andalus transcended the boundaries of Islamic territory and were adopted as a sign of prestige by Christian Castile. As Castile became the strongest kingdom of Spain it employed its growing wealth to develop with renewed vigour this architecture of Islamic tradition. Models of Andalusian origin were selected, modified, reworked and recreated, so renewing the influence and development of Islamic art, especially in the city of Toledo. A typical example is the palace of Don Fadrique, a building closely linked to the Toledo plaster artisans, which was built in Seville a few years after the Christian conquest in the middle of the thirteenth century.

Paradoxically, while typical Islamic elements such as cross-shaped courtyards fell into disuse in later thirteenth century al-Andalus, they were maintained and developed in designs owed to the Mudéjar (Islamic residents of Christian Spain). The recently excavated Alcázar of Guadalajara, which is providing valuable information about the interactions between Christian and Muslim in the architecture of the thirteenth and fourteenth centuries, featured a courtyard with a great cross-shaped area. Instead of a pavilion, it had at its centre a large rectangular pool lined with concrete in which were embedded ceramic pots to encourage the breeding of fish (Fig 4.18). This is a valuable example of the Castilian Mudéjar contribution to Andalusian architecture, since this model of cross-shaped court with great central pool, appears later in the Nasrid palace of Alhambra.
Fig 4.17 The garden and pavilion of the Cuarto Real of Santo Domingo, Granada, end of the 13th century (digital reconstruction by A. Almagro).

Fig 4.18 Plan of the fortress at Guadalajara (13th-14th century), which featured a courtyard with a great cross-shaped area. Instead of a pavilion, it had at its centre a large rectangular pool lined with concrete.