Encyclopedia of Vernacular Architecture of the World

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Asia, East and Central
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Alentejo’s historical centres sometimes relate to the ancient Roman-type tando-ataenius structure – with its north–south axis (tando) and its east–west axis (ataenius) – transformed and blended by centuries of Muslim-medieval and modern reconstruction, giving the overall image of a circular pattern. Outside the former Roman forum and after the first line of walls, restios or squares of rural origin became the new subcentres of the growing medieval city, and were further embraced by a second line of walls. Évora is typical, with the cathedral area and the nearby Praça do Giraldo square, connected by tortuous grids of streets and white residential buildings, both manor and vernacular houses.

Other urban structures relate to medieval-Christian fortified foundations, from the reconquest of lands from the Moors (12th to 13th centuries). They are simple structures, mainly in frontier areas, with a main street (rúa da rua) and short secondary ones, incorporating the city hall with small square (largo da câmara) and the local church with small square (largo da matriz).

Such are the scenic villages of Monsaraz, or of Mértola (Roman Myrtillus), both near the Guadiana river, former frontier of the Roman province of Lusitanía.

The architectural materials used in domestic buildings are diverse and include granite, marble, schist (xisto), adobe and tapio (for plaster walls), and small mass bricks (tijole burro) used in delicate dome-structure (abobadilha). This system consists of small cellular 4.5 m × 4.5 m (15 ft × 15 ft) domed rooms, supporting terraces, tiled roofs on a wooden structure, or a second floor within the building. Simple rural ovens produce the bricks for these structures and the thin bricks and ladrillos used elsewhere.

Tapio is the system for moulding thick walls (45–70 cm (18–27 in)) with a mixture of sand, small stones and clay (argila), within a space formed by two wooden tapios (2 m (6.5 ft) × 0.5 m (1.5 ft) × 0.5 m (1.5 ft)), which are framed and dismantled as the wall grows. If the length of the wall justifies it, every 3–4 m (10–13 ft) there will be a gigante (buttress) built against it – like a cornérface, a pyramid-type mass – to offer resistance. Pavements also use the ladrillos, sometimes placed directly over the wooden-framed floor of the second storey.

Big chimneys surmounting the facades (with big fireplaces in the inside kitchen), small doors and windows, worked or simple eaves, earth-coloured outlines (blue, red, yellow, green, grey) around the openings and the foundations of the house define the general look of vernacular houses, with the oven, either attached to the village house, or separated, in the hill-top house, where the one-storey buildings for the animals form a rural patio.

The return of Portuguese emigrants to the rest of Europe since the 1960s has not yet deeply changed the building traditions in Alentejo, as has happened in northern and central Portugal. Nevertheless, generally speaking, the most traditional techniques, like the tapio building system, are being abandoned.

Algarve
The traditional house of the coastal strip of the southernmost province, Algarve (from the Arabic al-Ğarb, meaning ‘the west’), separated from Alentejo by the arid hill (serna) sector, parallel to the coast, is a single-storey, whitewashed building, with a tendency to more refined details than those of Alentejo.

They incorporate smaller and very decorative chimneys, coloured outlines and platbands. Frequently a part of the roof is a terrace, supported by light brick-built vaultings, the abobadilha de tijolera (e.g. on the coastal strip in Olhão and Fuseta). But roofs are mostly tiled, over a simple wooden structure.

In the interior senn, houses frequently have a one-sided sloping roof. Coastal and urban houses use traditional and unique hipped roofs (telhados de traves) – with one or two independent structures over small homes, one for each room, or multiple roofs over the larger manor houses (telhados múltiples) – giving them an unmistakable triangular-pyramid profile. It probably had its origin in oriental-Indian roofs, their influence seen in Algarve harbours and brought by the overseas expansion of the 16th century. Inside, roofs incorporate the mantópolo, or canio, made with river canes (canas) juxtaposed, for thermal control purposes, and also used in Alentejo.

José Manuel Fernandes

2.4.5.5 Andalusian (Spain, SW)
Andalucía, a large region covering 82,000 sq km (32,000 sq mi) in southern Spain, has several distinct climatic and geographical conditions that have generated different types of vernacular architecture, influenced by building traditions from the northern and southern Mediterranean as well as the Middle East.

Usually, Andalucía is considered to be divided into two areas, called ‘High’ or ‘eastern’ and ‘Low’ or ‘western’, with four provinces each. The first area is very mountainous as there are six ranges that rise above 2000 m (6560 ft) and the Sierra Nevada has the highest peak in the Iberian peninsula, at 3480 m (11,414 ft). Low Andalucía has fertile plains surrounding the Guadalquivir river and low mountains only on its northern border with Castilla la Mancha and Extremadura. Average annual rainfall varies from
more than 2100 mm (82 in) at Sierra de Grazalema (near Cádiz), the rainiest place in Spain, to 250 mm (10 in) in the desert-like zone in Almería, the driest area in Europe.

The first main typological classification in Andalusian traditional architecture separates city houses from villages and isolated houses. In big historic cities such as Seville, Córdoba or Granada, houses always developed around a patio, following the Roman and Islamic traditions, both of them very important in Andalucía. The closest to the Islamic tradition are the Morisco houses in the old quarter of Albayzin, in Granada. Collective dwelling had its best solution in the corrales de vecinos, still inhabited in the popular quarter of Triana, in Seville.

In rural housing the courtyard is not so important as many activities take place in the street or in the countryside. Therefore, these houses lack a central patio, that sometimes is replaced by a back courtyard, farmyard or stall, or even a front open space in the case of a troglodytic dwelling. Most of the Andalusian rural houses are whitewashed, the reason for the generic name of pueblos blancos, 'white villages'.

In mountain villages, houses used to have three or four stories as a result of the different street levels and small sites. The upper floor is used to stock agricultural produce. Normally, they have no patio as, at a height of over 700 m (2300 ft), it would be unused, except in the summertime. Walls are made from rubble obtained in the surrounding mountains, and have small windows. Roofs use curved tiles and are designed with one or two slopes parallel to the front facade. Stairs used to have only one flight, with very high steps, following the Islamic tradition.

In villages on the plains, the temperate climate and the lack of topographic and surface problems allow patios to be built. Houses used to have two or three stories, with walls usually made from rammed earth concrete (tapial) or brick, and huge vertical windows that started almost from ground level. They are protected with projecting grilles that stand over low masonry walls and are covered at the top. Roofs are pitched and clad with curved tiles, called 'Spanish' tiles abroad but known as 'Arabic' tiles in Spain.

In the two provinces of the southeast zone, Granada and Almería, there is a type of house with no patio and a form of flat roof laid with impermeable grey clay (Latera). Two subtypes can be noted. In the vast area of Alpujarras, on the slopes of the Sierra Nevada, walls are made from slate flagstones mortared with mud, and topped with big flagstones as eaves. No plaster is used for the facades. This economic method of construction has a Berber origin, and is nearly the same as that still used in the High Atlas area of Morocco. Some villages are at a height of 1500 m (5000 ft), where winter snowfalls force people to remove snow from the roof by hand. The second type occurs in desert-like zones in Almería, where roofs have parapets instead of eaves, while walls are plastered and whitewashed. The result is an architecture close to that of the North African coast and some Mediterranean islands.

In these same provinces there were in the 1950s 15,000 artificial inhabited caves. In the Baza and Guadix areas, both north of Granada, this ecological habitat represented one third of the entire housing.

Another type of vernacular dwelling is the hut, presumed to have originated in prehistory. Circular or rectangular in shape, with a low masonry wall and a light wood frame covered by bulrushes or rockrose, these huts were used in summertime by shepherds of eastern Andalucía, but can only now be seen in small areas near the mouth of the Guadalquivir river.

Finally, the generic name of cortijo is applied to any isolated Andalusian farmhouse that takes on the same characteristics of its location area. The most interesting are in big grain and olive tree estates, where owner's and workers' houses, together with mill, stores and stall, surround a large courtyard with a common gate.

Antonio Orihuela

See also: 1. M.S.-7: Casas Medite rranean 1. M.S.-H: Huts and Power