The context of Ria de Aveiro F (Ilhavo, Portugal): confluence of shipbuilding traditions between Late Middle Ages and Early Modern Age

The Site

The Ria de Aveiro is situated on a coastal and estuarine region in the northwest of Portugal, where the Tagus river lies along with other small water courses. It had its origins around the 10th/11th centuries, when a sandy shoal began to form in Espinho area heading South. Thus, a coast in the shape of a large bay between Vila Nova de Gaia and the Centre of Aveiro was gradually being transformed into a straight coast, as can be seen today (Freitas e Andrade, 1998:68-69).

The Ria de Aveiro shipwreck (RAVF) was discovered in February 2002 as part of the expansion of the port of Aveiro, during the archeological monitoring of the dredging construction of off-berth-of-terminal. The results of radiocarbon analyses of the early traces of wood dated the context between 1260 and 1460 (Rodrigo, 2002:1).

The place where the wreck occurred was a space that over the centuries between has changed back and forth from salted area to navigation channel. These changes were caused by the increase or decrease of sediment deposition, influenced by the waves and the tides.

The Ship

The RAUV context consisted in two major structures, wood core, one in planking hull and another in a cracked hull, forming the central core, but also a number of other small agglomerations of wood, some still in connection and other dispersed by the local. In addition to these, five more isolated cores were identified (Rodrigo, 2002:8-10).

The core of the planking hull (level 1) corresponded basically to a stem with a maximum width of 3.8 and was constituted by a stempost, Y-shaped floor timbers and part of the sternboard and port side planking. The planking was smooth and the fastening were in iron, with no trace of wooden dowels (Rodrigo, 2002:5). In the port side besides the planking feed to the Y-shaped floor timbers and sternpost, there was a set of six planks that appeared to be the continuation of the planking board, but that were not physically connected to it. The sternboard had three wooden planks under the sternpost, overlapping one another, forming a cracked hull (Rodrigo, 2002:6).

The partially visible cracked structure (level 2), was constituted by three planks, that are 3 and 4 m thick 14, 30 and 23 cm with respectively, and a total length of the set of 63 m (Rodrigo, 2002:3).

The Planking Hull

The planking hull had between 8 and 36 cm width, and 3 and 5 cm in thickness. The total length that preserved along with the remains of the planking was 2.97 m, and the average was around 1.3 m. The entire fastening was in foursquare section (1x1 cm) iron nails, with charnels on two of the faces so it would fit ribbet.

The Rigging

The bow sprits are characteristic of the Mediterranean between 14th and 17th centuries, as we can see in the ships Cujo VII (mid 14th century), Vass-Arc (19th century) and San Sebastián (late 17th century). The fastening system is almost entirely in iron, also a feature of the Mediterranean that finds parallels in the ships above mentioned and also in Vilafranca-sur-Mer (16th century), and Castel (late 16th century). The presence of the shipwreck as a single piece and the fact that the mast step appears to have been notched as an expanded part of the keel is characteristic of the Atlantic (Arling, 2001:236). The typologies of pulley block find clear parallels in the mid 16th century ships Mary Rose, (1545) and San Juan (1565) (Greener, 2007; Morsden, 2009).

The conclusions of the wood samples indicate that those have the characteristics of tropical timber species, present in South America, with higher incidence in current Brazil. Therefore, RAVF seems to be a vessel of the early 16th century, which may have been built in the Mediterranean and suffered repairs in South America, or been built in a colonial space. On another hand, the wreck orientation and the fact that the woods of the cracked hull are also from South America, may indicate that the context includes two vessels: the main ship (planked) and a support boat (cracked) which would have been built from scratch in that territory.

References


GREGO, Gonçalo Correia (2015) — Ria de Aveiro F (Ilhavo): um naufrágio de época moderna na margem de Aveiro. Tese de mestrado. FCSH-UNL.


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