

EARLY NEOLITHIC NAVIGATION IN THE WESTERN MEDITERRANEAN

Joao Zilhao

Research Professor at ICREA (Institució Catalana de Recerca i Estudis Avançats), University of Barcelona, Barcelona, Spain.

A number of models have been offered to explain the spread of farming economies into southern and western Iberia. Based on the highly controversial evidence for the presence of pottery and/or domesticates in the upper Ebro valley around 6000 cal BC or before, indigenist/adoptionist views argue for such innovations to emerge or have been acquired by local Mesolithic people in the context of trans-Pyrenean land networks of contact, exchange and diffusion uniting Iberia to France and beyond. The mechanism supported by migrationist views is instead one whereby Mediterranean sea routes play a key role in the encroachment of groups of farmers that create from scratch new village settlements in Mesolithic territory. One such model, Maritime Pioneer Colonization, sees the process as one of leap-frog dispersal into the empty areas found between the nodes of Mesolithic occupation known along the northern shores of the western Mediterranean. Alternatively, it has been hypothesized that farming economies of southern and western Iberia originate in South-North crossings of the Straits of Gibraltar, which presupposes an earlier emergence of the Neolithic in the Maghreb, where it would have arrived from Sicily. However, such a North African route of cultural diffusion is not supported by the archaeological evidence. Firstly, because, in the Maghreb, the earliest directly dated domesticates post-date by several centuries similar evidence from Valencia, Andalucía and Portugal. Secondly, because obsidian from Pantelleria, located about half-way between Tunisia and Sicily, is not found in the nearest mainlands until ~5000 cal BC, indicating that the beginnings of routine prehistoric navigation between Europe and Africa in the central Mediterranean post-date by several centuries the earliest Neolithic of Iberia. Thirdly, because the distribution pattern of the obsidian sourced to Sardinia, Palmarola and Lipari found in Italian, French and Catalanian Neolithic sites suggests circulation by cabotage, over coastal waters and with mainland-island or island-island crossings involving short distances only. The latter is consistent with the lack of any settlement of the Balearic Islands prior to the Copper Age and further suggests that the obsidian from the Tyrrhenian islands moved around by down-the-line exchange and/or the movement of persons transporting individual tool-kits. Overall, the evidence thus argues against the existence in the western Mediterranean of large-scale processes of colonization such as those documented in the Aegean and the Levant, which involved targeted landfalls in previously reconnoitered territories located across significant open sea expanses. The difference may relate to the social fabric of the Early Neolithic farming societies involved: dense, tightly-knit, probably hierarchical, in the East, but perhaps scattered, family-based, easy-fissioning and non-hierarchical in the West. This hypothesis accords well with the pioneer colonization model inferred from the leap-frog pattern of dispersal suggested by the location of the earliest Neolithic settlements currently known along the Mediterranean and southern Atlantic coast of Iberia.