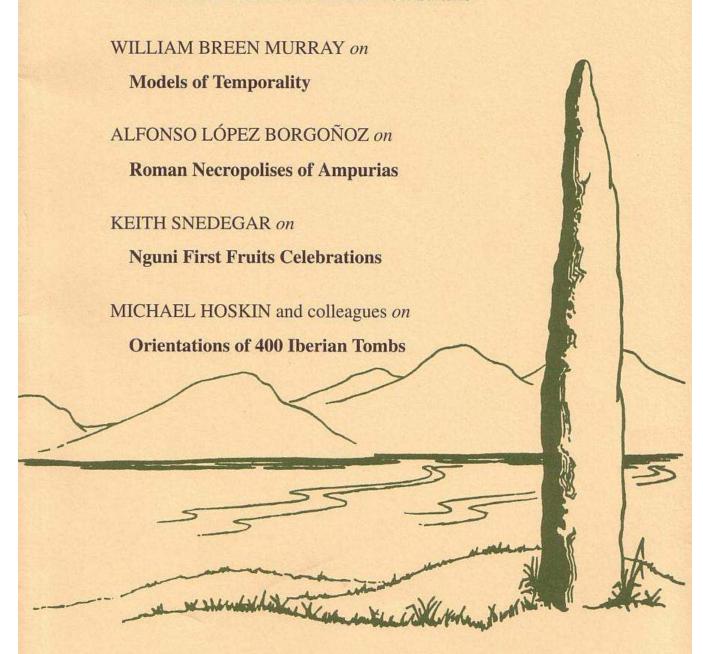
Archaeoastronomy

Supplement to Journal for the History of Astronomy

J. A. BELMONTE, C. ESTEBAN and J. J. JIMÉNEZ GONZÁLEZ on Pre-Roman Tombs of Africa Proconsularis



Archaeoastronomy

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H: THE SCHIST TOMBS OF THE PORTUGESE UPPER TEJO

FRANCISCO HENRIQUES, Associação de Estudos do Alto Tejo

The River Tejo, which later enters the sea at Lisbon, flows westerly while it marks the border between Spain and Portugal, with Spain to its south and Portugal to its north. But when the Tejo is joined by the River Sever, the border turns south and follows the Sever instead. The area of Spain within the angle of the Tejo and Sever is the subject of the next section; here we study the tombs of the region of Portugal on either side of the Tejo. In prehistoric times the rivers were highways rather than

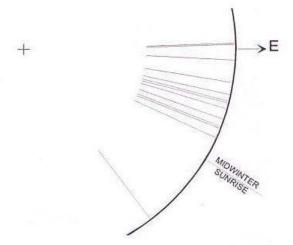


Fig. H1. Orientations of 13 schist tombs of the Rosmaninhal (Idanha-a-Nova) region of the Portugese Upper Tejo (northeast of the region studied in Section J).

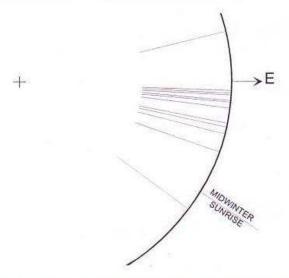


Fig. H2. Orientations of 12 schist tombs of the Vila Velha de Ródão and Nisa regions of the Portugese Upper Tejo (west and southwest of the region studied in Section J).

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Orientations of Iberian Tombs

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TABLE H1. Orientations of 26 schist tombs of the Portugese Upper Tejo.

Az.	Alt	Lat.	Dec.	Tomb	Comment
Area of	Rosmaninh	ıal			
88	0	39.8	+1	Amieiro 2	
88	0	39.8	+1	Couto da Espanhola 2	
93	0	39.8	$-2\frac{1}{2}$	Amieiro 3	
99	0	39.7	-7 1	Samarrudo 1	
102	0	39.7	-91	Mesas	
104	0	39.7	-11	Cubeiras 2	
104	0	39.7	-11	Zambujo 1	
106	0	39.7	$-12\frac{1}{2}$	Tapada da Ordem 1	
109	0	39.7	-15	Zambujo 3	
111	0	39.7	$-16\frac{1}{2}$	Zambujo 2	
111	0	39.8	$-16\frac{1}{2}$	Couto da Espanhola 6	
114	0	39.7	$-18\frac{1}{2}$	Tapada da Ordem 2	
143	0	39.7	$-38\frac{1}{2}$	Samarrudo 2	
typ	0	39.8	typ	Amieiro 8	
Area of	Vila Velha	de Ródão			
76	$1\frac{1}{2}$	39.7	$+11\frac{1}{2}$	Santo Amaro 2	
93	3	39.7	$-0\frac{1}{2}$	Santo Amaro 1	
93	2	39.8	-1	Casa da Moura	
95	71/2	39.7	+1	Cabeço de Anta	
95	$0\frac{1}{2}$	39.7	-4	Vale das Cobras	
130	31/2	39.8	-27	Silveirinha	
Area of	Nisa				
92	11/2	39.6	-1	Terra da Frágua	Corridor faces 82°
97	0	39.6	-6	Tapada do Muro	
101	1	39.6	-8	Terra da Azinheira	
102	0	39.6	$-9\frac{1}{2}$	Naves	
104	0	39.6	-11	Tapada do Sobreirão	
109	$1\frac{1}{2}$	39.6	-14	Oiro	

barriers, and not surprisingly we shall find that that the tombs of this and the next section are closely related, both in construction and orientation.

The Tejo itself dominates the area in terms of hydrography, most of its tributaries being torrential in wet periods and almost without water at other times. Geologically the region is characterized by an extensive covering of schist and greywacke, through which quarzite crystals obtrude. In terms of climate it is characterized by hot, dry summers, and by winters that are cold but also dry. Herding and agriculture were, and are, the most important economic activities.

The megalithic monuments are most common in areas within reach of the river, and are often to be found in twos. They are of schist, and the chambers have a variety of shape. Some three hundred were listed earlier this century. However, in some areas only a small fraction of those listed can be found today: the orthostats are rarely over a metre in height, the schist is fragile, and few of the tombs are easy to recognize. As a result, mechanical farming, and the widespread plantation of eucalyptus, has caused devastation on a tragic scale, sometimes intentional but often not.

The fragility of the schist orthostats prevented the use of capstones in most cases, and it seems that the tombs were covered with poles and branches. In some examples

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this is confirmed by notches cut into the top edges of orthostats. Curiously, where human remains have been found, they have been of one, or at most two persons. This would seem to suggest that the entrances were for offerings rather than for the insertion of further bodies; but in size the chambers are on a par with communal tombs elsewhere, and we therefore treat them as such. In date the tombs are assigned to the Middle and Late Neolithic.

A total of 26 tombs were visited and measured by the authors in April 1998 in company with Aylene Rogers. Although they are scattered over an area of many tens of kilometres, their orientations (Table H1 and Figures H1 and H2) show a remarkable consistency, only three lying outside the narrow range 88°-114°, so that the tombs are clearly SR. Of the three, Silveirinha faces marginally south of midwinter sunrise, but Samarrudo 2 is the only clear exception.