

## THE GROTTA FILIESTRU, BONU IGHINU, MARA (SASSARI)

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### RESUME

La grotte Filiestru est située à une vingtaine de kilomètres au Sud de Sassari, à 20 kms de la côte occidentale de la Sardaigne.

Elle a livré une stratigraphie de 3 m. de profondeur couvrant six phases de la préhistoire sarde du Cardial au Nuragique ancien. En 1980, le niveau inférieur du secteur D a donné le premier dépôt intact de céramique cardiale retrouvée à ce jour en Sardaigne.

La poterie est décorée de bandes, de triangles et de chevrons à profusion, réalisés à l'aide d'une coquille de cardium.

Les niveaux sus-jacents font apparaître une nette diminution de la décoration.

Les vases sont en très grande majorité globulaires ou en forme de bols largement ouverts. Des vases à large col sont également représentés. En particulier trois vases complets de cette forme ont été retrouvés dans le niveau supérieur. L'un d'eux contenait 2 kgs d'ocre rouge ; les deux autres une substance noire non encore analysée, mais vraisemblablement un colorant.

Aucun fond plat n'a été recueilli.

A l'exception d'une seule, toutes les anses sont horizontales et semblent disposées par quatre, diamétralement opposées, parfois reliées entr'elles par un cordon.

L'outillage lithique est très abondant, représenté par 1.240 fragments, dont 25% (numériquement) d'obsidienne de Monte d'Archi, distant de 70 kms. Le reste est constitué de silex de diverses variétés.

La faune comprend dans l'ordre le mouton, le bœuf, le porc mais les proportions exactes restent à déterminer.

Aucune graine n'a été retrouvée. Plusieurs meules fragmentaires témoignent en faveur d'une économie pleinement néolithique. Cependant, l'environnement immédiat se prête seulement à la pastoralisation.

L'occupation cardiale de Filiestru, dans le Nord de la Sardaigne, est à mettre en parallèle avec la culture cardiale de SU CAROPPU définie par D. Atzeni dans le Sud de l'île.

Le niveau immédiatement supérieur continue la même tradition, mais avec une poterie non décorée, ou rarement décorée d'empreintes au peigne ou imprimée, prototype possible de la fine décoration imprimée du Néolithique moyen de Bonu Ighinu présente dans le niveau sus-jacent.

The object of this paper is to give a factual account of a single site and the evidence obtained from its Early Neolithic levels. The report can only be an interim one since in several important respects, no least the chronology, study is incomplete. Through no attempt will be made to relate these finds to the growing body of relevant material from elsewhere in the island and abroad, it is hoped that this evidence will be of interest and help to other researchers.

Excavations in the Grotta Filiestru in 1979 and 1980 formed part of a longer term research project by the Soprintendenza alle Antichità per le Provincie di Sassari e Nuoro, under Dr F. Nicosia and now the Dottoressa F. Lo Schiavo, on the Bonu Ighinu valley. It began, indeed, under Prof. E. Contu as early as 1969, with the accidental discovery of prehistoric material in the cave known as Sa 'Ucca de Su Tintirriolu by the late, and sadly missed, Don Renato Loria. I have been hapilly associated with the work since 1971. That first phase was published as Loria R. and Trump D., *Le scoperte a Sa 'Ucca de Su Tintirriolu e il neolitico sardo*, *Mon. Ant.* ser. misc. II.2, Rome, 1978. It had nothing to say on the Early Neolithic which concerned this conference.

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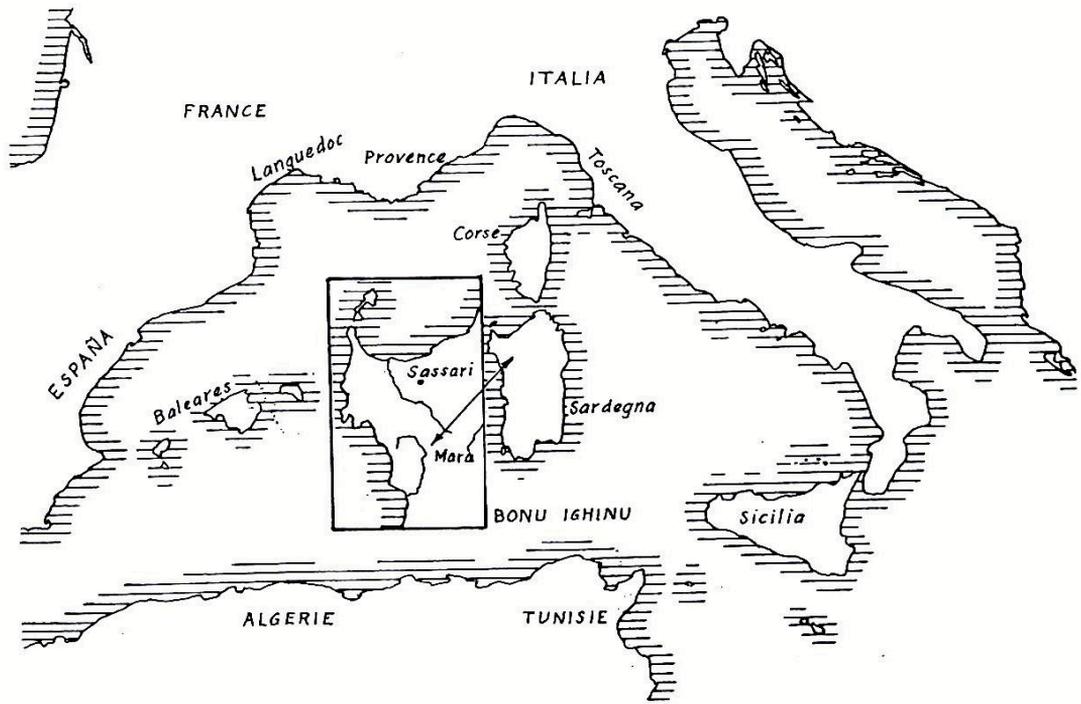


Figure 1 : Grotta Filiestru, location of the site.

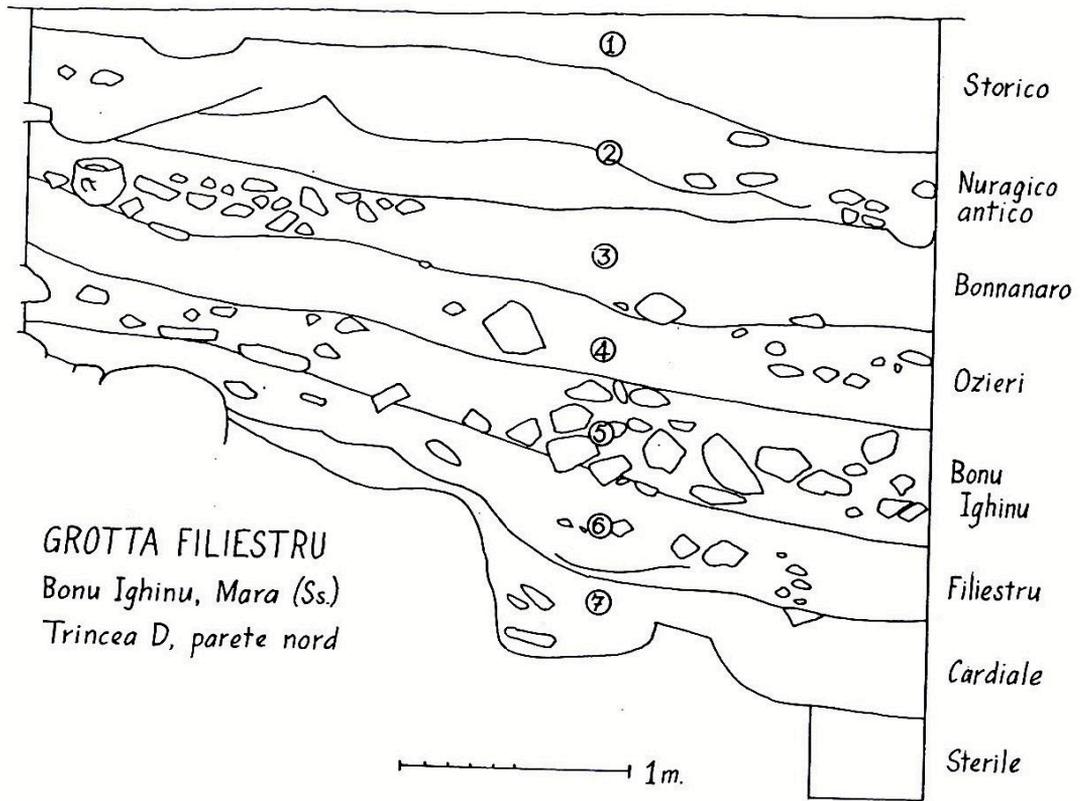


Figure 2 : Grotta Filiestru, the stratigraphy.

The Grotta Filiestru opens in limestone on the northern slope of the valley, 30 km south of Sassari, 20 km from the west coast of the island : both figures are taken direct from the map, the distances by road being much longer. It is 400 m downstream from Su Tintirriolu, and clearly belonged to the same community. It was indicated as a site of possible interest by its convenience of shape and access, and above all by having an excellent spring of water 30 m from its entrance, although no single sherd or flint was found on the surface. Trial trenches in 1979 revealed a 3m deep stratigraphy covering six phases of Sardinian prehistory from Cardial to Early Nuragic. The Early Neolithic was reached over a modest area in trench B, 2 x 1,50 m. This was remedied in 1980 when trench D was carried to rock over 3 x 4 m, giving considerably more material and clarity of detail. The deposits consisted of domestic refuse throughout, with frequent hearths, and clearly represented occupation by a small group of pastoralists and perhaps hunters, whether continuous or sporadic is not certain.

The lowest level in trench D, (7), gave a typical Cardial Ware deposit, the first intact one of its period to be located in Sardinia. The decorated pottery bears bands, triangles and chevrons in profusion, produced by the impression of a *Cardium* shell. Only two sherds bore grooved or channelled decoration. The lowest level of B had 24.8% of its pottery decorated, the lower spits of D (7) 17.7%, the upper spits 4.5%. The figures are based on a total of 1300 sherds, so the picture of a steadily declining use of decoration should be a reliable one. A further 8.2% had a fine red slip and 2.4% plain horizontal cordons. The last figure could be misleadingly low as this decoration covers only a restricted part of each pot.

Of recoverable vessel shapes, the great majority were of globular to open bowls, though baggy jars were also represented. Indeed, three complete vessels of this form were found at the very top of the layer, so may have been recessed into it from the one above. One held c.2 kg of pure red ochre, the other two a black substance, not yet analysed but presumably also a pigment. No single flat base was found. Apart from one vertical example, all handles were rather coarse and placed horizontally, the 'ansa a maniglia'. The complete jars suggest, though do not prove, that four handles was the normal quota. Cordons were present linked these handles.

Flaked stone was frequent, with 1240 fragments recovered. 25% by number, much less by weight, were of obsidian from Monte Arci, 70 km distant. Two thirds of this obsidian was of the translucent variety, group SA as defined by the Bradford team, Hallam B., Warren S. and Renfrew C., "Obsidian in the western Mediterranean : characterization by neutron activation analysis and optical emission spectroscopy, *Proc. Preh. Soc.* 42, 1976, p. 85"; One third was of group SB, much more opaque. The rest were of a number of varieties of flint, most of them occurring naturally within the valley, though none within the cave. Only six could be described as implements, a stout dagger-like point, a lunate arrowhead, an awl, a backed blade and two scrapers. The absence of transverse arrowheads is strange but perhaps not significant.

Fragments of animal bones occurred in similar numbers, though exact figures are not yet available. They included three ground into awl points. The proportions of the different species were sheep-cattle-pig, though again exact figures are awaited. No goat or deer have yet been certainly identified. In spite of wetsieving, no grain was found, though there were several quern fragments - too many to be explained by the need to grind pigments.

This material seems to imply a fully Neolithic economy, even though the countryside immediately around the cave is suitable only for grazing. It is assumed that the occupants of the Grotta Filiestru, 3-4 families at most, were pastoralists dependent on an agricultural village in the main valley a kilometre or so to the south. Their culture equates closely with the Su Caroppu variant of the Cardial Ware as defined by D. Atzeni in the south of Sardinia. Despite the quantity of true cardial decoration, which might suggest an early penetration from the coast, the dates to be mentioned below argue more for late survival in this inland backwater.

The immediately overlying layer D(6) clearly continues the same tradition though its pottery was almost completely undecorated. Out of 1270 sherds recovered, eight bore cardial impressions, but these were all small and in the lowest spit, so may well have been residual, incorporated accidentally from the layer below. Three sherds, though unmatched in layer (7), are clearly of the same tradition, bearing comb-impressed designs, one of which was on an interior surface. One sherd with widely spaced impressed dots and three rims with coarse transverse notches could be regarded as prototypes for the finer decoration which appeared in the Bonu Ighinu, Middle Neolithic, level above. Red slip and plain cordons continued in much the same proportions as before.

In both vessel shapes and handles there was rather more variety, though little more sophistication. For example, S-profile jars and vertical handles were slightly commoner, but there were still no flat bases.

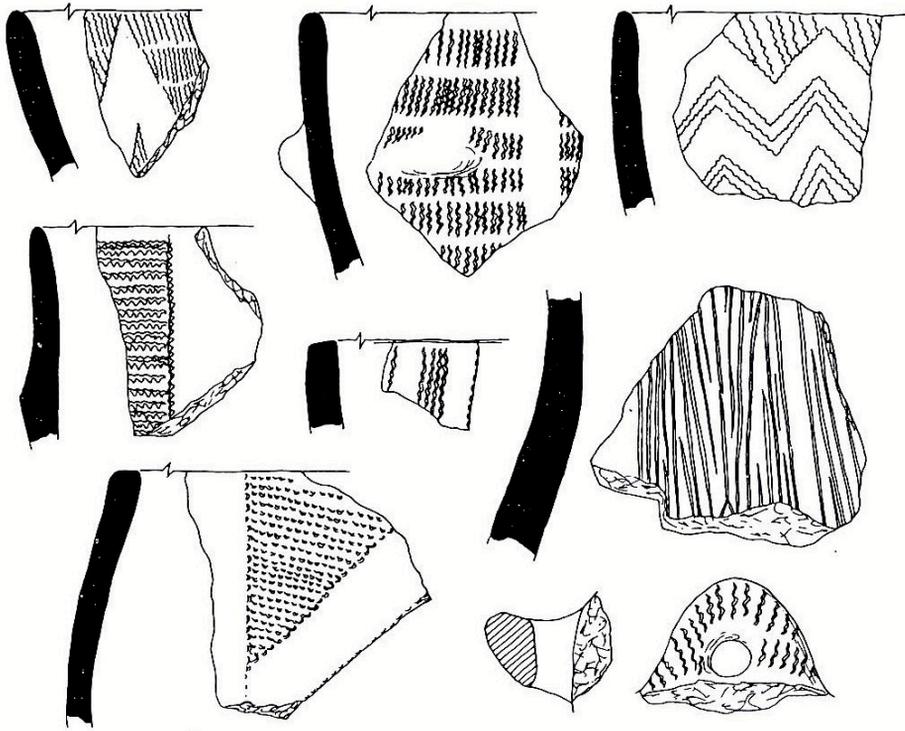


Figure 3 : Grotta Filiestru, pottery from the Cardial layer. Scale 1 : 1/2 (drwgs 1 : 1/2).

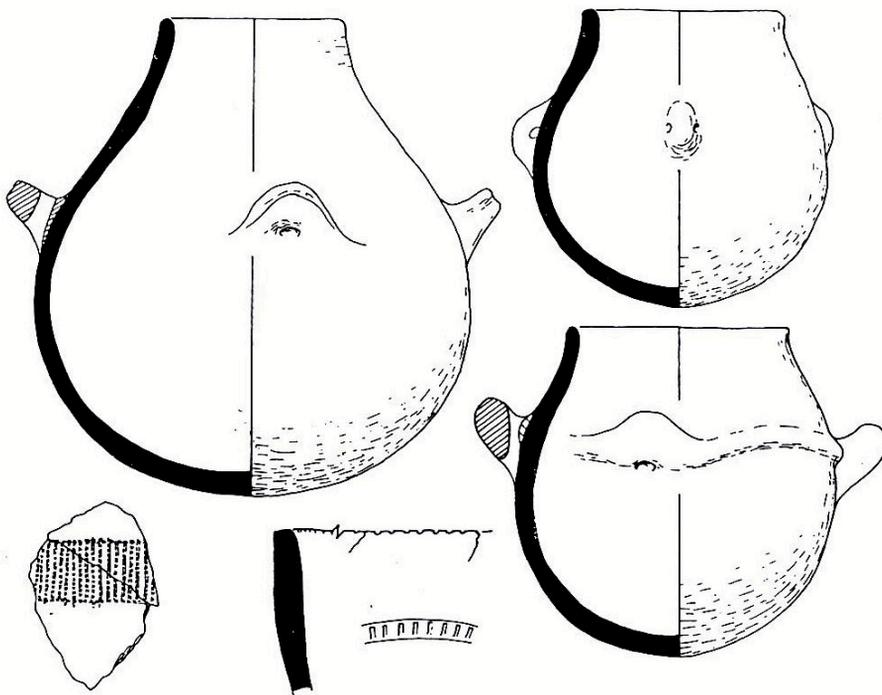


Figure 4 : Grotta Filiestru, pottery of Filiestru type. Scale whole pots 1 : 1/2. sherds 1 : 1/2. (drawings, pots 1 : 3. sherds 1 : 1/4).

977 pieces of stone showed no appreciable changes of material, though rather more recognizable artifacts - 4 lunates, 18 transverse arrowheads and a scraper. The animal bones (7 awls) and the querns showed no marked differences either.

The pottery parallels that from the 'Ighetto' in the Grotta Verde, Alghero. Despite the clear evidence of continuity from the Cardial Ware, I prefer not to use that name when the distinctive feature of this level is the near-absence of cardial decoration, Provisionally therefore, I propose to give this the name 'Filiestru' phase.

Layer D(5) belonged to the now well-recognized Bonu Ighinu Culture of the Middle Neolithic, D(4) to the even better known Ozieri Late Neolithic, D(3) to Bonnanaro, with four certain Beaker sherds associated, D(2) to an early form of Nuragic, into which were mixed in D(1) a few sherds of various historic periods.

Further excavation in the Grotta Filiestru is not immediately anticipated, though only a small proportion of the deposit has yet been touched. Instead, research is being actively pursued elsewhere in the valley to recover a full picture of the economy and settlement pattern, as well as the cultural succession, within a single territory, clearly defined by the topography. Surface survey has located many sites of all periods, including the parent village of the Grotta Filiestru. This, however, offers no hope for excavation, having been washed bare by erosion. Another, underlying a nuraghe and associated village 3.4 km from the cave, is much more promising for 1982.

Meanwhile, the text of a detailed excavation report is already in type-script, work is well under way on the drawing of finds and has started on their photography. The Dottoressa A. Foschi will write up the parallels which will tie this sequence into that of Sardinia as a whole, a full report on the animal bones by Dr M. Levine of Cambridge is nearing completion, and Prof. Cariati of the Centro di Spettroscopia (Facoltà di Agraria) at the University of Sassari will study soil samples and the biological finds.

Perhaps most important of all, two series of charcoal samples were recovered, from tranches D and B, and these have been accepted by the appropriate laboratories at the Universities of Rome (Dott. sa C. Cortesi of the Istituto di Geochimica) and Cambridge (Dr V.R. Switsur of the Godwin Laboratory for dating. Preliminary results are available from the Cambridge series. They date the Cardial phase in the Grotta Filiestru to the second quarter of the 5th millennium bc. How much before this the Neolithic colonization of the Sardinian coasts began is a matter for speculation at this stage. Two determinations for the Filiestru level lie just either side of 4000 bc. All dates were in accordance with their stratigraphic order. Determinations from the Rome series are promised by early next year, and are keenly awaited.

The immediate aim is to present the evidence from the Grotta Filiestru in the *Quaderni* of the Soprintendenza alle Antichità, Sassari, so that it may be available for use by our many friends and colleagues in Sardinia and elsewhere around the Western Mediterranean at the earliest possible moment.

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