

THE NURHAGS OF SARDINIA AND SOME OTHER
MEGALITHIC MONUMENTS OF THE MEDITERRANEAN
REGION.¹

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The nurhags of Sardinia, of which there are more than three thousand, in different states of preservation, are sepulchral towers. Some are double or multiple and a few have been altered into small forts. A typical nurhag, however, consists of a tower 20 to 60 feet in height, built of rude stones perhaps more or less shaped by hammering. It often stands on a platform. The diameter of a nurhag is generally rather greater than its height, and is less at the top than at the ground level, as the wall slopes inwardly about 1 foot for every 10 feet in height. There is an entrance six or more feet high, roofed over, either by a long stone lintel or by projecting stones forming a false arch. The passages and domes are all constructed on this principle, as are those in the Treasury of Mykenae and other prehistoric buildings, and also those in Hindu temples. The wall is very thick, more than a quarter of the diameter of the tower. A short passage leads into the central chamber, which is roughly circular, and has three alcoves, one opposite the entrance, and one at each side. The chamber is 12 or 15 feet high, and is vaulted on the overlapping principle, each row of stones projecting beyond the one below it, till the sides approach one another near enough to be roofed in. In large nurhags there is a similar but smaller chamber above the first, and in rare cases a third above the second. The upper chamber is reached by a steeply sloping passage which does duty as a staircase. It opens from the side of the entrance passage and is constructed in the thickness of the wall. On the top of the most perfect nurhags I saw, was a platform,

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A TYPICAL SARDINIAN NURHAG.

Reproduced from a water-colour drawing in the possession of E. H. Fison, Esq.

though some authorities think that the termination was a cone. A platform would suggest ancestor worship or some similar ceremonies performed on it. Some have imagined that nurhags were defensive or watch towers.

Doubtless some, as the curious nurhag of Losa, have been altered in later times into forts, as would naturally occur in an island, which has suffered its share of war and pillage, and where *vendetta* has not even yet died out; but the situation of many nurhags, often in groups, with no connection between them, precludes the idea that they were originally defensive, their shape moreover is not well suited for warfare. It is much more probable that like the tumuli of our country, and elsewhere, they were memorials of long forgotten chiefs. It has been objected, that had they been sepulchral more remains of the dead would have been found. Fergusson¹ suggested that they were Towers of Silence, like those of the Parsees. But cremation and the lapse of centuries may account for the absence of remains from towers that are exposed to men and animals, and to the weather.

The stones of which nurhags are built are generally large and oblong, but vary a good deal. There are many stones in some nurhags 4 or 5 feet long and $1\frac{1}{2}$ to 2 feet thick. A few stones exceed 6 feet in length.

The Phoenicians and Egyptians seem to have traded with the island, and perhaps introduced metals to the inhabitants. Owing to the absence of harbours and the barrenness of the soil on the eastern side, there was little communication with Italy in early times. The Carthaginians under Hasdrubal conquered Sardinia about 512 B.C. and very much oppressed the inhabitants, and consequently the Romans, who took possession of the island soon after the first Punic war, were hailed as deliverers.

The Sardinians are a primitive and backward people belonging to Professor Sergi's "Mediterranean race"; and having had less intermixture with big Celts and Teutons than other Italians they are among the smallest people in Europe.

The other prehistoric antiquities are Giants' Tombs,

¹ *Rude Stone Monuments.*

resembling long barrows, and *Perdas Lungas*, or menhirs, which are sometimes decorated with female breasts.

Nurhags or similar monuments are not confined to Sardinia. Some towers in the Province of Otranto bear great resemblance to them. A model of one of them, near Lecce, is to be seen in the Museo Kircheriano in Rome, and might be taken for a representation of a nurhag. Of the Balearic Isles I will speak later on. I have twice visited Sardinia, and among the most remarkable nurhags I saw was that of Losa near Abbasanta. It was probably at first an ordinary nurhag consisting of a single tower about 35 feet high. Later three vaulted chambers were added, making it triangular. After the lapse of a further considerable period, it was found useful for defence and surrounded by a wall with at least four towers, having a diameter of about 24 yards. A low wall outside this one enclosed a space, perhaps for cattle. The nurhag of Nurrai is near that of Losa. It is of the ordinary type and rather dilapidated. Its height is at present about 24 feet, though it was originally considerably more: its diameter 12 or 15 yards. The central chamber is 14 feet in diameter and has some small niches. The longest stones used are about 6 feet. There are several 4 feet by $1\frac{1}{2}$ or 2 feet.

Near Porto Torres is a double nurhag, and that of Ortu has at least eight towers. Thus we find a certain amount of variety.

The most interesting monuments, which resemble nurhags, are the Talayots of Minorca and Majorca.¹ In these the vaults are not entirely on the overlapping principle, as in the nurhags, but are supported in the middle by a pier, which sometimes remains when the Talayot has been destroyed by the stones having been removed for other buildings. The stones of these piers being too large for easy transport have survived *in situ*, and have been described by Fergusson as "bilitons." The largest Talayot is in the Bay of Alcudia, on the north-eastern side of the

¹ For the benefit of intending visitors to the Talayots of Majorca, I may mention that there is some difficulty in finding them. At Palma the Municipal authorities told me they were situate 4 kilometres from Alcudia. I crossed

the island to that place (about 60 miles), but was unable to get any further information, and had to return without seeing them. There is a good hotel at Palma.

Island of Majorca. It is 16 metres in diameter at the base and 14 at the top. The shape of the summit is uncertain, as none of the Talayots are in very good preservation. One Talayot is 12 metres high, others measure six; some again have two stories. The stones may be natural or roughly cut. Some are of very large size, exceeding 12 feet in length. These monuments, I believe, exceed 600 in number.

Besides the Talayots there are also buildings of 50-80 feet long, called "Navetas," from their resemblance to a ship turned upside down. They have a long internal cell and appear to be like our "Long Barrows."

The next monuments I will refer to are the "Sesi" of Pantellaria (the ancient Cossyra). Of these fifty-seven exist in fair preservation, besides a good many that are ruined. The Sesi are oval tumuli built of small stones, and penetrated by tunnels. The largest is 10 metres in its longest diameter, and 8·70 in width. Another is 9 metres by 5·40, and 2·60 m. in height; another, 5·80 metres by 4·60 with a surrounding platform 65 centimetres in width. In one instance there are as many as eleven tunnels, one of which bifurcates. These tunnels enter from different parts of the circumference, and each terminates in a small domical chamber, which was used for burials. They seem to have been of neolithic age, as no trace of metal has been found.

Not very far from Pantellaria, are the islands of Malta and Gozo, which contain some remarkable prehistoric monuments, the Giants' Tower in Gozo, the Mnaidra, and the Hagiar Khem in Malta. They are of much better masonry than the buildings with which we have hitherto been dealing and are probably of later date. They contain oval chambers. Hagiar Khem has recently been very carefully excavated by Dr. Caruana. It is 100 feet long by 80 in width, and has six oval chambers. Fergusson thinks that these buildings were roofed over, and as the remains of some courses of overlapping stones are still to be seen, it is hard to believe that it was otherwise, especially as the space to be covered is only about 20 feet wide. Dr. Caruana, however, can find no traces of the roofs and does not believe that they ever existed; it is so long since I saw them that I will not offer an opinion on

the question, but should Fergusson's view be correct, these elaborate structures may have been developed from primitive Sesi, like those of Pantellaria. Fergusson holds that these Maltese remains were funereal and that the stone shelves and cupboards still to be seen were for offerings to the dead. Caruana thinks they were open to the sky, and were Phoenician temples of Baal and Astereth.

There are said to be some nurhag-like monuments in Sicily and Portugal, but of these I have been unable to obtain any information. The domical tombs at Mykenae and other places in Greece may be considered as more or less related to the monuments I have been describing. They all are prehistoric, and belong to the neolithic and bronze ages. They seem to have been the work of Professor Sergi's "Mediterranean Race," which under the names of Pelasgians or Iberians occupied Southern and Western Europe. I will not detain you with the chambered tumuli of Spain, France, and the British Isles, except to remark that in all probability we owe them to the same dark, dolichocephalic people.

Fergusson thought that the dolmen builders came from Africa, and this is still the idea of anthropologists. Algeria has a large number and considerable variety of rude stone monuments. Some of these are called *chouchas* by Fergusson. One of them is represented in his book¹ from a drawing by Flower. They are low towers, not exceeding 5 or 10 feet in height, with diameters varying from 10 to 40 feet. They may perhaps be the ancestral forms of nurhags, and also of those much later tombs, the so-called Tombeau de la Chrétienne, 40 miles west of Algiers, and the Medrassen, between Constantine and Batna. The Tombeau de la Chrétienne was the sepulchre of the Kings of Mauretania, about 100 B.C. It stands on a hill and is visible from afar, and consists of a low cone standing on a cylinder, 200 feet in diameter, and decorated with Ionic columns. It is now 100 feet high and may have been 130. It has an internal gallery, which contains a small carved lion and lioness.

The Medrassen is not quite so large, and is decorated

¹ *Rude Stone Monuments.*

with rude Doric columns. It has a gallery and sepulchral chamber, and was probably the tomb of the Numidian kings. Near it are the remains of several small tombs of similar shape, probably those of relations or courtiers. There are several monuments of the same character in the western province of Oran.

The dolmens of Roknia (near the hot springs of Hammam Meskotine) of which there are two or three thousand, are of very simple structure; they consist of two parallel stones, 5 feet or more in length, with shorter stones at the ends. They form the sides of a box which is covered by a larger slab. I examined about 200, most of which were only large enough to hold a corpse with knees doubled up, but a few could hold a body at full length. The dolmens at Guyotville, eight miles from Algiers, are of very similar character. There are also thousands of menhirs spread over the hills near Setif, many of which I saw when riding to that place from Batna.

As I have wandered somewhat from my original subject, I may as well add that megalithic monuments are also found in Syria and Arabia, consequently we can trace them over nearly the whole of the area occupied by the Mediterranean race.

I have only in conclusion to acknowledge my obligations to Mr. Fergusson's *Rude Stone Monuments*, to M. Cartailhac's valuable work on Majorca and Minorca, to the *Monumenti Antichi* of the Accademia dei Lincei, and to Professor Sergi, for the kind assistance he gave me when I was in Rome.