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Beginnings, settlement and consolidation of the production economy in the Basque region



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ABSTRACT

The introduction of the Neolithic cultural and economic practices in the Basque region has been traditionally understood as a late process, in parallel to the achievement of the production of the first metals in neighbouring areas where the production economy has been considered to arrive much earlier. This paper presents an updated view of the beginnings and consolidation of the Neolithic practices in the Basque area and the current state of knowledge based on data from recent excavations and advances in ¹⁴C dating and micro/macro-plant remains, fauna, lithic raw materials, artefact and micromorphological analysis. The results challenge traditional interpretations and provide a timeframe and cultural and palaeoenvironmental characterisation of the Early, Middle and Late Neolithic periods in the region through data currently available from rockshelter, cave and open-air site deposits.

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1. Introduction

Research on the Neolithic Period in the Basque region has evolved significantly in the last quarter century. During these years, a number of favourable methodological and technical developments have provided a solid basis for our current knowledge about this period:

- Fieldwork and excavations in caves, rock-shelters and open-air sites have proliferated and provided rich artefact assemblages.
- Advances in ¹⁴C-based dating techniques have enabled, using just a small quantity of organic matter, direct dating of singular objects and bone remains of domestic species as well as seeds and charcoal. This methodological improvement has provided data for the development of a well-documented proposal for the timing of introduction of plant and animal domestication to the Basque area.
- Palaeobotanical studies of pollen, plant-macro remains, charcoal and phytoliths have provided information on the management of vegetal and natural resources.

- Micromorphological analysis of sediments has contributed to the characterisation of the use of the space, settlement patterns and palaeoenvironmental dynamics involved in the accumulation and alteration of the archaeological record.
- Fauna studies have provided information about the first domestic species documented in the region.
- Finally, investigations of the sources of siliceous raw materials have provided insights into the supply sites and relations between different human groups in the area.

This work synthesises the results of these studies and present an updated perspective on the origin and evolution of the Neolithic Period in the Basque region.

2. Deposits

In recent years, the number of sites containing archaeological deposits corresponding to the Neolithic Period has increased considerably. Many long-known sites have been revisited using current methodologies (Fig. 1):

- In Álava: Araico, Atxoste, Fuente Hoz, Kampanoste, La Renke, Los Husos I, Los Husos II, Mendandia, Peña Larga, San Cristóbal and

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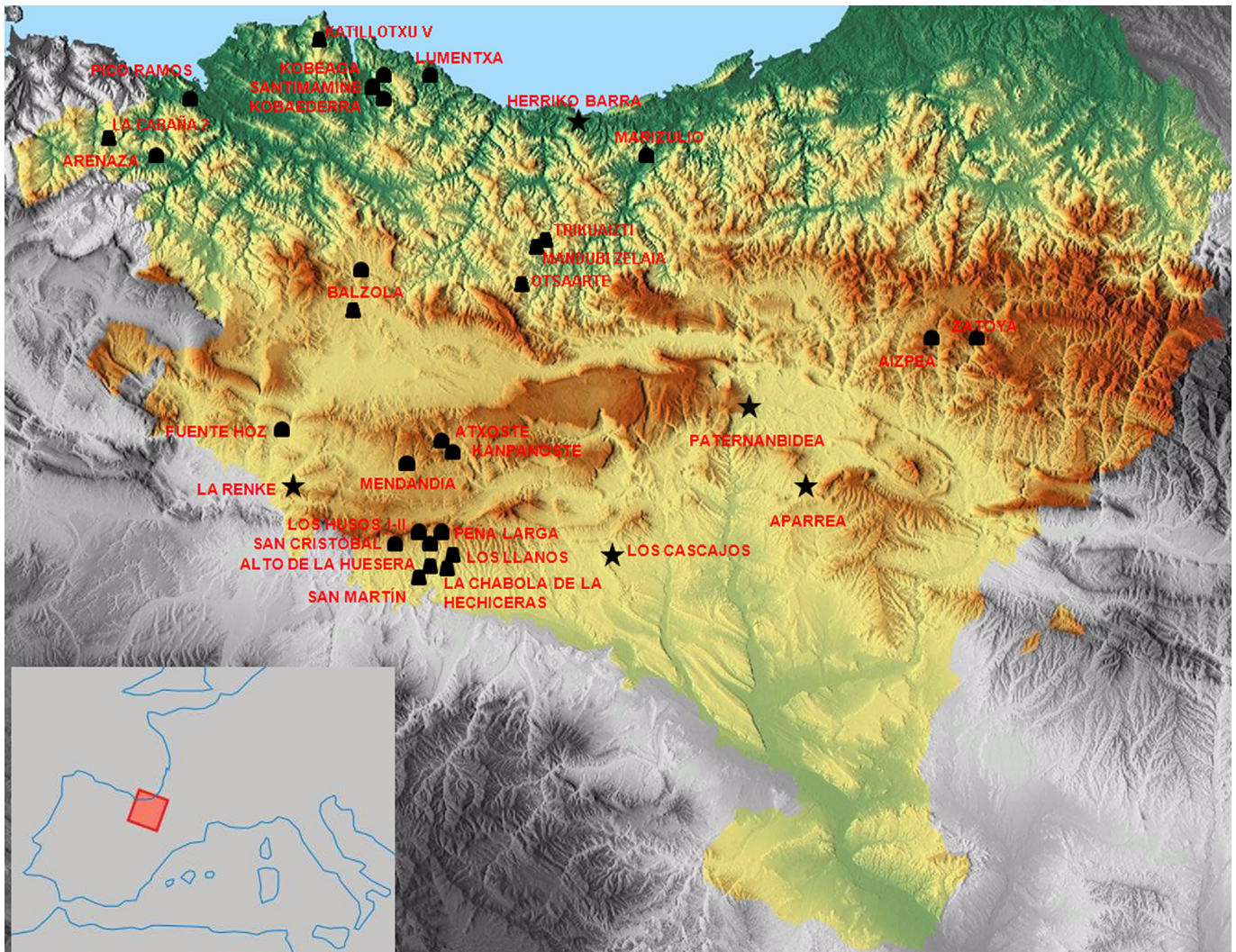


Fig. 1. Distribution map of Neolithic sites in the Basque region referred to in this work.

the dolmens of Kurtzebide, La Chabola de la Hechicera, Los Llanos and San Martín.

- In Bizkaia: the caves of Arenaza, Balzola, Kobaederra, Kobeaga, Lumentxa, Pico Ramos and Santimamiñe and the dolmens of La Cabaña 2 and Katillotxu V.
- In Gipuzkoa: Herriko Barra, Marizulo and the dolmens of Madubi Zelaia, Otsaarte and Trikuaitzi II.
- In Navarra: Aizpea, El Llano del Montico, Los Cascajos, Paternanbidea and Zatoya.

3. Materials and methods

This work includes data from archaeological materials recovered during excavation processes that were examined according to an interdisciplinary protocol of analyses. Dating with ^{14}C was conducted for all deposits. However, in this paper, we have only referenced dates that were directly obtained from seed remains and bones of fauna recognised as domestic. For funerary assemblages, we reviewed dates obtained from human bones. In both cases, dates with error margins not exceeding ± 100 years were selected (Figs. 2 and 3).

Samples for pollen, charcoal, plant macro-remains, phytoliths and micromorphology were studied according to their

corresponding protocols. Fauna study includes species, sex and age characterisation of domestic specimens.

Human-manufactured materials were characterised following commonly applied typologies for the characterisation of lithics, ceramics and bone remains as well as the type of raw material used. Habitation structures documented in open-air sites and in caves and rock-shelters, as well as structures of a funerary character in pits, caves, rock-shelters and dolmens, have also been studied and interpreted.

The results of these studies have been synthesised in order to provide a hypothesis about the arrival of the Neolithic culture to the Basque area and its development stages. This synthesis has been built on the basis of the widest body of knowledge available to date for this geographical region.

4. Neolithisation process in the Basque region: time frame, culture and environment

Evidence indicates that the Neolithic in the Basque area is a clearly exogenous phenomenon. In its southern area, in the Ebro basin, there are a series of deposits with very early chronologies that are contemporary to the Epipalaeolithic assemblages documented in the rest of the Basque region (Fernández-Eraso, 2004). These sites can be understood as outposts of groups originating

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