# Atapuerca (Spain)

# No 989

# Identification

Nomination	The Archaeological Site of the Sierra de Atapuerca in the Municipalities of Atapuerca and Ibeas de Juarros (Burgos)
Location	Autonomous Community of Castille and León, Province of Burgos
State Party	Spain
Date	28 July 1999

# Justification by State Party

The sequence of archaeopalaeontological deposits in the Sierra de Atapuerca consists of a series of sites with a rich and abundant fossil and archaeological record. While they are all cave sites, some were initially exposed by a railway cutting. Nevertheless, the activities recorded in these deposits accurately reflect past ways of life which occurred over a very long period of time in a relatively undisturbed environment, and were preserved in pristine condition until the time of their discovery.

The archaeological sites of the Sierra de Atapuerca are significant testimony to the arts, not only because of the presence of the Palaeolithic drawing in El Portalón in the Cueva Mayor, but principally for the sanctuary in the Galería de Silex, which remained closed from the Bronze Age ( $\pm$  1500 BCE) until 1972, when it was discovered and studied.

# la unique testimony

The Sierra de Atapuerca sites provide unique testimony of the origin and evolution both of the existing human civilization and of other cultures that have disappeared. The evolutionary line or lines from the African ancestors of modern humankind are documented in these sites.

#### Criterion iii

Exceptional examples of diverse and significant periods of human history are to be found in these sites. From the most ancient European settlements, nearly one million years ago, to modern times, the passage of history is recorded here in milestones such as the existence of Neolithic sanctuaries, Bronze Age offerings, and Megalithic structures.

#### Criterion iv

The sites of the Sierra de Atapuerca constitute an exceptional example of continuous human occupation, due to their special ecosystems and their geographical location.

#### Criterion v

#### Category of property

In terms of the categories of cultural property set out in Article 1 of the 1972 World Heritage Convention, this is a series of *sites*. (It should be noted that this property is also nominated under natural criteria i and ii, and so it should be considered as a *mixed property*.)

#### **History and Description**

## History

- Pleistocene deposits

The Pleistocene epoch of the Quaternary period is dated to 2.4 million to c 10,000 BP (*Note* Early dates resulting from scientific dating techniques are expressed as "years BP" – ie years before the conventional date of 1950 on which all radiocarbon dating is based.) The earliest fossil hominid remains in Europe, from c 800,000 BP as established by palaeomagnetic analysis, were found in the *Gran Dolina* site in the Sierra de Atapuerca, one of the *Trinchera del Ferrocarril* group. They are associated with simple stone tools of the Pre-Acheulean (Mode I) type, which is consistent with the dating of the earliest levels of this site.

Also in the *Trinchera del Ferrocarril* group of sites are those known as *Tres Simas*. The oldest human remains from the *Galería* site have been dated to between 200,000 and 400,000 BP, associated with Acheulean (Mode II) stone tools.

Similar dates have been established for human skeletal remains from the *Sima de los Huesos* in the *Cueva Mayor*. The absence of herbivores consumed by humans in this site, where the remains of no fewer than 32 humans have been discovered, suggests that this may have been a mortuary site. If so, it is the earliest yet recorded. The relatively large sample, largely of adolescents and young adults, has permitted a number of important studies to be carried out on the palaeopathology of this population, the growth and development of individuals, and their average size.

- Holocene deposits

The Holocene epoch of the Quaternary period is dated from 10,000 BP to the present day.

The archaeological significance of the *Portalón* of the *Cueva Mayor* was first recognized in 1910, when the representation of a horse's head found at the entrance to the cave was identified as Palaeolithic. Subsequent excavations have established that it was occupied by various human groups over many centuries, mainly at the beginning of the Bronze Age (*c* 3200 BCE) and again during the Roman period and the early Visigothic period.

The *Galería del Silex* contains abundant evidence of human occupation during the Neolithic and Bronze Age. More fifty painted and engraved panels have been recorded, with geometrical motifs, hunting scenes, and anthropomorphic and zoomorphic figures. Excavation has revealed the existence in the cave of what appears to be a sanctuary in which funerary rites took place, with human remains (largely young adults and children) and many ceramic fragments, identified as being related to sacrificial activities. At the far end of the gallery there is evidence that the flint from which the cave takes its name was being exploited.

There is evidence of there having been a similar sanctuary in the *Cueva del Silo*. Human activities have also been recorded at several other sites, such as the *Cueva Peluda*, the *Cueva Ciega*, and *El Mirador*.

Human activity declined in the Sierra de Atapuerca with the creation of permanent settlements in the plains below, especially in the Middle Ages.

## Description

The Sierra de Atapuerca is located at the north-eastern corner of the Castilian plateau. Although it is more than 1000m above sea-level, it is now no more than a gently sloping limestone ridge, largely covered with scrub and with some farming. Water erosion over the past five million years has led to the formation of a karst landscape with an elaborate system of caves. The water table became lower as a result of geomorphological processes, making the caves suitable for animals and humans to live in them. The system of terraces formed along the southern margin of the Sierra shows that, during the Middle and Lower Pleistocene, streams flowed close to the entrances of these caves, making them especially suitable for human occupation.

Scientific interest in the caves began in the mid 19th century, concentrating on the *Cueva Mayor*. This is entered from the south, giving access immediately to *El Portalón*. To the east lies the sinuous *Galería del Silex*, extending more than 300m, and to the west the sequence of caves (including the *Sima de los Huesos* – the "Pit of the Bones") leading over 1km to the *Galería del Silo*, which has its own access.

To the north-west is the group of sites revealed by excavation of a mining railway cutting (from which it takes its name, *La Trinchera del Ferrocarril*), never to be completed. These are in fact caves brought to light by the cutting and so with the appearance of rock shelters. To the north is the *Gran Dolina*, and further southwards are the *Tres Simas*, with the important finds at *La Galería*.

#### **Management and Protection**

### Legal status

The nominated property was declared a Site of Cultural Interest (*Bien de Interés Cultural*) under the provisions of the Spanish Historic Heritage Law of 1985.

This imposes strict control over the protected area, requiring official authorization for survey and excavation and for transfer of ownership.

#### Management

Ownership of the lands covered by the nominated property is partly public and partly private. Overall supervision of activities within the prescribed area rests with the national Ministry of Education and Culture, located in Madrid. Much of this is delegated to the Council for Education and Culture, Directorate General of Heritage and Cultural Promotion of Castille and León, based in Valladolid, which in turns involves the municipal administrations of Atapuerca and Ibeas de Juarros in the conservation and protection of the sites.

A Management Plan (*Plan Director*), commissioned by the *Junta* (Government of the Autonomous Community) of Castille and León, was completed in April 1993. This

detailed plan begins with an analysis of the present situation and goes on to take account of the basic aspects of the protection, conservation, investigation, and presentation of the sites. It is not confined to the cultural sites alone, however, but contains a section detailing measures to protect the ecology of the Sierra de Atapuerca. It was prepared because of the lack of planning provisions relating to the sites in the two municipalities.

#### **Conservation and Authenticity**

## Conservation history

The first scientific investigations took place as early as 1863, but it was not until the early years of the 20th century that the first archaeological report was published, concentrating on the more recent prehistoric finds in the Cueva Mayor.

Excavations took place in El Portalón in 1964 and 1971. After the discovery of the Galería del Silex by the *Edelweiss* Spelaeological Group in 1972 a great deal of investigation took place in this group of caves during the 1970s and 1980s.

The Trinchera sites were discovered by the Edelweiss Group in the mid 1950s. The first major excavations took place in the 1970s at Gran Dolina and La Galería. While these excavations were in progress the rich fossil finds of the Sima de los Huesos were discovered, but its physical nature, that of a deep shaft filled with bones, precluded excavations starting in earnest until 1984, continuing until the present day under arduous conditions.

Systematic investigation of the La Trinchera sites began in 1978 and has been continuing uninterruptedly to the present. The sites, which are open as a result of the defunct railway cutting, were protected by the addition of roofs in the 1980s.

The only means of access to the Sierra de Atapuerca sites is on foot, using small paths through the thick brush. It has therefore not yet proved necessary to provide any elaborate form of additional protection. However, the *Plan Director* includes proposals and projects relating to the protection and presentation of the property.

#### Authenticity

The natural caves that form the subject of this nomination contain deep strata containing archaeological and palaeontological material of great scientific importance which have remained untouched since prehistoric times until the present day, when they are being excavated scientifically. Their authenticity may therefore be deemed to be total.

#### Evaluation

#### Action by ICOMOS

An ICOMOS expert mission visited the Sierra de Atapuerca in February 2000.

#### Qualities

The fossil deposits in the karst cave system of the Sierra de Atapuerca contain remains of the earliest known hominids in Europe. Their relative abundance and their association with animal bones make it possible for scientific studies to be carried out on many aspects of these early societies. There is also evidence of continued human occupation in the caves over nearly one million years.

# Comparative analysis

A comparative study of fossil hominid sites was carried out for ICOMOS in 1997. This study identified four periods of human evolution represented in these sites. The second of these covered the period from 1 million to 300,000 years BP. During this period there were only representatives of the genus *Homo*, but with considerable regional diversity, and still confined to parts of the Old World.

The study defined six criteria for the evaluation of fossil hominid sites:

- 1. *Well dated material* allows the taxonomist to sort out phylogenetic relationships and rates of evolutionary change.
- 2. The *numbers of fossils* from a single locality or within an identifiable geological unit, if well dated, provide opportunities for scientific analysis and answering questions of population variability, the necessary condition if evolution under natural selection is to occur.
- 3. The antiquity of the finds.
- 4. The potential for further finds.
- 5. *Groups of closely related sites and even landscapes*, which provide good contexts that preserve environmental and archaeological evidence as well as hominid fossils. This is needed in order to interpret their lifestyles and capabilities.
- 6. *Role in the discovery and demonstration of human evolution.*

The Sierra de Atapuerca sites perform highly when set against these criteria. The comparative study identified a number of sites with hominid remains that score most highly on these six criteria and which were strongly recommended for consideration. The Sierra de Atapuerca was the only site on this list from the second chronological group described above.

There is already a number of fossil hominid sites on the World Heritage List. However, only those at Sangiran (Indonesia) and Zhoukoudian (China) are noteworthy for fossil hominid remains from this period, and neither is in Europe.

It should also be borne in mind that scientific exploration of the caves in the Sierra de Atapuerca, which is a slow and meticulous process, has only been in progress for a quarter of a century. Much more work remains to be done on the known sites, and others will unquestionably come to light in the decades to come.

## ICOMOS recommendations for future action

ICOMOS has no reservations about the cultural value of the Atapuerca sites. However, it was concerned that no buffer zone was defined around the proposed site in the original nomination dossier. ICOMOS also recommended that there should be some form of tourism development plan, which imposed controls over development related to tourism in the nearby villages of Atapuerca and Ibeas de Juarros At the meeting of the Bureau in June 2000 this nomination was *referred back* to the State Party, requesting the definition of a suitable buffer zone and the preparation of a tourism development plan.

In September 2000 the State Party supplied detailed information relating to these two points. The nominated archaeological Site of Cultural Interest (*see* "Legal status" above) is surrounded on all sides by agricultural areas where no construction is permitted (*Suelos No Urbanizables*) or areas of protected woodland (*Suelos No Urbanizables*) or areas of protected woodland (*Suelos No Urbanizables*). These give complete protection and constitute an effective buffer zone, which preserves the visual setting of the archaeological sites and is fully in conformity with the requirements of the *Operational Guidelines*.

The State Party also provided extensive information regarding provisions for tourist access and control in the immediate vicinity of the nominated area and in the neighbouring municipalities. All the local planning regulations are drafted so as to avoid undesirable development related to tourism in the municipalities of Atapuerca and Ibeas de Juarros. Work has begun on the coordination of local initiatives, by both municipal and voluntary groups, set against the overall tourism resources of the region, which centre on Burgos.

ICOMOS is satisfied that serious attention is being paid to this aspect of the future management and protection of the nominated archaeological area.

# Brief description

The caves of the Sierra de Atapuerca contain a rich fossil record of the earliest human beings in Europe, from nearly one million years ago and extending into the Common Era. They represent an exceptional reserve of data, the scientific study of which provides priceless information about the appearance and the way of life of these remote human ancestors.

# Recommendation

That this property be inscribed on the World Heritage List on the basis of *criteria iii and v*:

*Criterion iii* The earliest and most abundant evidence of humankind in Europe is to be found in the caves of the Sierra de Atapuerca.

*Criterion* v The fossil remains in the Sierra de Atapuerca constitute an exceptional reserve of information about the physical nature and the way of life of the earliest human communities in Europe.

ICOMOS, October 2000