

# Hugo Obermaier and the Research on the Mesolithic of Northern Spain\*

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**Summary:** It is Professor Dr Hugo Obermaier's relationship with the "Asturian" (or the Mesolithic of the western Cantabrian coast) and with the end of this period which motivates this paper; but it would be difficult to analyze this question without considering the scientific relationship that the German prehistorian maintained with Ricardo Duque de Estrada, Count of the Vega del Sella, throughout his life. It is an important question, given that it was Vega del Sella who initiated the systematic study of the Asturian with his excavation in the cave of El Penicial (Asturias). The key factor in the scientific relationship between these two pioneers of Cantabrian prehistory must have been the fact that Vega del Sella granted refuge to Obermaier, and to his disciple Paul Wernert, in his Palace of Nueva de Llanes (Asturias) at the beginning of the First World War. In the same way, the fact that Obermaier dedicated his *Estudio de los glaciares de los Picos de Europa* (1914) and the second Spanish edition of *El Hombre Fósil* (1925) to Vega del Sella undoubtedly confirms the link which existed between these two prehistorians. Obermaier's contribution to the study of the Mesolithic of Northern Spain in the first years of the 20<sup>th</sup> century will be analyzed in this historical context. It was he who introduced the term "Asturian", and who situated the new culture in the global context of European prehistory, along with the rest of the Mesolithic cultures. Although it is indeed certain that Obermaier offered in his synthetic works a vision of the Asturian fundamentally based on the works of Vega del Sella, we must not forget that the German author did not share Vega del Sella's idea of the Asturian-Neolithic "disconnection". On the contrary, Obermaier put forward the idea of an evolution in the composition of the Asturian shell middens which would provide evidence for the transition to the Neolithic: the ceramics would be found in the last stage of evolution of the deposits. This is a question which even today continues to be a matter of debate within the framework of the research on the process of neolithization in the North of Spain.

## I. Introduction

In this paper I analyse the contribution of Professor Dr Hugo Obermaier (Regensburg 1877 – Fribourg 1946) to the study of the Mesolithic of Northern Spain in the first years of the 20<sup>th</sup> century. Initially I will refer to the scientific relationship that the German prehistorian had with one of the pioneers of Cantabrian Prehistory: Ricardo Duque de Estrada, Count of the Vega del Sella (Pamplona 1870 – Nueva de Llanes 1941). Later the role Obermaier played in the initiation of research on the Mesolithic in the North of the Iberian Peninsula will be analysed. Finally I will discuss his ideas about the Mesolithic-Neolithic transition in the Cantabrian region. The contributions of Obermaier to the study of the Mesolithic

\* This paper was presented at the 44<sup>th</sup> annual meeting of the Hugo Obermaier Society, celebrated in Innsbruck, Austria, in April 2002. The work has been carried out with a post-doctoral fellowship granted by the Secretaría de Estado de Educación y Universidades (Spain). The comments of the Professor Pablo Arias Cabal on the first draft of the article contributed without doubt to its improvement. For the production of the figures I counted on the contribution of Luis C. Teira Mayolini.

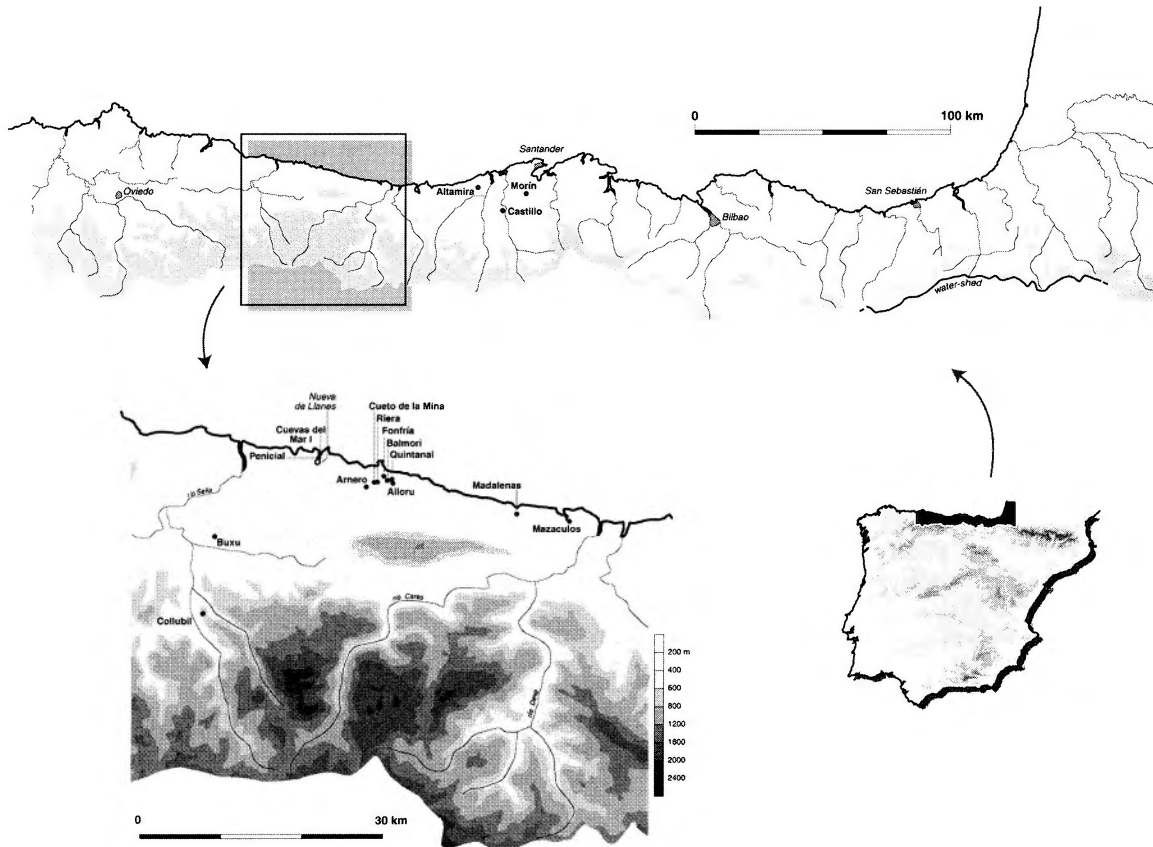


Fig. 1. This map of the Cantabrian region shows the location of the archaeological sites cited in this article. The classic area of dispersion of the Asturian in the East of Asturias is shown in detail; at present the number of shell middens known along the eastern coast of Asturias exceeds one hundred.

of the Cantabrian region are basically compiled in the different editions of his main work: *El Hombre Fósil* (Obermaier 1916; 1924; 1925)<sup>1</sup>.

## II. Hugo Obermaier and the Count of the Vega del Sella

Certainly, it is the relationship of Hugo Obermaier with the Mesolithic of the Cantabrian region and with the end of this period which motivates this paper; but it is difficult to analyse the question without taking into account the scientific relationship that the German prehistorian had with Ricardo Duque de Estrada, Count of the Vega del Sella, throughout his life. This aristocrat, Navarran by birth but resident of Asturias since his youth, was one of the pioneers of Cantabrian prehistory, and is commonly known in references as Conde de la Vega del Sella. In the same way, the relationship with Obermaier must have

<sup>1</sup> *El Hombre Fósil* was in part an updating of the work that Obermaier published in 1912 (*Der Mensch der Vorzeit*), to which he added archaeological information relating to the Iberian Peninsula, as is the case of the data related to the beginning of the investigation on the Mesolithic in the North of Spain.

been important in the formation of Vega del Sella as a prehistorian, given that the Count, who had studied the career of Law, lacked academic training in Prehistory.

It was Vega del Sella who initiated the way of systematic study of the Asturian. The term "Asturian" is commonly used to refer to the Mesolithic of the western Cantabrian coast (Fig. 1). The archaeological record is characterized by shell middens (Fig. 2), almost always located in caves and rock shelters (Fig. 3). In fact, from the 9<sup>th</sup> to the 6<sup>th</sup> millennium cal BC, this is practically the only type of archaeological site we find in this part of the region (Vega del Sella 1923; Clark 1976; González Morales 1982; Fano 1998a). In contrast, in the eastern Cantabrian coast the shell midden deposits are not a common element, or at least do not appear with the same frequency as in the west of the Cantabrian coast. This situation is currently unexplained, but has certainly influenced the establishment of a model which distinguishes between the Asturian and the fundamentally Basque, post-Azilian Epipalaeolithic.

The history of the investigation provides a good account of the relationship between Obermaier and Vega del Sella. Thus one may point out Vega del Sella's visit to the cave of El Castillo during the excavations directed by Obermaier between 1910 and 1914; but also the contribution of the German prehistorian to the excavation of the cave of Morín, directed by Vega del Sella in 1920 and published one year later (Cabrera & Bernaldo de Quirós 1999, 186 and 200). In the same way, the photograph that accredits the Count's visit to the cave of Altamira during the excavation campaign of 1925, directed also by Obermaier, is already well-known (Züchner 1997, 26).

But in the scientific relationship between these two pioneers of Cantabrian prehistory one key factor must have been that Vega del Sella welcomed Obermaier, and his disciple Paul Wernert, at his palace of Nueva de Llanes (Asturias) at the outbreak of the First World War. Apparently, as Benito Madariaga indicates, Obermaier had previously stayed in Santander as the guest of Jesús Carballo (Madariaga de la Campa 1996, 72). In the same way, the Count facilitated Obermaier's incorporation into the Spanish Commission of Prehistoric and Palaeontological Research (C.I.P.P.), as well as into laboratories of the National Museum of Natural Sciences of Madrid at the end of 1914 – see the letter of Paul Wernert to Vega del Sella, dated December 13, 1914, in which Obermaier's disciple informs the Count about their work in the Museum. The linking of Obermaier to the C.I.P.P. was extended until 1919 (Márquez Uría 1996, 80; Moure 1996, 29). In these years Obermaier and Vega del Sella inspected sites together, for example in the case of the caves of El Valle and Rascaño in Cantabria, and of Candamo, Las Mestas and La Peña in Asturias (Márquez Uría 1974).

Other photographs document the friendship and collaboration that both of them maintained, for example the photo included by Hans G. Bandi and H. Schwab (1985, 026) in their contribution to the 1985 re-publication of *El Hombre Fósil*. In it we see both of them in Nueva de Llanes in 1917. Another good example is the photo collected by Márquez (1996, 81) in her contribution to the commemorative book of the 50<sup>th</sup> anniversary of Obermaier's death, in which both of them appear together with General Barga and Lama in Amieva (Asturias) in 1915. It is precisely in that place that the cave of Collubil is located, excavated by the Count in 1912 and inspected again with Obermaier in 1915.

Years later, Vega del Sella also supported Obermaier in his appointment as Professor of the Primitive History of the Man at the University of Madrid in 1922 (Moure 1996, 31). In the same way, the fact that Obermaier dedicated to Vega del Sella his *Estudio de los glaciares de los Picos de Europa* (1914) and the second edition of *El Hombre Fósil* (1925), confirms the bond that existed between these two prehistorians. Finally, the work that they published together, such as the monograph on the Cave of the Buxu (Obermaier & Vega del Sella 1918), is a good indication of the scientific relationship that the two men cultivated for many years.



Fig. 2. Shell midden of Madalenas Cave (Vidiago, Llanes).



Fig. 3. Cuevas del Mar I (Nueva de Llanes): this site forms part of a cluster of caves with shell middens situated in the mouth of the Nueva River. These deposits were surveyed by the Count of the Vega del Sella in the 1920's.

### III. The Asturian in the works of Hugo Obermaier

In the excavation of the Cave of El Penical (Asturias) Vega del Sella (1914) discovered a lithic industry without precedents in the region. One distinguishing feature of the assemblage was the presence of a pick made in quartzite, which was later named Asturian pick (Fig. 4). Throughout those years, the basic problem to solve was to establish the chronology of the finds from El Penical.

Certainly, the stratigraphy of El Penical did not permit chronological conclusions to be drawn and Vega del Sella had to rest on typological criteria in order to present a basic working hypothesis about the age of the materials. Because of this, as pointed out by Obermaier himself (1916, 336), it is not surprising that the Count initially attributed the finds to the Palaeolithic. Vega del Sella indicated that the majority of the pieces were similar to Acheulian tool assemblages, while another part of the material showed affinities to Mousterian tool assemblages. This made the Count think of a moment of transition between both periods (Vega del Sella 1914, 13)<sup>2</sup>.

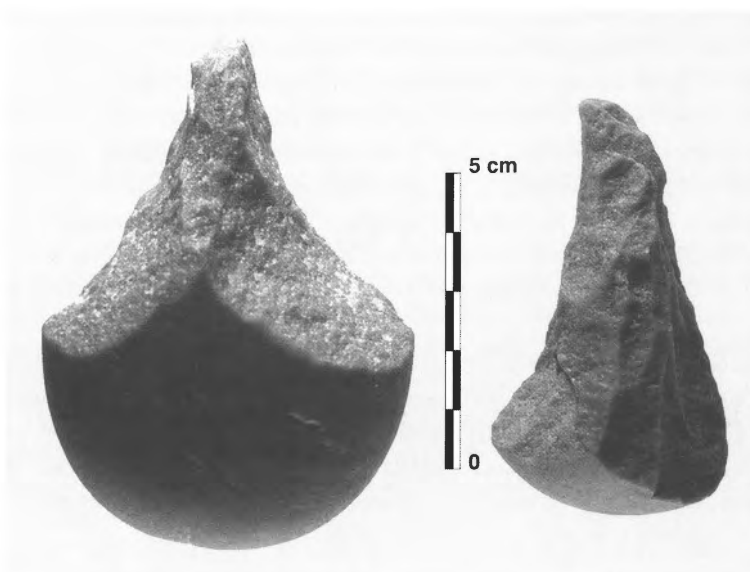


Fig. 4. Asturian picks knapped in quartzite.

Before the 1914 note about El Penical was published, the Head of Research of the C.I.P.P., Eduardo Hernández Pacheco, revealed his doubts concerning the age that the Count had attributed to the materials:

*"Su nota sobre Penical quería que rompiese la marcha de las publicaciones de la Comisión de Investigaciones Prehistóricas, pero no me decido a enviarla a la imprenta por las dudas que me asaltan respecto a su edad ..."* [I wanted to initiate the march of publications of the Commission of Prehistoric Investigations with your note on El Penical, but I am not sure of sending it to the print because of the doubts that assailed me regarding its age ...] (letter by Hernández-Pacheco to Vega del Sella dated 1 November, 1913; Márquez Uría 1988, 487).

<sup>2</sup> Many years later, in the 1950's, the typology was again one of the criteria followed by the Professor Fco. Jordá Cerdá in his revision of the chronology of the Asturian (Jordá 1959; see a historiographic revision of the question in Fano 1998b).

In the same letter Hernández-Pacheco urged Vega del Sella to exchange views with Obermaier about the materials in question. In spite of the rather unkind comment made by Hernández-Pacheco about Henri Breuil in that same letter, Vega del Sella also spoke with the French prehistorian, as the Count himself records on page 13 of his note on El Penicial. In fact, Breuil showed him two picks analogous to those found in the cave of El Penicial, which he had gathered in the cave of Quintana (= of Balmori), a site situated a few kilometers from El Penicial. The surface find of those two picks in the Magdalenian deposit of the cave of Quintana made Breuil suppose that the pieces corresponded to the end of the Palaeolithic; but Vega del Sella must have thought that the basis of Breuil's hypothesis was too flimsy, and so he did not call into question his own conclusions about the chronology of the material from El Penicial.

A year later, we observe again the difficulty he had in confronting an absolutely unknown archaeological reality, when in the Congress of the Spanish Association for the Advancement of Sciences, Vega del Sella (1915, 156) attributed the shell midden deposits of the eastern coast of Asturias to the Azilian. At that time Vega del Sella was not yet conscious of the relationship existing between the tool assemblage found in El Penicial and the shell middens of the eastern coast of Asturias. But early in 1915, the work carried out at two caves, Fonfría and Mazaculos, demonstrated to Vega del Sella in which way the type of tools documented in the Cave of El Penicial was associated with the shell middens. In Fonfría the Count documented several Asturian picks among the remains of a shell midden, and in the shell midden of Mazaculos he found picks identical to those at Fonfría and El Penicial. This led the Count to affirm the following:

*“Este nuevo descubrimiento vino a corroborar lo que ya era presumible por el resultado de las anteriores investigaciones: que la industria de estos picos es sincrónica de las formaciones de estos depósitos de marisco, cuyos vestigios aparecen adheridos en las cavernas y abrigos de la región”* [This new discovery came to corroborate what was already presumed by the result of the previous investigations: that the industry of these picks is synchronous to the formations of these shell middens, whose vestiges appear in the caves and shelters of the region] (Vega del Sella 1916, 66).

When Vega del Sella was writing the work cited, *Paleolítico de Cueto de la Mina (Asturias)*, the first edition of *El Hombre Fósil* had already been published, as is clear from the fact that Vega del Sella cites the work of Obermaier (Vega del Sella 1916, 67); and that it is precisely this book in which the Count includes the paragraph of *El Hombre Fósil* (page 334) in which Obermaier proposes that the name “Asturian” be given to the period under study. In that way, Obermaier followed the custom of using the name of the place – in this case a province – in which the first finds were documented.

Likewise in the first edition of *El Hombre Fósil* Obermaier already conceived the Asturian as a post-Palaeolithic period:

*“Como elemento completamente nuevo aparece en el N. W. de España, después del Azilo-Tardenoisense, una civilización a la cual proponemos se dé el nombre de Asturiense. Ha sido encontrada por el Conde de la Vega del Sella, en una serie de cavernas y abrigos, todos situados en la parte oriental de la provincia de Oviedo”* [A completely new element appears in the northwest of Spain, after the Azilo-Tardenoisian, a civilization which we propose that it be given the name of Asturian. It has been found by the Count of the Vega del Sella in several caves and shelters, all situated in the eastern part of the province of Oviedo] (Obermaier 1916, 334).

It is evident that while he was writing that book, Obermaier (1916, 182) was fully informed about the work of Vega del Sella at Cueto de la Mina, a cave which showed the post-Palaeolithic chronology of the Asturian deposits. In fact, in *El Hombre Fósil* Obermaier compiles the still unpublished results of the excavations carried out by Vega del Sella in 1914 and 1915 in several caves of Asturias. The publications of Vega del Sella were still in preparation at that time like the monograph about Cueto de la Mina, but the Count yielded the information to Obermaier for the publication of *El Hombre Fósil*.

Furthermore, precisely as indicated by Obermaier himself in the English version of 1924 (*Fossil Man in Spain*, pages 170 and 175) and in the second Spanish edition of 1925 (pages 184 and 188), the German

prehistorian collaborated in some of the excavations directed by Vega del Sella in places with Asturian layers, such as the caves of Arnero, Balmori and La Riera (Vega del Sella 1923, 42; 1930).

Just before the publication of the first edition of *El Hombre Fósil*, Obermaier participated in the excavation of the cave of Arnero, a deposit which also showed the post-Palaeolithic chronology of the Asturian. Subsequent to that publication, Obermaier repeated this observation in the excavation of the cave of Balmori, and above all in La Riera, the site which provided the most secure stratigraphy to fix the relative chronology of the Asturian, with a clear succession of archaeological layers, corresponding to the Upper Palaeolithic, Azilian and Asturian.

Certainly, the main contribution of Obermaier was that of situating the Asturian in its European context, together with the rest of the Mesolithic cultures. It was not easy, and for this reason it is pertinent to point out the modifications introduced by Obermaier throughout his works. The information on the Asturian increased progressively during the first decades of the 20<sup>th</sup> century, and this has remained perfectly reflected in the different editions of *El Hombre Fósil*.

At first, Obermaier hesitated for many years to accept the term “Mesolithic”. This is hardly surprising, given that the term only began to be used regularly by German and British archaeologists in the end of 1920's<sup>3</sup>; and other academic traditions, such as the Spanish or French, have hardly made use of the term until very recently. The German author rejected the term “Mesolithic” in the three editions of *El Hombre Fósil*, considering that the cultural phases grouped under that name did not suppose a progressive transformation in the transition from the Palaeolithic to the Neolithic (Obermaier 1916, 313; 1924, 322; 1925, 361). Only in the 1925 edition did the term “Mesolithic” appear, timidly hidden in one of the appendices.

Years later Obermaier used the term “Mesolithic”. It has remained reflected in the annotations that he made to his own personal copy, corrected with extra pages, of the second Spanish edition of *El Hombre Fósil* (López Junquera 1985, 53 and 54). These and other notes never saw the light, in spite of the fact that Obermaier thought of publishing a new edition of the book. Some of the annotations reveal that the German author closely followed the progress of the investigation into the Asturian, and there is even record of Obermaier visiting a series of caves near Llanes, in the east of Asturias, in September of 1932. Since 1987 this personal copy of Obermaier has been in the National Archaeological Museum of Madrid<sup>4</sup>.

In his work *El Hombre Prehistórico y los Orígenes de la Humanidad*, translated from German to Spanish in 1932, he also uses the term “Mesolithic” in order to refer to the intermediate period between the Palaeolithic and the Neolithic; and in a synoptic picture he refers to the Mesolithic cultures of Europe, situating the Asturian among them (Obermaier 1932, 167). But at the margin of the term “Mesolithic” – only used by Obermaier after the last edition of *El Hombre Fósil* – and returning to the question of the location of the Asturian in its European context, Obermaier, as I have previously indicated, did not always maintain the same position with respect to the period of the European Prehistory to which the Asturian corresponded.

<sup>3</sup> Specifically, among the authors who wrote in German, it was G. Schwantes and C. Schuchhardt who first employed the term in their separate works published in 1928 (Hoika 1993, 8); and among the British can be cited M. Burkitt, who, in the words of his disciple Grahame Clark, “was one of the first prehistorians to apply the term Mesolithic systematically to assemblages intermediate in age between the Palaeolithic and Neolithic, as defined by Lubbock” (Clark 1980, 3). As causes of the delay in the use of the term “Mesolithic” in Europe, recently P. Rowley-Conwy has indicated, in the first place, the inconsistent use of the term on the part of H. M. Westropp, the author who introduced the new term in his work *Pre-historic phases; or, introductory essays on pre-historic archaeology*, published in 1872 in London; and in second place, the coincidence in time of the publication of the book by Westropp and the book by J. Evans, *The ancient stone implements, weapons, and ornaments of Great Britain*, also published in 1872 in London. In this book Evans, a famous figure in the Archaeology of the epoch, only employed the terms Palaeolithic and Neolithic, and thereby caused the term coined by Westropp to fall into oblivion for years (Rowley-Conwy 1996).

<sup>4</sup> The book was donated to Spain by the Professor Dr. Hans-George Bandi (Cacho Quesada 1988, 13).

Thus, in the first edition of *El Hombre Fósil*, Obermaier thought that the Asturian was one of the descendants of the Palaeolithic, for which reason he grouped this culture together with the rest of the Epipalaeolithic cultures, that is to say, with the Azilian, Tardenoisian and Maglemosian (Obermaier 1916, 314). However, in the English edition of the same work, finished in 1922 and published in 1924, Obermaier ceases to consider the Asturian an Epipalaeolithic culture, and situates it in a subsequent period which he calls Protoneolithic (Obermaier 1924, 323)<sup>5</sup>. Other Protoneolithic cultures would be the Campignian and the culture today known as Ertebølle-Ellerbek.

Probably, his change of position was due to the fact that he already had access to archaeological information regarding the Azilian-Asturian relationship. Obermaier could verify the succession of layers of both cultures in the cave of La Riera, and could also observe the distance existing between the Azilian and Asturian archaeological record. This would lead the German author to revise his theory of 1916 and to separate the Asturian from the Epipalaeolithic cultures. In that way, the Asturian was converted into the only Protoneolithic culture known in Spain.

Finally, in the 1925 edition of *Fossil Man*, Obermaier again revises the question. In this case he defines the Asturian as a Preneolithic culture, that is to say, subsequent to the Epipalaeolithic and previous to the Protoneolithic (Obermaier 1925, 361 and 362). Now the influence of Vega del Sella turned out to be crucial, given that this was also the name used by the Count in his fundamental book published in 1923: *El Asturiense. Nueva industria preneolítica*. In fact, Vega del Sella thought that the Asturian lacked any point of contact with the Neolithic (Vega del Sella 1925), and therefore considered the employment of the term Protoneolithic hardly appropriate, for that concept would suggest that the Neolithic was a derivation of the Asturian. In any case, the presence of indications of food production in the Protoneolithic phases and therefore not in the Asturian, could have influenced Obermaier's change of position.

#### IV. The Asturian-Neolithic transition in the work of Obermaier and the survival of the problem currently

Probably, the lack of information was the reason why Vega del Sella did not study in depth the question of the end of the Asturian. According to this author, as we have already indicated, the period represented by the shell middens lacked any point of contact with the Neolithic. In his monograph on the Asturian, the Count alludes to a question that even today continues to be unresolved. I refer to the appearance of ceramics in a given moment, considered by this author as new element subsequent to the Mesolithic (Vega del Sella 1923, 32). Vega del Sella indicates in his work that the end of the Asturian is contemporaneous to this invention, but does not include the appearance of that type of material in the framework of an evolution of the Asturian to the early Neolithic.

Obermaier had, however, a different vision of the question. In spite of the adoption of the term "Preneolithic", the Asturian/Neolithic "disconnection" is not perceived in his work. In fact it is just the opposite; he suggests an evolution in the composition of the shell middens showing the transition to the Neolithic. One of the prominent elements is again the ceramics, which are found in the last stage of evolution of the deposits (Obermaier 1916, 337; 1920, 173; 1924, 358; 1925, 387).

Obermaier distinguished three types of deposits corresponding to three different periods. The first period would be that of the Asturian typical shell middens. The shell middens of the second period would be characterized by an increase in the genus *Mytilus*, and by the lack of Asturian picks. The fundamental novelty of the shell middens of the third period is the presence of ceramics.

<sup>5</sup> Obermaier had already ceased to consider the Asturian as an Epipalaeolithic culture in an article published two years before (Obermaier 1920, 161 and 167).



In his work the German prehistorian conceived the ceramics as an element linked to sedentary human groups with a neolithic lifestyle, that is to say, groups that already produced their own food. According to Obermaier, this was the context in which the use of ceramics proliferated, and not among the mobile groups of hunters and gatherers, given the fragility of that type of material (Obermaier 1916, 347). Thus, I indicated previously that the evolution in the composition of the shell middens described by Obermaier showed the transition to the Neolithic.

Very probably, the information that Obermaier used to establish this sequence proceeded from the field-work of Vega del Sella. Unfortunately, we do not have access to this information. We do not know on which sites the observations that permitted Obermaier to establish the sequence described, at least as a working hypothesis, were carried out.

During the last two decades, within the framework of the research on the first Neolithic of the Cantabrian region, there has been debate about the possibility of linking the start of the Neolithic to the shell middens with ceramics (González Morales 1982, 207; Arias 1991, 272). Today, we know that the ceramics make their appearance in the region during the first half of the 5<sup>th</sup> millennium cal BC. In the same way, the first evidence of animal domestication in the region also corresponds to that period (Arias *et al.* 1999). However, the work developed to date does not permit us to define a phase, immediately subsequent to the Mesolithic, characterized by shell middens with ceramics (Fano 2000).

In the territory that directly occupies us here (the western Cantabrian region), we have a substantial lack of data between the end of the Asturian (end of the 6<sup>th</sup> millennium cal BC) and the appearance of the first megaliths (2<sup>nd</sup> half of the 5<sup>th</sup> millennium cal BC), that is to say, we hardly have any information



Fig. 5. Detail of the test pit excavated in April 2000 in El Alloru (Balmori, Llanes). This site was surveyed by the Count of the Vega del Sella in 1915.

corresponding to the early Neolithic. At present we are developing a research project which, through the sampling of an important number of shell middens on the eastern coast of Asturias, is trying to verify whether the early Neolithic in this part of the region is linked to the shell middens with ceramics, just as proposed by Obermaier (Fig. 5)<sup>6</sup>.

## V. Conclusions

In conclusion, the work of Obermaier placed the Prehistory of the Iberian Peninsula in the foreground; and thanks to the friendly working relationship maintained by Obermaier and Vega del Sella, the investigations into the Mesolithic of the Cantabrian region were also widely diffused. Obermaier was witness to the start of these investigations on the part of Vega del Sella and he also participated in them. In fact, it was he who coined the term "Asturian", but his main contribution was that of situating the Asturian in its European context, together with the rest of the Mesolithic cultures.

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<sup>6</sup> I am carrying out this investigation in collaboration with Pablo Arias Cabal (Grupo de Prehistoria, Universidad de Cantabria), within the framework of the Project "*La transición al Neolítico en la región cantábrica. Cronología, subsistencia y organización social*", financed by the DGICYT (PB98–1098–C02) and directed by P. Arias Cabal.

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