Thinking about the concept of archive: Reflections on the historiography of Altamira

Pensando sobre el concepto de ‘archivo’: reflexiones a propósito de la historiografía de Altamira

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Abstract
The word ‘archive’ has been traditionally used to define both the physical place in which historical texts are kept and studied, and the set of documents that relate to the activity of a person, organization, association, community or nation. In both cases, archives have been considered privileged spaces that provide primary data for writing history. In this paper I discuss this traditional conception and suggest that archives are not only privileged sites providing the sources from which histories are constructed, but they are also historiographical constructions that determine historical interpretations. Taking into account the case of Juan de Vilanova y Piera, one of the first scientists to accept the authenticity of the Altamira paintings, I explore in this paper some of the ways in which the definition of ‘archive’ determines the historical interpretations of past scientists’ work.

Key words: Archive. Altamira. Historiografia. Vilanova. Sautuola.

Resumen
El término ‘archivo’ se ha utilizado tradicionalmente para referirse tanto al espacio físico en el que se almacenan y se estudian documentos históricos como al conjunto de documentos relacionados con la actividad de una persona, organización, asociación, comunidad o nación. En ambos casos, los archivos han sido considerados espacios privilegiados que proporcionan datos fundamentales para la escritura de la historia. En este artículo se examina dicha concepción tradicional. Se sugiere que los archivos no son únicamente espacios privilegiados desde los que escribir la historia sino, también, construcciones historiográficas que determinan las interpretaciones históricas. Tomando como ejemplo el caso de Juan de Vilanova y Piera, uno de los primeros científicos en aceptar la autenticidad de las pinturas de Altamira, exploramos en este artículo cómo las diferentes definiciones del término archivo determinan las interpretaciones históricas sobre los científicos del pasado.

I. Reflections on the concept of archive

In *Mal d’archive: une impression freudienne*, Jacques Derrida (1995: 1-2) defines the concept of archive in the following terms:

The meaning of “archive”, its only meaning, comes to it from the Greek *arkheion*; initially a house, a domicile, an address, the residence of the superior magistrates, the *archons*, those who commanded. The citizens who thus held and signified political power were considered to possess the right to make or to represent the law. On account of their publicly recognized authority, it is their home, in that place which is their house (private house, family house or employee’s house) that official documents are filed. The archons are first of all the documents’ guardians. They do not only ensure the physical security of what is deposited and of the substrate. They are also accorded the hermeneutic weight and of the substrate. They have the power to interpret the archives. Entrusted to such archons, these documents in effect speak the law: they recall the law and call on or impose the law.

Derrida’s etymological definition points to two ideas that have been associated with the concept of archive since antiquity. In the first place, this term has been used to define a place of collection containing records or documents of historical interest. In the second place, archives have been traditionally considered the privileged sites in which historical truth resides. This double meaning (archives as the physical sites in which the textual memory of the past is compiled and archives as a symbol of truth and authenticity) prevails in the modern conception of this term, which originated in Europe during the nineteenth century. At that time, history became a virtual space that encompasses a vast province of further objects for the archive, the remains of past civilizations, arrowhead, tools, and images […] and, in particular, photographs” (Ve- lody, 1998: 5). In other words, we have witnessed the incorporation of diverse types of material within the concept of archive. In the third place, some late-twentieth-century historians have rejected the idea of the archive as the objective record of the past. This notion, they argue, was typical of the end of the nineteenth century, when historians supposed that they could reconstruct the past from its objective documents. At that time, “the document was always treated as the language of a voice since reduced to silence, its fragile, but possibly decipherable, trace” (Foucault, 1969: 14). Today, historical documents are not interpreted as raw materials through which it is possible to reconstitute what people did; rather, they are considered as historiographical constructions whereby definition, study and interpretation depend on historians’ political, social and economic context. Consequently, archives are no longer considered as the place of primary sources for writing histories, but as “products of historical struggle” (Lynch, 1999: 67), “the storing and ordering place[s] of the collective memory of the nation or people” (Harvey Brown & Davis-Brown, 1998: 17) and the “crucial weapon[s] in ethnic struggle” (Ve- lody, 1998: 4).

Based on these considerations, I propose some reflections on the concept of archive. More specifically I seek to explore the concept of *virtual archive*, conceived as a virtual space that encompasses a collection of various texts and documents related to the activity of a certain scholar. To develop this concept, I focus on the case of Juan de Vilanova y Piera (see also Moro Abadia & Pelayo 2010; Pelayo & Rodolfo Gutiérrez 2012). Vilanova was...
a Spanish geologist who is considered one of the pioneers in archaeology because he was among the first scientists to accept the authenticity of Altamira’s paintings. The story is well known; in 1868 a peasant, Modesto Cubillas, discovered the entrance to the Altamira Cave. He reported this discovery to Marcelino Sanz de Sautuola, a Spanish lawyer interested in the natural sciences, especially in the new scientific discoveries concerning humans’ high antiquity. In 1878 Sautuola visited Paris in order to inspect the prehistoric collections displayed at the World Exposition. Inspired by this experience, Sautuola began excavating in various caves of his region (El Pendo, El Mazo y Covalejos). In 1879 Sautuola came to dig in the floor of Altamira and discovered the great painted ceiling. Almost immediately, he realized the importance of the discovery; he had the intuition that the paintings came from the Stone Age. In 1880 he published his discovery in a brief pamphlet entitled Breves apuntes sobre algunos objetos históricos de la provincia de Santander (Brief Notes on Some Prehistoric Objects from the Province of Santander, Sautuola, 1880). In 1881 the French prehistorian Édouard Harlé rejected the prehistoric antiquity of the paintings in an article published in Matériaux pour l’histoire primitive et naturelle de l’homme, one of the more prestigious archaeological journals of the time. Sautuola approached Juan Vilanova y Piera, the most renowned Spanish geologist at the time, and invited him to visit the cave. Vilanova concluded that the paintings were from the Stone Age. Nevertheless, for almost twenty years some of the most important French prehistorians (Mortillet, Cartailhac) rejected the authenticity of Altamira. During this time, Vilanova supported and displayed the paintings at a number of national and international congresses. Finally, the publication of Emil Cartailhac’s Mea culpa d’un sceptique (1902) resulted in the acceptance of Altamira and, consequently, its status as Paleolithic cave art.

As I show in the second section of this paper, Vilanova has traditionally been considered a precursor because of his defense of Altamira’s authenticity. He has been depicted as a “Spanish hero” (Carballo, 1950: XLIII) fighting against the international resistance to accept Altamira’s high antiquity. I argue that Vilanova’s mythical status in the history of archaeology is partly related to the fact that his work has been only partially examined by historians of the discipline. Let me elucidate this point. Vilanova was a geologist, a paleontologist and a prehistorian; consequently, he wrote an important number of works in all these fields. Despite this, historians of archaeology have focused, almost exclusively, on his papers supporting the high antiquity of Altamira. As a result they have produced an image of Vilanova that clearly overemphasizes the modernity of his thought. As I show in the third section of this article, if we take an interdisciplinary approach towards Vilanova’s archive (including his works in other fields), we can obtain a better understanding of both his general ideas and the implications of his support for Sautuola’s thesis.

2. The narrow archive: Traditional interpretations of Vilanova’s defense of Altamira

Juan de Vilanova y Piera (1821-1893) was one of the most important Spanish scientists during the nineteenth century. He earned his degree in medicine from the University of Valencia in 1845. The next year he moved to Madrid to complete his PhD dissertation at the Museum of Natural Sciences. While at the Museum, he spent four years (from 1849 to 1853) studying in Freiburg and in Paris. Once home, he obtained a position chairing the Department of Geology and Paleontology at the Museum of Natural Sciences in 1853. He was one of the founders of the Spanish Society of Natural History and of the Geographic Society of Madrid. Furthermore, he belonged to the Academy of Medicine, the Academy of Physical and Natural Sciences, and the Academy of History. During his academic career, he took part in some of the most important scientific debates of his time, such as the discussions concerning the high antiquity of human beings or the controversies over the divisions of prehistoric times. As a result, he published numerous works in paleontology, geology and prehistory which have been considered among the most important Spanish contributions to nineteenth-century science.

What I will call Vilanova’s virtual archive (i.e. the set of records relating to his activities) is composed of different documents including books, papers, newspaper articles, private correspondence and obituaries. One of the primary limitations in the analysis of these materials is that they are not gathered together in a central physical place. In fact, they are disseminated in books, journals, bulletins and newspapers, which are dispersed in libraries, museums and private collections. Vilanova’s virtual archive can be approached using several distinctions. In the first place, I think it is important to distinguish between his work as a scientist and his work as a journalist. Like other scientists of his time, Vilanova published various texts on the popularization of science (especially in Valencia’s newspaper Las provincias). In the second place, we can classify Vilanova’s scientific work into several categories – books, papers, reviews, talks,
conferences and notes. Vilanova wrote thirty-eight books (including catalogues, scientific memories, speeches, conferences, essays, atlases and dictionaries), more than one-hundred-and-twenty articles (in journals including Boletin de la Real Academia de la Historia, Bulletin de la Société Géologique de France, Actas de la Sociedad Española de Historia Natural, Revista de la Universidad de Madrid, Revue Europee, Archives de Sciences Physiques et Naturales), almost twenty-five reviews in international congresses (Association Française pour l’Avancement des Sciences, Congrès International d’Anthropologie et d’Archéologie) and more than fifty notes and scientific reports.

How many of these texts have been considered by historians of archaeology? Very few. In fact, most of these historians have only cited the conferences held by Vilanova in Santander in September 1880 (e.g. Madariaga, 1976: 29; González-Echegaray, 1985: 15; Madariaga, 2002: 23), his reviews of the congresses of the Association Française pour l’Avancement des Sciences (e.g. Terry-White, 1949: 153; Madariaga, 1972: 27; Kühn, 1976: 131; González-Echegaray, 1985: 17; de las Heras & Lasheras, 2000: 29; Freeman & González Echegaray, 2001: 15; Madariaga, 2002: 24, 25, 29; Curtis, 2006: 51, 53) and the debates about Altamira held in the framework of the Sociedad Española de Historia Natural (e.g. Cabre, 1915: 56; Terry-White, 1949: 154; García-Guinea, 1968: 64; González-Echegaray, 1985: 17; Groenen, 1994: 319; Freeman & González Echegaray, 2001: 15; Madariaga, 2002: 31; Madariaga, 2004: 83). In other words, historians of archaeology have focused exclusively on Vilanova’s writings treating Altamira. To the best of my knowledge, not one of these historians has examined in depth Vilanova’s work on paleontology, geology and human evolution.

What are the effects of this narrow definition of Vilanova’s archive? The main consequence is that historians of archaeology have promoted an image of Vilanova that overemphasizes certain aspects of his thought and underestimates others. I believe this image is directly related to the fact that historians of archaeology have focused on a very restricted number of his works. In other words, there is a close relationship between what kind of documents historians of archaeology have examined and in what way these historians have considered Vilanova’s position in the Altamira debate.

The following paragraph illustrates how historians of archaeology have interpreted Vilanova’s defense of Altamira:

At the International Congress of Anthropology and Prehistoric Archaeology which was held at Lisbon in 1880 nobody even troubled to mention the cave of Altamira officially. In vain De Sautuola’s only defender, Professor Juan Vilanova y Piera of the University of Madrid, took members of the Congress aside and coaxed them to come and see Altamira for themselves. They only shrugged their shoulders, exchanging meaningful glances with brother scientists. The good professor had been hoodwinked. He was too trusting. As for themselves, they were serious scientists. They had no time for jokes. But Vilanova would not surrender. 1886 found him still talking just as firmly, though to yet deafener ears […] Vilanova sat down in a silence evidencing only too clearly that he hadn’t changed anybody minds. And to a degree he could understand it; the paintings were too good, they were too modern […] after this the cave of Altamira was doomed to disappear for a time from the list of subjects to be discussed. But I would come back, Vilanova was sure it would come back […] Vilanova was right (Terry-White, 1949: 153, 154, 155, 156).

The story of Altamira has usually taken a mythical format in which Vilanova plays the role of a daring scientist who anticipated the truth that was only later accepted by the scientific establishment. In fact, most of the historiographical accounts about the cave have adopted a legend-like narrative structure. They begin with an anecdote that has been passed down via oral tradition and is supposedly from a witness of the event. In this case, this short story is the discovery of the paintings by Sautuola’s daughter, María, who, “bored by her father’s excavations, wandered into the back depths of the cave […] There, by the flickering light of the lantern, she saw on the roof of the inner cave the now very famous vigorous, bold and striking polychrome paintings of bulls, bison and charging boars. She tottered out to tell her father what she had seen, saying ‘Toros!, Toros!, father come and see the bulls!’’” (Daniel, 1981: 98). This anecdote, which has never been documented, is reproduced in most historiographical reports about Altamira (e.g. Terry-White, 1949: 151; Madariaga, 1972: 24; García-Guinea, 1975: 15; Kühn, 1976: 129; González-Echegaray, 1985: 11; Romer, 2000: 47; De las Heras & Lasheras, 2000: 28, Freeman & González Echegaray, 2001: 14; Curtis 2006: 49).

The discovery of the paintings was the beginning of a “romantic adventure” (Madariaga, 2002: 10), a “campaign in defence of Altamira” (González Echegaray, 1985: 15). What was the role played by Vilanova in this story? Because of his “formidable and selfless defence of an art discovered for the first
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time” (Madariaga, 2004: 58), Vilanova has usually been considered a precursor in the history of archaeology. While Sautuola has been defined as a gifted amateur (Curtis, 2006: 51), Vilanova has been considered the only scientist who accepted the authenticity of cave art before the turn of the century. If Sautuola was the first to make the brilliant deduction concerning the age of the paintings, Vilanova was the first scientist to be “proclaiming [...] the discovery, with all his scientific authority recognized in all Europe” (Carballo, 1950: XL). The scientific community, however, was not ready to accept Vilanova’s theory. His ideas were too advanced for his time; they contradicted all the notions that scientists had about the Old Stone Age. Consequently, the reaction of the archaeological establishment was “almost explosive” (García-Guinea, 1975: 16). Sautuola and Vilanova were the victims of a “furious storm of scepticism” (Cabré, 1915: 55) and a “hostile ambiance” (Madariaga, 1972: 28). Nevertheless, “Vilanova would not surrender” (Terry-White, 1949: 154), he “continued his pilgrimage around the most important European congresses” (Madariaga, 2002: 29), making a “persistent and touching campaign” (Madariaga, 2002: 29) for the authenticity of Altamira’s paintings. Despite this effort, “he hadn’t changed anybody’s mind” (Terry-White, 1949: 155) because his reasoning was too “modern” for his contemporaries. At that time, the only thing he could do was to anticipate the truth that would later be revealed by science (Madariaga, 2002: 29). Several years later, thanks to Vilanova’s efforts, the truth was finally made clear (García Guineca, 1979: 49).

This image of Vilanova is directly related to the kind of historical sources considered by historians of archaeology. As I mentioned above, most of these historians have exclusively focused on Vilanova’s texts concerning Altamira’s debate. As a result, they have reproduced a representation of Vilanova that those documents promote – Vilanova as an abnegate scientist combating the ignorance and the skepticism of his time. The story, however, is much more complex.

3. The Extended Archive: Towards a New Interpretation of Vilanova’s Theory

Before putting forward my own position, I would like to clarify several points concerning these traditional interpretations. First, I am not disputing that Vilanova supported the Paleolithic antiquity of Altamira’s paintings before this fact was accepted by most scientists of his time. Second, I am not questioning that he defended his ideas about Altamira in a number of national and international congresses held between 1880 and 1886. What I seek to do is to situate his thought in its historical context in order to gain a better understanding of his positions concerning the acceptance of Paleolithic art.

My starting point is to formulate a new approach toward Vilanova’s archive. In the first place, I have conceptualized Vilanova’s documents concerning Altamira differently from traditional interpretations. I have tried to place these texts within their context. For instance, I have evaluated the importance of the discussions about Altamira in the framework of the International Congress of Anthropology and Prehistoric Archaeology and of the Spanish Society of Natural History. In the second place, I have considered a number of Vilanova’s documents that have been omitted from most histories of prehistoric art. Particularly, I have examined Vilanova’s Origen, naturaleza y antigüedad del hombre (1872), in which Vilanova summarized his ideas concerning human origins, and Vilanova’s and Tubino’s Viaje científico a Dinamarca y Suecia con motivo del congreso internacional prehistórico celebrado en Copenhague en 1869 (1871). Furthermore, I have analyzed some articles in which Vilanova expounded his thought concerning prehistory; he wrote three papers on this topic that are especially relevant. The first one, entitled Origen del hombre, Antigüedad de la especie humana, was published in several parts in Revista de Sanidad Militar y General de las Ciencias Médicas (1866 and 1866b). The second one was entitled Origen y Antigüedad del Hombe (1869); in this text Vilanova summarized a seminar he gave about human origins held at the Ateneo de Madrid between December 1867 and March 1868. Finally, I have considered a long article about Lo prehistórico en España, which was published in Actas de la Sociedad Española de Historia Natural (1872b). Most of these texts are well known by historians of geology and paleontology (who have proposed a more complex and interesting approach to Vilanova’s thought; see for instance Gozalo, 1993; Pelayo, 1994; Pelayo, 1999), but they have generally been omitted by historians of archaeology in their historiographic evaluations of Altamira’s controversial dating.

The image of Vilanova derived from the study of these materials differs in many ways from traditional interpretations. Particularly, these texts provide us with a more adequate understanding of his thought about prehistory and human evolution. I would like to analyze some of these ideas in light of the historical context in which they were formulated.

In the field of natural sciences, the last decades of the nineteenth century were marked by the con-
troversy between evolutionists and creationists. Influenced by the publication of Darwin’s *On the Origin of Species* (1864, first published in 1859), an increasing number of late-nineteenth-century scientists used the term *evolutionism* to explain, without assistance from divine intervention, the origins and the development of humans. Darwin’s main idea, the principle of natural selection, is a deductive consequence of a struggle for existence in which only those best fitted to obtain a living will survive. His theory also implies that humans were not directly created by God, but rather evolved from other species like apes. This idea contradicted *creationism*, a set of theories that presupposed that the universe, the earth and human life had been entirely created by God. The wide spectrum of such theories included “Young Earth creationism”, which presupposed that life on Earth was created by God exactly as it is explained in Genesis, and “Old Earth creationism”, which made an effort to reconcile the Genesis account of Creation with modern scientific evidence about the age of the universe.

The reception of Darwinism in Spain occurred between 1868 and 1874, a period marked by the Glorious Revolution, which deposed Queen Isabel II in 1868. At that time, scientists like Antonio Machado and Rafael García Álvarez tried to introduce evolutionism in fields such as geology and paleontology. Even if they produced a number of important works in this field, the Spanish scientific establishment rejected Darwin’s theory because it was considered incompatible with Genesis. One of the most important Spanish critics of Darwinism was Vilanova, who tried to reconcile the recently accepted extremely long history of the earth with biblical dogma. In fact, Vilanova supported what in English literature has been called “Old Earth creationism”, a theory that accepted scientific geological evidence concerning the age of the Earth, but questioned the details of evolutionary theory. Furthermore, Vilanova sustained catastrophism, i.e. the belief that the Earth was affected by sudden, violent geological cataclysms (like the Great Flood) that were sometimes worldwide in scope. According to Vilanova, this accumulation of catastrophic events could explain the patterns of extinction and creation that geologists observed in the fossil record. Divine creation was thus the mechanism by which repopulation occurred following each catastrophe.

Even if I know that there are very respectable authorities who consider the existence of only one Creation […] it gives me great pleasure to confirm that most of them consider the existence of different creations of beings that appeared and disappeared […] In this point, [these authorities] are in totally accordance with the mosaic description […] The order established by Moses [for these creations] is exactly the same that science has discovered thanks to a regular exploration of immense series of sediments (Vilanova, 1866b: 738).

Concerning the question of human origins, Vilanova was orthodox in his beliefs. He believed that “God created man in His own image, culminating His prodigious work” (Vilanova, 1866; 711). For him, humans had not physically evolved much from primitive to complex beings because they had been created by God in their perfect state from the very beginning. Consequently, early humans were, at least in a biological sense, very similar to modern people.

After this brief description of Vilanova’s thought, his position with regards to Altamira is clearer. According to Vilanova, “our [human] species was created only once from the Creator’s hand, in a state as perfect as the state in which the rest of species were created, without necessity of sketches or proofs” (Vilanova, 1875: 279). It follows that God created humans in their modern form and, consequently, with all their potentialities, including their artistic capacities. In other words, humans were created in a perfect state since they were created in the image of God. Certainly, prehistoric humans “should be a kind of savage nomad, fisherman and hunter, not very intelligent and without culture” (Vilanova, 1872: 236); yet “even if this is true, it is also true that the primitive state of culture was the beginning of the series of progress made by the only conscious being” (Vilanova, 1872: 237). From this viewpoint, the perfection of prehistoric paintings demonstrates the potential abilities of early human beings and, consequently, could be interpreted as evidence of the failure of evolutionism. At least in an artistic sense, humans have not evolved much through time. Paleolithic paintings reveal that prehistoric people had an “artistic sentiment” (Vilanova, 1886: 82), an “instinctive knowledge of art” (Vilanova, 1997: 118), an “artistic taste, spontaneously born in them” (Vilanova, 1997: 119). Primitive humans were able to draw the sketches of animals with perfect proportions (Vilanova, 1886: 83).

Vilanova’s thought was not terribly advanced for his time. A more detailed examination of his work proves that traditional interpretations sketched in the second section of this paper are only partially right. While it is true that Vilanova accepted cave art before most of his contemporaries, it is unclear whether he was among the most advanced scientists of his time. In fact, he rejected Darwinism and evolutionism because both theories were irreconcilable
with religious dogma. From this perspective, it is
important to stress that the acceptance of parietal
paintings as Paleolithic acquired a political mean-
ing linked to the more traditional sectors of Spanish
society. It is no coincidence that the main research-
ers on Paleolithic prehistory in Spain at the end of
the nineteenth century and the beginning of the
twentieth were nobles (Conde de la Vega del Sella,
Marqués de Cerralbo) or priests (J.M. de Barandi-
arrán, Obermaier, Carballo).

4. Conclusions
As Irving Velody has recently pointed out, “appeals
to ultimate truth, adequacy and plausibility in the
work of the humanities and social sciences rest on
archival presuppositions” (Velody 1998: 1). The
privileged status given to archives is related to the
“myth of archives’ historical objectivity”, i.e. the
idea that archives are sacred places in which his-
torical documents are sheltered from the subjectiv-
ity inherent to historical interpretations. This idea
was first formulated at the end of the nineteenth
century when positivist historians established that
the close analysis of archive materials was the only
way to attain objectivity in historical research. Even
if the second half of the twentieth century “saw a
sustained theoretical offensive against the empiri-
cist approaches that have upheld the archive’s sym-
monic status” (Freshwater 2003: 730), archives have
remained symbols of genuineness, authenticity and
truth.
I sought to demonstrate in this paper that ar-
chives are not the mere assemblage of historical
records. Archives are socially constructed by the
historian. The way that historians select, order and
define the materials from which they elaborate their
interpretations is also a historical construction.
Consequently, historians must explore the nature of
their archives, examine the kind of presuppositions
involved in their ideas of ‘archive’ and study the
relationship between the definition of certain mate-
rials as primary sources and the historical interpre-
tations ultimately proposed.
With Juan de Vilanova as a case study, I have
considered that the way in which historians define
their archives determines the different possible
interpretations of the disciplinary past. In the first
place, I have shown that traditional interpretations
of Vilanova’s defense of Altamira’s paintings are
based on a narrow concept of archive that focuses
exclusively on those texts related to this episode. As
a result, traditional historians have promoted the
image of Vilanova as a noteworthy precursor who was
first to announce the authenticity of prehistoric art.
Because of his contribution, Vilanova was imme-
diately placed on the side of those who contributed
to the progress of science, fighting against sup-
positions that delay scientific progress. In the second
place, I have sought a more complex understanding
of Vilanova’s thought. With a wider definition of
his archive in mind (including his texts on paleon-
tology, geology, prehistory and human evolution) I
have shown that Vilanova cannot be depicted as a
scientist who was too advanced for his time. On the
contrary, he tried to reconcile religious dogma with
some of the new scientific ideas on human origins.
In other words, his ideas on prehistoric art are in-
trinsically linked to his traditional thought. I hope
this examination helps historians of archaeology to
critically appreciate the concept of archive, a con-
cept that has recently changed and, in all likelihood,
will change again in the future.

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