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## The “making of” La Denise fossil man (French *Massif Central*) The history of a persistent scientific forgery

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**Abstract.** Discovered on the southern flank of the ancient volcano called *La Denise* located near the town of Le Puy-en-Velay in the south-eastern French *Massif Central* (Aymard, 1844), “*La Denise* fossil man” is a little-known object today but was of a major interest at the time of the emergence of the prehistoric discipline. As soon as these human remains came to the light, they triggered a controversy over their authenticity and their age. This controversy has continued for over a century, until the recent age of these bones was established in 1969 (Heintz & Oakley, 1969), reinforcing doubts on a fake.

In terms of current thinking on scientific knowledge, this case study is interesting to examine the persistency of an archaeological forgery (Kaeser, 2001). More specifically, it raises the question of how and why the authenticity and the age of this discovery are justified over time. An analysis of scientific publications and archives related to these human remains will provide a clearer picture of how this controversy unfolded and worked. Our development will be chronological, outlining the basis of a biography of this object (Bonnot *et al.*, 2018). The other goal of this paper is to show how the tension between residential knowledge and cosmopolitan knowledge (Kohler, 2006) can explain the persistency of this forgery.

First, we will focus on the way in which “*La Denise* fossil man” was defended when the high antiquity of man was not yet recognised by the scientific community. We will then take a closer look at the uncertainties surrounding this discovery which has been anthropologically interpreted by various ways. Finally, we will expose how this object ended up on the margins of the history of the prehistoric discipline. Looking at these human remains through the prism of the question of fakes and authenticity in prehistory (Cohen, 1999) will enable us to question the value of this find. *La Denise* forgery is one of the first case of a fake fossil man, preceding those of Moulin-Quignon and Piltdown.

**Keywords:** “*La Denise* Fossil Man” – Velay – Forgery – Controversy – Biography of object – Residential and Cosmopolitan Knowledge.

“Was it the proud full sail of his great verse,  
Bound for the prize of (all too precious) you,  
That did my ripe thoughts in my brain inhearse,  
Making their tombe the wombe wherein they grew?”

William Shakespeare, *Sonnet 86*, 1609

## Introduction: The fallacy of truth



Fig. 1. L'âge de la pierre taillée, La Denise en éruption, 1874, Gustave Richond, © Musée Crozatier, Luc Olivier. Data base POP: <https://www.pop.culture.gouv.fr/notice/joconde/01160005331>

Today, a visit to the Crozatier Museum will not allow you to see “*La Denise* fossil man”. Since 2010, this object has been stored in the reserves, out of sight. The bones are carefully wrapped in plastic bags and stored in a grey box on a metallic shelf in the basements of the building. On the other hand, on the ground floor of the museum, in the prehistory room inaugurating the Historical Gallery, we can find a painting of Gustave Richond entitled *L'âge de la pierre taillée, La Denise en éruption*. This canvas, painted in 1874, offers to us a prehistoric reconstruction based on scholarly observations. This work of art was produced on the advices of Auguste Aymard, the main 19<sup>th</sup> century scholar of the Velay area. It provides us information on the fact that he thought had been established and confirmed by other scholars of the time: Man would have attended to the last volcanic eruptions in the Velay area and would have been contemporary with the extinct fauna. Here, we can see a lake topped on the right by a cliff of basalt organs and in the background, we can actually see *La Denise* volcano erupting. A mammoth and a reindeer can be seen on the left, but in the foreground, we can distinguish a man, almost hidden by a tree stump and carrying a tool on his shoulder: there's no doubt about it, this is “*La Denise* man”. If art here has seized upon a major scientific

concern of the second half of the 19<sup>th</sup> century, namely the question of the great antiquity of Man, it is today the only trace that seems to have been left by “*La Denise* fossil man” in the current museography of the Crozatier Museum. But what is this object that is the starting point of our study? It consists of human bones found in 1844 in their rocky gangue, on the southern flank of *La Denise*, an ancient volcano located around two kilometres south-west of the town of Le Puy-en-Velay in the Haute-Loire French department. The three main discoveries were made in the vineyard of a cabaret owner named in all likelihood Dominique Adsklénard. The first one, called “*frontal-limonite*”, was supposedly sold or traded to Barthélemy Eyraud, a former teacher and a “natural history merchant”, who sold it to a lawyer named Pierre-Isidore Pichot-Dumazel. The second discovery was called “*bloc du musée*” (Museum block) because it was acquired by Auguste Aymard and Bertrand de Doue, members of the *Société d'agriculture, sciences, arts et commerce du Puy*, to enrich the collections of their museum. Finally, the third discovery, made up of two other blocks containing various bones, was, like the first one, bought by the lawyer Pichot-Dumazel. A few other bones were also discovered *in situ* by Louis Pascal, Auguste Aymard and Paul Gervais.

But today, the absence of the human remains of *La Denise* in the permanent collections of the Crozatier Museum, and the absence of any commentary explaining the context in which Gustave Richond's painting was produced, would almost make us forget what is essential, and what we will take as our starting point: "*La Denise* fossil man" is a forgery. Visitors will be completely unaware of the forgery "hiding" in this painting, which seeks to capture the truth of the past. But after all, it would seem that "*Fingunt simul creduntque*" (Ginzburg, 2020). Indeed, although doubts were raised on its authenticity from the beginning, "*La Denise* fossil man" was recognised as a genuine scientific object and the forgery lasted for 125 years, ending with the demonstration of the recent age of these bones (Heintz & Oakley, 1969). But even after this dating, some people continued to defend this object, which we consider to be one of those "Senseless signs of History" (Gould, 1982).

Why and how did this forgery worked for so long, whereas the Moulin-Quignon forgery was

detected very quickly (Hurel et al., 2016) and the Piltdown hoax only after forty years (Weiner, Oakley & Le Gros Clark, 1953)? We will propose a chronological approach and invoke the concepts of residential and cosmopolitan knowledge. In the first part, we will take a look at the period from the discovery of the bones in 1844 to the death of Auguste Aymard in 1889, outlining the way in which this object finally gained consensus in the scientific community. Then, in the second part, starting in 1889 and ending in 1969 with the relative dating of the bones, we will see how new interpretations have maintained the credibility of this discovery. Finally, in the third part, which will explore the period from 1969 to 2024, we will explain how this object has gradually been relegated to the dustbin of history, even if some individuals have remained attached to it locally. Through this chronological development, we will discuss the evolution of this object as well as the dichotomy between residential and cosmopolitan knowledge, before concluding by addressing the deeper meaning of this forgery.

## Method



Fig. 2: Attempting to make a "Fossil Man" from rocks from "*La Denise*" site, plaster and bones, 2022, © Edgar Lhoste

The purpose of this short methodological section is simply to remind to the reader the two main aspects of historical work, namely the development of a corpus of sources and its analysis.

During my researches, I collected as many publications as possible that mentioned the

human remains of *La Denise*. In order to carry out this work, I drew on several existing bibliographies (e.g., Bout, 1946), which I supplemented with research on the Internet (Gallica, Google Books, Persée, etc.) and in libraries (*Campus Condorcet*, *Bibliothèque nationale de France*, *Bibliothèque de la Société Géologique de France*, *Institut de*

*Paléontologie Humaine*). In parallel, I led research in the archives in Haute-Loire (*Archives départementales, Bibliothèque Municipale du Puy-en-Velay, Musée Crozatier*) and in Paris (*Bibliothèque centrale du Muséum national d'Histoire naturelle, Bibliothèque du bâtiment de paléontologie, Bibliothèque de l'Institut de France*). I also had access to digitised archives (*Musée des Confluences, Tolosana*, private archives, University of Edinburgh Library Heritage Collections).

My analysis was initially inspired by the biography of object. According to me, the finest example of such an approach is *Bones and Ochre: The curious after life of the Red Lady of Paviland* (Sommer, 2007). I then wanted to test the relevance of the concepts of residential and

cosmopolitan knowledge developed by the historians of science Robert Kohler and Jeremy Vetter (Vetter, 2011). To sum up very briefly, residential knowledge “is acquired by intimate experience of the sort that comes from living in a place, and may be true only for the present or only in that place”. It is particular and immediate. By contrast, cosmopolitan knowledge “is acquired anywhere there are books and libraries, and is presumed to be true everywhere”. It is presumed to be true everywhere, and is intended to be global and theoretical (Kohler, 2006). These authors have insisted above all on the fact that “residential” are indispensable to the “cosmopolitans”, seeking to take into account the work of both and not just scientists’ authority, a position that we will discuss in the light of our case study.

### 1844-1889: Defending a new scientific object: the fossil man



Fig. 3. Photograph showing the museum block, Charles Lyell Notebook 40, Folio 69, 1859 (?), Henri Malègue (?). University of Edinburgh Library Heritage Collections: <https://libraryblogs.is.ed.ac.uk/lyell/2023/03/>

In 1844, at the time of the discovery of *La Denise*, the high antiquity of Man was not recognised by the scientific community, despite the discoveries of human bones associated with extinct fauna

made by the pharmacist Paul Tournal in the Gard (1830) and by the doctor Philippe Charles Schmerling in Belgium (1833). The discovery made by the “scholars of *Le Puy*” first circulated in

the academic world through papers presented by Auguste Aymard to the *Société géologique de France*. He had great difficulties in silencing rumours of fraud, but nevertheless succeeded to obtain recognition of the authenticity of the discovery by some famous scientists, including Isidore Geoffroy Saint Hilaire, Charles-Léopold Laurillard, Jules Pictet, Paul Gervais, Henri Lecoq, Jean-Baptiste Croizet and Auguste Pomel.

In 1855, the Scientific Congress of France provided an opportunity for local scholars as Aymard, Pichot-Dumazel, Robert to discuss the authenticity and the age of these human remains directly in the field, although these issues were not fixed at the end of this scientific gathering. On the other hand, the arrival of the writer George Sand in June 1859, of Edmond Hébert, professor of geology at Sorbonne university, and finally of the British geologist Charles Lyell in August of the same year boosted the reputation of the "scholars of *Le Puy*" and their "fossil man", which after being forgotten for a few years was back in the debates. Although Charles Lyell officially ruled out the possibility of a fraud, he did not consider "*La Denise* fossil man" to be a proof of the coexistence of Man with extinct fauna, and even less of the fact that Man had witnessed the last eruptions of the volcanoes of the Massif Central, arguing alongside Edmond Hébert in favour of a reworked geological formation (Lyell, 1859), a fact which the "scholars of *Le Puy*" did not accept.

One of the most famous photographs of prehistoric archaeology is the one showing a worker pointing the location of an *in-situ* stone axe in a stratigraphic sequence of a quarry at Abbeville in northern France. The photograph was taken by Charles Pinsard, a civil engineer, at the request of the British geologists Joseph Prestwich and John Evans. When Charles Lyell left for Scotland in September 1859 to attend the 29<sup>th</sup> meeting of the British Association for the Advancement of Science, he took Charles Pinsard's photograph with him, as well as a photograph of the Museum block from *La Denise*. The latter was probably taken by the engineer Henri Malègue, who had already taken photographs of "*La Denise* fossil man" (Robert, 1863). This photograph, probably produced by the "residents" and passed on to the "cosmopolitans", made it possible to objectify the discovery, as in the case of Abbeville, emphasising on the

importance of the geological context represented by the rock matrix. The "scholars of *Le Puy*" were not only the holders of residential knowledge, as witnessed their library, museum and scholarly relationships that brought them closer to the cosmopolitan world. But above all, they were first of all excellent guides for "foreign" visitors to their "country", who, far from being solely occupied by books and collections, have acquired residential knowledge by exploring the field with them.

The extraordinary meeting of the *Société géologique de France* in 1869 was an opportunity for the scientific community to recognise the authenticity of the "*frontal-limonite*" and the Museum block. Although the human remains from *La Denise* were initially considered to belong to the "Caucasian race", an article published by the doctor Henri-Emile Sauvage (1872) completely changed their anthropological interpretation, considering them to belong to "the dolichocephalic palaeontological race of which the Neanderthal, Eguisheim and Canstadt skulls are representatives". His proposal, inspired by Ernest-Théodore Hamy, will be spread in scientific literature, particularly through the *Crania ethnica* (Hamy and Quatrefages, 1882). During an excursion organised by the French Association for the Advancement of Science in 1876, the discovery of *La Denise* was taken for granted, so much so that it hardly seemed to interest the excursionists, who preferred to concentrate on the landscapes around *Le Puy*. It was therefore gradually that the "scholars of *Le Puy*" were able to acquire the authenticity and the antiquity of a discovery that was initially surrounded by rumours of fraud. As some letters testify, "foreign" scholars were welcomed with beer, *pâté* and ham, as well as a "*Champagne Velaisien*" according to Georges Poulett-Scrope. Although the Velay region was of particular interest to geologists, it was ardently defended by the "scholars of *Le Puy*", for whom "*La Denise* fossil man" was a mean to promote their region and their local studies. Visits of recognised scientists were important for the local elite, who gained in notoriety. Thus, at the end of his life, Auguste Aymard became one of the "precursors" of prehistory. Its work was praised by Gabriel de Mortillet (1883) and Camille Flammarion (Du Cleuziou, 1887). We should notice that this status of "precursors" is only achieved respectively, when the discovery has been recognised.

## 1889-1969: Overcoming the uncertainties of physical anthropology

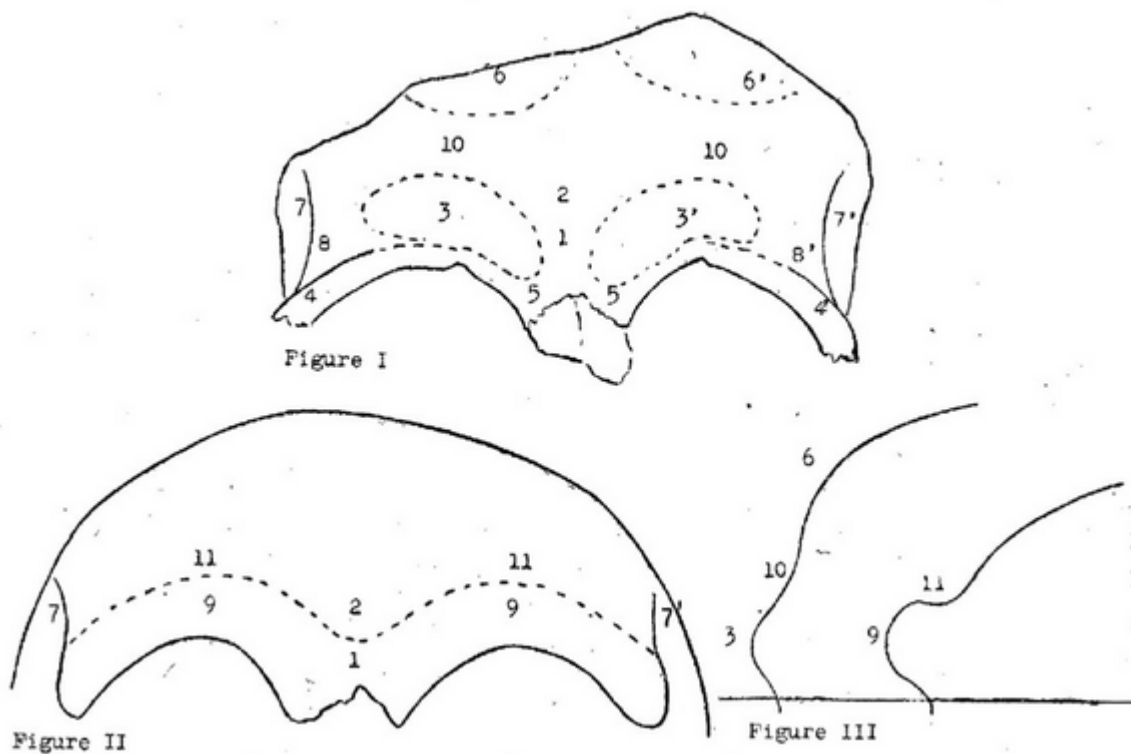


Fig. 4. « Frontal Aymard » compared to *La Chapelle-aux-Saints* frontal bone, *Comptes rendus hebdomadaires des séances de l'Académie des sciences*, tome 183, p. 311, 1926, Lucien Mayet.  
Gallica: <https://gallica.bnf.fr/ark:/12148/bpt6k3136h/f311.item>

Before becoming one of the leading specialists in human palaeontology, Marcellin Boule was first a geologist, defending his doctoral thesis on the geology of Velay in 1892. In this work, he vented the “courage of the naturalists of *Le Puy*” and recognised the authenticity and the antiquity of “*La Denise* fossil man”. Although he did not initially take part in an anthropological view, in a dissertation that won an award from the *Académie des sciences* (Boule, 1906), he adopted the doctor Sauvage's conclusions, although he did suggest that it would be necessary to lead a new study on these bones. In 1908, the doctor Bouchereau showed that the human remains from *La Denise* could not be related to the “Neanderthal or Engis type” as Henri-Emile Sauvage had claimed. But its observation did not stop a number of scientists, including Marcellin Boule, the geologist Emile Haug and Henri Breuil which will continue to refer to this

erroneous interpretation. In 1913, the veterinary Jean Pader studied *La Denise* bones and concluded that they belong to the species *Homo Sapiens*. In the meantime, Marcellin Boule had described the man of *La Chapelle-aux-Saints*, largely influencing the perception of Neanderthal man (Hurel, 2005) and in 1921, in his famous book *Les Hommes fossiles*, he did not rule out the idea of a more recent burial concerning *La Denise* discovery, finally giving up on the antiquity of these human remains.

For his part, the geologist and palaeontologist Charles Depéret from Lyon undertook new excavations on the site in 1925, carried out by the farmer and “fossil hunter” Pierre Philis accompanied by his brother-in-law Auguste Andrieux (Faure et al., 2022). Charles Depéret's letters to Pierre Philis show us how this man was useful to,

the scientist in negotiating the access to the site and underline the importance of workforce management. The results of these excavations were not perceived in the same way by the two men: Pierre Philis was disappointed because, in spite of his efforts, they had discovered nothing, whereas Charles Depéret was delighted to have clarified the geology of the site. On the other hand, Pierre Philis's letters to Claude Gaillard, Director of the Lyon Museum of Natural History, show that this peasant went to the Crozatier Museum, kept himself informed through the press and made his own judgements about his discoveries or even those of other researchers. These letters show a typically residential actor with cosmopolitan practices and who can be critical towards paleontological issues. From a residential point of view, the members of the *Société académique du Puy et de la Haute-Loire* celebrated their "fossil man", which they were proud to possess, and were happy to see their "little homeland" at the heart of new research.

Following Charles Depéret's excavations, the anthropologist Lucien Mayet re-examined the human remains of *La Denise*. While he also refused to see in these bones the remains of a "neanderthaloid", he considered them as bones of a *Homo Sapiens* comparable to "the most primitive of modern humans: the Australians" (Mayet & Chossesros, 1926). It was in particular the presence of a voluminous brow ridge on the Aymard frontal (belonging to the Museum block) that enabled him to make this suggestion. For him, it was an "archaic" characteristic in keeping with evolutionary ideas and the late age of the deposit. But for others, such as the Abbot Théophile Moreux, the zoologist Louis Vialleton and the engineers and graduates of the *Ecole Polytechnique* Louis Lafont and Georges Salet, "*La Denise* fossil man" became an argument to support their hypotheses against a

Darwinian conception of the evolution. The human remains from *La Denise* were then considered to be the oldest representatives of *Homo Sapiens* in France. Like the discovery of Piltdown Man, the remains of *La Denise* became major evidence for the defenders of the existence of *Homo Sapiens* at a very early period, considered to predate the Neanderthals, who were seen as a "degenerate branch". This prefigured the presapiens theory, which was defended in particular by the anthropologist Henri-Victor Vallois. Despite his positions, when Vallois was in charge of the third edition of Marcellin Boule's book in 1946, he still mentioned the idea of a burial site, but explicitly added that of fraud, also mentioning the misinterpretations made by Charles Depéret, who was at odds with Marcellin Boule. Although the anthropologist was very precautious about the discovery of *La Denise*, he did participate in the supervision of a DEA thesis made by a student named Renée Gabis, who studied the morphology of the radius, ulna and iliac bone of *La Denise*. She concluded that these were the bones of a "modern man" and "of the present-day white race" with no "australoid" characteristic as Pierre Teilhard de Chardin had already stated in a letter in 1948.

To mark the centenary of the discovery, the geologist Pierre Bout published a long article in which he reviewed the history of *La Denise* human remains, defending their authenticity, their antiquity and proposing a new geological interpretation of the deposit by invoking the role played by the periglacial phenomenon of solifluction (Bout, 1946). This work of synthesis illustrates perfectly how "residents" are attached to what they consider to be an important discovery. With this "anniversary paper", the author wished to commemorate and rehabilitate it.



## 1969-2023: Relegating “*La Denise* fossil man” to the History margins



FIGURE 1  
Crâne et vertèbre de l'homme de la Denise découvert en 1844 par Auguste Aymard. Musée Crozatier, le Puy-en-Velay.

Fig. 5. Photograph illustrating a book chapter written by Nathalie Richard entitled « Les sociétés savantes & la question de l'antiquité de l'homme », In *Dans l'épaisseur du temps, Archéologues et géologues inventent la préhistoire*, p. 270, 2011, © Frédéric Lacombe - Musée Crozatier - Le Puy-en-Velay.

Open Edition Books: <https://books.openedition.org/mnhn/2665>

In 1969, Nicole Heintz, a researcher at the laboratory of anthropology in Paris, was in charge of writing the French section of the fossil men catalogue for the British Museum. It was in this context that she collaborated with Kenneth Oakley to carry out a relative dating of the human bones from *La Denise* using a fluorine and nitrogen dosage. Fluorine amount in the bones increases over time, while the nitrogen amount decreases. They showed that none of the *La Denise* bones were very old (Heintz & Oakley, 1969). However, this dating could not have been carried out without the help of the curator of the Crozatier Museum and his colleagues, who helped him to take the samples that were analysed and to take photographs that were useful to the researcher. On the same occasion, the "frontal-limonite" left *Le Puy* to be presented at a meeting of the *Société d'Anthropologie de Paris*. Following this announcement, Henri-Victor Vallois spoke of "the end of a myth" and even if he had formulated the presapiens

theory, he considered that "*La Denise* fossil man" should be "definitively struck off the list of Palaeolithic men of France" (Vallois, 1969).

Subsequently, several anthropologists just mentioned this discovery as marginal (Vandermeersch, 1986), a discovery which had an uncertain geological context (Hublin, 1989) and foreshadowed the presapiens theory. But others, such as Yves Coppens, still considered it to be authentic but recent, defending the rigour of Henri-Victor Vallois despite his errors (Coppens, 2009). As far as historians are concerned, this discovery has not been dealt with in any depth (and we hope that we have opened the way to approaches that allow us to understand the life of an object over the long term). It is barely mentioned by Donald Grayson (1984) and then by Goulven Laurent (1989), and in their biography of Jacques Boucher de Perthes, Claudine Cohen and Jean-Jacques Hublin completely overlook this episode in favour of the

Picard scholar, making a mistake by stating that the volcanic activity of *La Denise* "continued until very recent prehistoric times" (Cohen and Hublin, 1989). Among recent work on the history of Prehistory, those of Nathalie Richard focus solely on Auguste Aymard's difficulties to get his "Velay man" recognised by other scientists and on the fact that he did not consider it to be very old. She also made a mistake when she referred to the "flora of the site" (Richard, 1992) that Auguste Aymard used to estimate the age of the human bones, which in fact did not come from *La Denise* but from *Ceyssac* site, located three kilometres away. These small "passing" mentions and inaccuracies show us that this discovery was mentioned according to the interests of the authors, who often did not pursue their research further.

In the *Velay* area, a period of silence followed the dating verdict and the 70s and 80s saw a renewal in the practice of geology, with researchers from the University of *Clermont-Ferrand* and amateur geologists from associations such as the *Centre permanent d'Initiatives pour l'Environnement du Velay* and the *Groupe Géologique de la Haute-Loire* (CPIE, GGHL, 1987) working together. This research led to a description of the different eruptive phases of *La Denise* volcano, which consisted of the juxtaposition of Surtseyan, phreatomagmatic and Strombolian phases. From then on, the site where "*La Denise* fossil man" was discovered gradually fell into oblivion, first located above a petrol station and now above a nightclub car park.

It was also a period of great renewal in prehistorical studies in the *Haute-Loire* (Musée Crozatier, 1981). New sites were emerging, gradually erasing the memory of *La Denise*, which was no longer considered to be a genuine site. Amateurs of both prehistory and geology played an active part in the growth of new research in *Haute-Loire*, as access to cultural leisure activities became more democratic.

But if this discovery has been relegated to the background, several persons have continued to defend this "fossil man". Thus, Pierre Bout speculates that the gases emitted during the last volcanic eruption might have altered the chemistry of the human bones, thereby distorting the analysis that concluded that they were recent (Bout, 1973). The old narratives about this "affair", which had become a major episode in local history (Viscomte, 1973), were repeated in the local press when exhibitions were organised to showcase new prehistoric or geological research, seeking to bring to the centre an object rejected by the new scientific works. Some individuals will continue to defend the importance of this discovery, remaining very attached to this "fossil man" and its history, even if these positions are quite residual. Finally, in 2010, when the international event *Mammoths and Co.* was organised, the bones of *La Denise* were put into the Crozatier Museum's storages and subsequently not integrated into the new museography because of a lack of space and thus falling into oblivion.

## Discussion

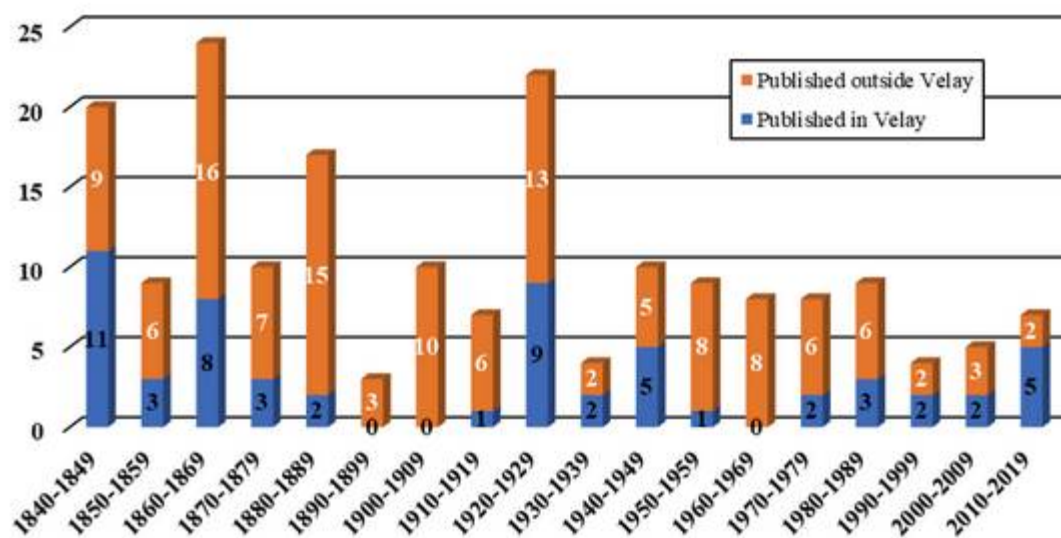


Fig. 6: Number of publications mentioning human remains from La Denise by decade (Lhoste, 2023)

This graph, plotting the number of publications mentioning *La Denise* human remains by decade, shows a general downward trend in the scientific interest in this object over time. However, the three main periods mentioned above are clearly distinguishable. Initially, the object was discussed in relation to the question of the antiquity of man, before playing a role in the rise of human palaeontology, fuelling the idea of the very ancient existence of *Homo Sapiens*, before becoming an anecdotal detail of the history of prehistory. It should be noted that in *Velay*, “*La Denise* fossil man” was not

a topic for publications after the death of Auguste Aymard, at a time when the *Société d’agriculture* was losing its dynamics. After this short period of silence, these human bones were coming back in force, especially thanks to the works of Charles Depéret, Lucien Mayet and Pierre Bout. Then, in the 1960s and until the relative dating of the remains in 1969, there was once again a period of silence surrounding these human remains, after which a certain local attachment to the discovery persisted.

	<b>Residentials</b>	<b>Cosmopolitans</b>
<b>1844-1869</b>	Auguste Aymard, Félix Robert	Charles Lyell, Gabriel de Mortillet
<b>1889-1969</b>	Pierre Philis, Pierre Bout	Charles Depéret, Marcellin Boule
<b>1969-2023</b>	Roger Gounot, Jacques Viscomte	Nicole Heintz, Kenneth Oakley

Fig. 5. Some of the main actors of *La Denise* controversy according to the concepts of residential and cosmopolitan knowledge

With regard to the concepts of residential and cosmopolitan knowledge, unlike Kohler and Vetter, we wish to emphasise that this dichotomy is not so marked. For example, “residents” who know the area very well may also have cosmopolitan activities, such as collection practice. They also keep abreast of the latest advances in research and are critical about other discoveries, as we saw with the example of Pierre Philis. As we pointed out in our short methodological section, according to Kohler and Vetter, “cosmopolitans” need the knowledge

of “residents”. While this finding was indeed confirmed in the course of our research, we also emphasised that the “residents” needed visits from “cosmopolitans”, whom they used to defend their position in the scholarly world. Finally, while the role of “residents” is essential, we do not want to place them at a same equality level as the “cosmopolitans”. They did not have the same authority. Above all, scientific activity is highly hierarchical, as this case study also reminds us.

## Conclusion: True from false



Fig. 7. View of the town of Le Puy, drawing by Viard, printed by Senefelder, 1800, *Les Cahiers de la Haute-Loire*, 1996. Gallica: <https://gallica.bnf.fr/ark:/12148/bpt6k32056080/f267.item>

In conclusion, we can ask what such a forgery tells us about the truth. As Claudine Cohen (1999) points out, fakes can have a “founding effect” (e.g., Moulin-Quignon) but it can also give rise to false theories (e.g., Piltdown man). It is also possible to think that forgeries can generate knowledge: the carving of tools from flint makes it possible to reconstruct prehistoric gestures in a heuristic way. But our case study shows something quite different.

On this engraving, which echoes to Gustave Richond's painting, we can see *La Denise* in the background but one detail can catch our attention: a cloud of white smoke emanating from a lime or a plaster kiln, materials produced during the 19<sup>th</sup> century in *Le Puy* basin. These materials were used to fertilise agricultural land, particularly vines. “*La Denise* fossil man” was “discovered” in a vineyard, and some of the associated rocky moulds were probably made of a mixture of plaster and volcanic tuff. According to us, this forgery reveals a social order and also gives us a glimpse of the

relationship between residential and cosmopolitan knowledge. On the one hand, there were the “scholars of *Le Puy*” in search of recognition, for whom this “fossil man” was a tool of scholarly socialisation, like the fossils extracted from limestone and gypsum quarries for example. On the other hand, there was a winemaker and also a kind of innkeeper and a “fossil merchant” who probably needed money.

We will never know who was behind this fraud, but today “*La Denise* fossil man” still slumbers peacefully in the reserves of the Crozatier Museum. Nevertheless, we have retraced its eventful life as an object of science, first at the time of the emergence of prehistoric archaeology, then with the rise of human palaeontology, before it became an object of history. No one knows what the future holds for one of the first fake fossil man, and while “we must preserve fakes because they are objects of art and science” (Olivier, 2011), we must also consider them as the product of a social order.

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For further references and details, please refer to my master's degree dissertation (Lhoste, 2023).

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