

Analysis of Cave Paintings in France & Spain





If we look at human immigration of Europe it is interesting to note the difference of expression of art our ancestors have produced in the various parts of Europe around 50,000 years ago when they arrived there.

Human Development

But let us take a look back at human movement out of Africa. About 1.8 million years ago first small groups of *homo habilis* and *homo erectus* moved in various waves into the Jordan Valley. From there they moved into Asia and Europe.

Here various other homo species developed like *homo neanderthalensis* about 600,000 years ago as well as *homo heidelbergensis*. The first species is Eurasian and the second European.

But our ancestor's *homo sapiens* developed about 300,000 years ago in various parts of Northern Africa and moved only around 80,000 years ago into Europe.

But recent findings and archeological research might prove that their arrival might have happened much earlier. And even their development might have taken place not in Africa but in Southern Europe.

Way of Immigration

Now let us look at the facts which are proven today. The way *homo sapiens* took about 50,000 years ago to settle in Europe. Did he take the way

around the eastern edges of the Alps along the Danube Valley? And followed from there down the Rhone River into today's Southern France? That is one theory.

Fact is again that in both areas he found many caves to camp and hide. Those clans who stayed at the Swabian Alb near today's city of Ulm did not cover the walls of their caves with painted animal images. But they used mammoth ivory to create carved sculptures of animals. The reason why they did not paint their caves might be obvious. Their caves were living quarters and not very deep either.

Religious Practices

All painted caves in France and Spain were not camping sites and used for ceremonial purposes only. They were also deeper and paintings were normally placed at the darkest far end of a cave.



As artistic developments in both areas took place about the same time we might assume that the immigration of France took place via Germany.

But another theory might suggest it was the other way round. But how come that the Swabian Alb caves do not have any paintings nor ceremonial places.

We can assume that religious practices at the

time were very important and would have been practiced and implemented where ever a clan moved to.

Worldwide Comparison

It is interesting to see how human development took place worldwide more or less at the same time. Despite impossible cultural connections across various continents from Australia, Asia, Europe to the Americas the results were often similar.

There is no real big difference in prehistoric rock art. The choice of colors and their pigment manufacture are similar and the naturalistic style of animal images do not differ much either.

Only human representations differ which can be explained with changed belief systems under different living conditions.

Cro-Magnon

Only in southern France *homo sapiens* started to paint animals on cave walls. Based on the first finds at a site called Cro-Magnon the name today stands for this Aurignacian culture period. Excellent examples of beautiful images from this early period can be seen at the cave of Chauvet.

Cave Paintings Periods

In southern France and northern Spain cave paintings were produced over a period of 30.000 years. This happened over four prehistoric cultural periods.

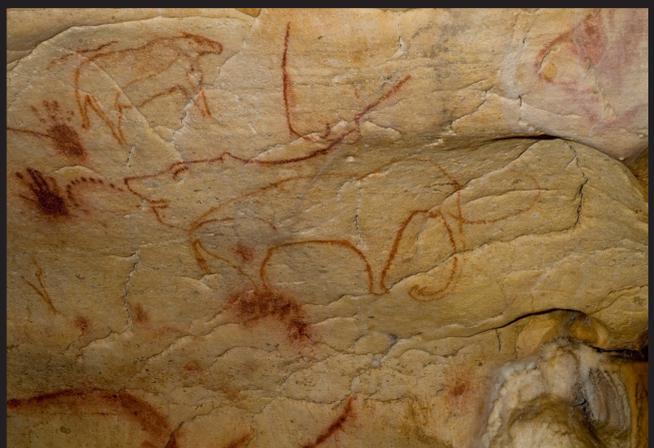
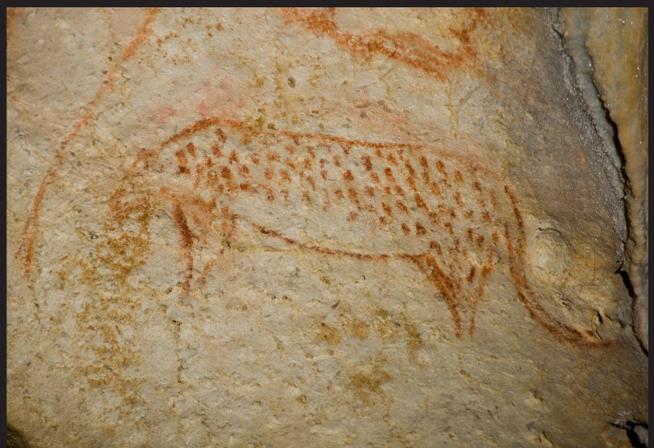
The Aurignacian period started 45.000 BP and was followed by the Gravettian period both lasting for about 10.000 years.

The remained two periods thereafter only lasted for 5.000 years each called Solutrean and Magdalenian. The latter ending around 10.000 years ago.

These periods could be defined not only by the sophistication of their cave paintings, but also more specialized stone and other material tools, cloth manufacturing and more refined carved art objects often produced from mammoth ivory, antlers and animal bones.

Cave Paintings

Simple red ochre outline images some with dots are the oldest. Followed more refined by black charcoal animal images. Typical examples are those in the Chauvet cave. About 15,000



years later polychrome animal images dominated the work of prehistoric cave painters.

Colors Used

Over time various colors were used. Experts found during their investigations a large quantity of colored powders, small blocks of pigments, pallets and crushers for example at Lascaux.

Charcoal black was either made from scots pine, which proved best for quality drawings, or won from manganese dioxide, black iron oxide ranging from olive grey to deep black.

Red was produced from ochre, iron oxide and red hematite. The shades were ranging from red to dark reddish brown.

Yellow was gained from goethite and clays with paints ranging from pale yellow to brown. White was easily received from calcite.

Ochre was mixed with fat and egg white to create variances in color. We can see brown, red and even yellow shades.

All paints were directly applied with fingers, brushes made of animal hair and vegetable fibers.

These skilled paleolithic painters already knew how to use certain techniques to create impressions of intensity and shade by diluting pigments.

Meaning & Interpretation

Paleolithic cave art is only possible through strong religious beliefs, important clan rituals, deep seated shamanic cults and resilient tradition of passing knowledge down to younger generations.



The images show the spiritual closeness between animals and their creators. Scientists believe that our hunter-gatherer ancestors in their spiritual world did not differentiate between man and animal nor the living and non-living. Therefore animal depictions express this spiritual closeness between man and beast.

Mythical Handprints

Why were hand prints used in such a way, but human figures and faces were drawn? The creators already had the needed artistic skills and talent to depict human figures with faces.

But was it too early in their



mythical development to draw hands? The reasons might be different.

Hand prints have possibly served as proven contact with the mythical “underworld” by touching cave walls to connect with deities.

Or was it the human contact with mother earth in the depth of a cave seen as her vulva for fertility reasons? That might explain the numerous female hand prints in various caves.

Positive hand prints are those whereby the hand was painted and pressed against the wall. Negative prints were done by holding the hand on the wall and blow the paint onto it creating a contour print.

In one cave about five hundred hand palm imprints were counted, some could even be classified as female or child. Was it a list of participants for a special clan ceremony?

Classification into Styles

Is it possible to classify engravings and paintings in caves in southern France and northern Spain? If so, do they change with cultural periods from Aurignacian to Magdalenian?

The number of prehistoric rock art sites in southern France is enormous. There are about 150 caves and rock shelters with some sort of engravings and paintings. In Spain the number is similar.

Having seen so many different sites across the world I have difficulty with style classifications. There are so many aspects such as choice of image, colors, techniques and composition.



In my opinion they differ so much with huge regional variances. I like to use the example of human figures. Animal images were the favorite drawings of our ancestors and they were masters in portraying them in every possible pose even moving.

But depicting humans seemed not to have inspired them. Was it a mythical resistance?

Let's look at the first human figures. They had rather realistic bodies, but faces, hands and feet were often left away.

Experts believe these human depictions did not represent a person like a clan leader or shaman but a human figure in general context versus an animal.

What is surprising in much later times human drawings were reduced to simple stick figures. The untrained eye might assume they were the oldest as they are the most primitive.

First Style Classification

But a classification might work in a regional environment. A French archeologist tried to define the artistic work of our ancestors over a period of 30,000 years into four depictive styles.

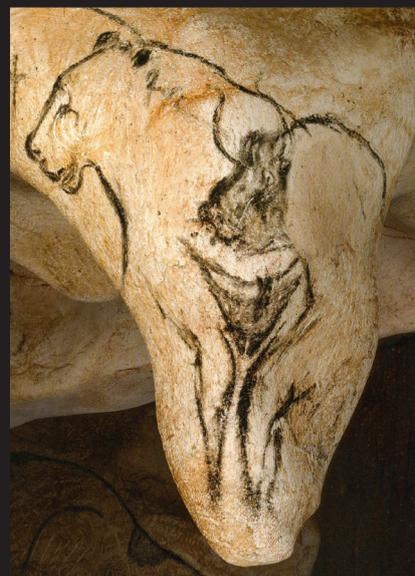
Style I

The first style includes images with simple engravings with fine lines and drawings of outline animal bodies such as bear, horse and mammoth mostly drawn in red ochre.

The bodies of few drawings were filled with dots or lines of the same red color. And some depictions show only an animal head without body.

It is interesting to see that vulvas were created as well at such an early stage at the beginning of the Aurignacian period. Which in France was also called Chatelperronian or Perigordian depending on the area.

A good example for vulva depictions is found in the cave of La Ferrassie in the Dordogne region.



At that time *homo neanderthalensis* was still around here as well and we know from DNA analysis that he mixed with *homo sapiens*.

This is why we have today still about two percent of neanderthal genes in our blood. In Asia the percentage is twice that high because the mixing of human species was wider spread.

Style II

This style type starts in the Gravettian and ends with the Solutrian period. It is assumed that this was the period of intense drawings for ceremonial purposes.

Caves were used as holy places with regular meetings and decorated for those religious practices.

At first drawings were placed in the cave entrance areas and later in the totally dark ends of the caves like in the Chauvet and Gargas caves.

In this period predominant animal images are mammoth as seen above, bison and horse with artistically rounded neck and back lines and also over bended front.

Typical examples can be seen in the cave Pair-non-Pair with its numerous mammoth and horse depictions.

After vulva depictions being drawn during the first style period now female or venus figurines being carved using mammoth ivory or stone.

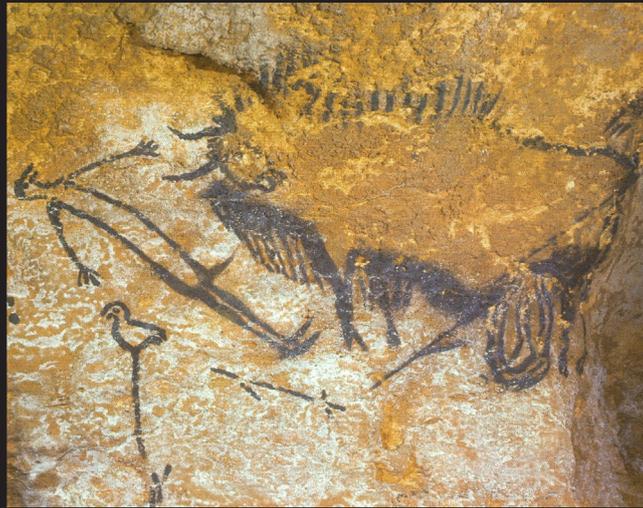
It is very interesting to see that these figures show numerous similarities across Europe. Faces, arms and feet are of lesser importance. But more detail is given by the artist to hips, bellies, bosoms and bodies. This demonstrates clearly the fertility purpose.

Style III

This style presents us artistically advanced drawings and more developed pre-historic art work. For the first time we see sophisticated painting techniques with shadows and double lines giving the impression of different movements of animals such as running or even jumping.

Deer for example show a totally new perspective whereby the body is drawn in side view but it's antlers in half frontal view to better show the impressive pair of antlers.

What surprises me most is



attacker to the ground before him.

This most realistic composition is really unique in prehistoric rock art worldwide.

Style IV

This last style falls into the Magdalenian period and is the busiest creation period of prehistoric engraving and cave painting artists.

the fact that the main diet of our ancestors at the time was reindeer. And this animal with its different antlers has not been depicted on any cave wall.

In this style period we now also see larger compositions of groups of animals of the same species or a mix of different animals as they were seen grazing together in nature.

New are also the depictions of humans together with animals. Most combinations are related to hunting.

But there are also intriguing images of humans with animals like in the Lascaux cave. Here a bison hurt by several spears of a hunter has pushed its

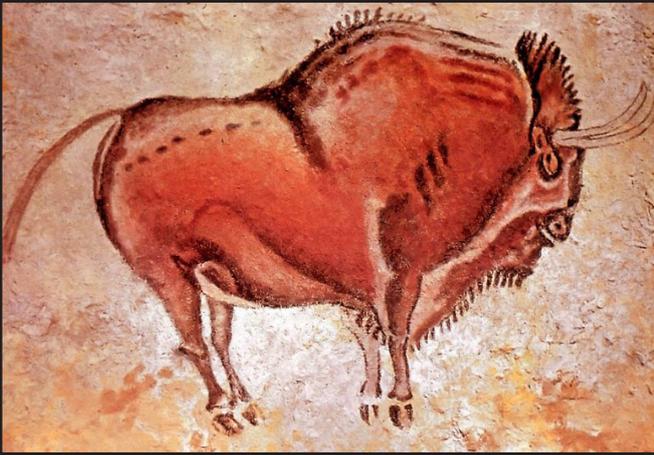
Interesting is that more regional variances occur in painting images. This might have various reasons.

First more local artists might have tried themselves at drawings and secondly the purpose of painting animals changed.

After 20,000 years the religious beliefs might have changed too. But possibly artistic expression of drawing animals became important or challenged the creative side and mind of humans.

During this phase animal images changed to become more realistic. This included

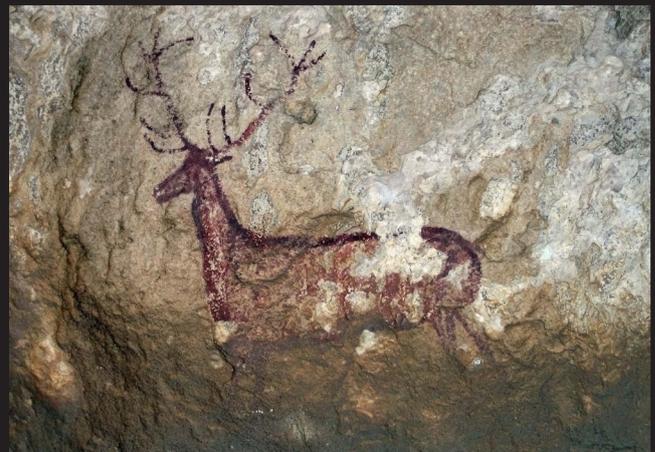




adding hairy parts to the bodies of bison and manes to horses for example. Body lines were curved to show different types of movement.

Different to today's african lions the prehistoric male cave lions had no manes and looked not much different to female lions.

Nearly all images created during this period were rather moving than static depictions. And antlers of deer were drawn now in a more naturalistic way.



Please note that description of symbols were not included in this style analysis to focus on the differences of animal and human depictions.

In summery we can say that style classifications are really difficult to establish as local styles varied too much. And they did not change at the same time in prehistory.



Thanks

We thank the different authorities of the Altamira, Chauvet & Lascaux cave museums to make available some of their pictures.

