Chauvet Cave
Aurignacian Culture

www.paleolithic-neolithic.com
The project to build a Chauvet replica cave was going on since 2007, but I had totally forgotten it. A planned opening date was never mentioned too. By pure coincidence I heard about the opening in April 2015 on TV news. And believe me, I was quite surprised and especially stunned what striking pre-historic animal drawings I saw in the short TV snippet. A decision was taken on the spot. I had to visit the cave as soon as possible and a few months later I was traveling to the Ardèche valley in southern France.

Clearly I remembered the reports of the sensational discovery in 1994 and the few breathtaking pre-historic charcoal drawings published at the time. The press pictures showed cave walls covered with large panels including expressive and rather lively paintings of wild horses, cave lions, woolly rhinoceros and steppe bison. And these weren’t single images, but rather complex compositions of large groups of animals depicted in various dynamic and forceful scenes, as if they were behaving and moving in their natural habitat. It looked very much more like documentary picture book story.

Unique Discovery
These pre-historic masterpieces were quite different from those multicolor creations I had seen at the Lascaux cave. But it was the huge age difference, which intrigued me. How was it possible, that these 15,000 years older paintings looked so much more sophisticated and so artistically refined and advanced? They looked much more like being created by a modern artist just yesterday.

Various tests done proved that these Chauvet cave paintings were the oldest so far discovered worldwide and had a spectacular age of 36,000 years. And they were the best preserved ever seen with so fresh looking colors and contours. How was this possible?

There was a very simple answer, the entrance of the cave was sealed off by a massive rock fall from the cliff above about 21,500 years ago. Therefore no air and water flow or damage by animals nor man did happened thereafter.

During that time most of the
many stalagmites and stalactites, one can see in the cave today, grew to their natural beauty. Only a few were already there, when the ancient creators entered and used the cave as mythical sanctuary.

No Public Visits
The uniqueness and important value of these prehistoric cave paintings was quickly recognized and it was clear they must be preserved at all costs. After the bad experience with Lascaux it was decided not to open the cave to the public at all. Today Chauvet is the best multi-discipline studied cave and rock art site. And since recently a perfect replica has been created and opened for public visits to share this UNESCO world heritage with all.

First Humans
Chauvet is situated close to the famous natural “Pont d’Arc” over the Ardèche river close to the city of Vallon-Pont d’Arc. This natural arch was created by the forces of water about 400,000 years ago and is sixty meters wide and thirty meters high. This unique landmark certainly was part of our ancestor’s mythical beliefs, who lived in the area during what we call today the Aurignacian Period.

First human traces in the Ardèche valley are about 300,000 years old and were found at Orignac some fifteen kilometers away. Homo neanderthalensis traces in the area go back a 100,000 years and could be proven at fifteen sites.

Mythology & Rituals
We know that all decorated caves were used by ancient man as sanctuaries reserved for rituals like initiations, shamanic cults and mythological rites, transmission ceremonies and search of contact to gods. These rituals possibly included shaman dances to reach the state of trance and go through the envisaged man-animal or living-dead ancestors and underworld transmission. Possibly they were also used for burial rituals, but experts are certain that burials never took place in the cave, as no human bones were found.

Bear Cave
We know that during winter cave bears hibernated in the cave, which is proven by the many sleeping hollows found at the so-called chamber of bear hollows. In addition many scratch marks from bear claws on the walls show that they spend time here. Interesting though with regards to chronology some of the scratch marks are underneath and others on top of the paintings. So we can assume that man
entered the cave when bear free in summer, created the paintings and held their ceremonies. The sanctuary use only theory is proven by the fact, that no human traces of living neither periodic nor permanent were found at the cave.

**Cave Details**
Now let’s look at some of the details. The cave is rather large with an area of 8,500 square meters. Its length measured from entrance to deepest point is about 250 meters and includes eight main chambers plus various galleries.

Experts call the small tunnel like parts of a cave galleries. The largest hall measures fifty by seventy meters and the highest ceiling reaches up to thirty meters. This gives you some perspective of the enormous size of this extraordinary cave.

**Age of Paintings**
Experts established two periods of human activity about 36,000 years ago during the Aurignacian period and again 5,000 years later during the Gravettian period. But it is assumed, that the later visitors did not create any major paintings and used the cave only for their rituals.

This means that possibly only few generations and even only a handful of skilled painters were the creators of the numerous pre-historic masterpieces. We also know that in between possibly no human visitors entered the cave.

Did the climatic conditions change? Did the hunted animals moved to greener pastures? Did the Aurignacian tribes living here were forced to move on with the animals? Or were they killed by tribal fighting or decease? With regards to the reasons we can only make assumptions.

**Curious Questions**
Why were all paintings created in the dark at the back of the cave? Why were not all walls painted? What was the reason to create various complex compositions grouped together? Why was red ochre used only in the middle part and black charcoal drawings in the totally dark back part of the cave? What meaning do the animal representations have and should tell us? What was the mystic message their creators wanted to preserve?

We should have discovered enough examples of cave art to be able to interpret them. But all explanations are still assumptions with various experts having different opinions how to best answer these questions.

Archaeologists are fact finders and without total proof there are only theories. Paleolithic cave art persisted for over 25,000 years, or close to 1,000 generations. So it might take more generations and new technologies being invented to give our offspring the chance to find the needed proof to give the answers.

**Artistic Dimensions**
When I entered the cave, I was immediately spellbound. On the spot I felt like being thrown back in pre-history. This was real, these fascinating images started to speak to me. They were so immensely expressive, truly dynamic and showed a real vivid vitality of these animals.

These highly artistic creations projected an enormous emotional power. Their Aurignacian creators produced here the most technically masterful drawings with regards to tone, perspective and interaction.

What is astonishing, Chauvet in my opinion makes Lascaux created 15,000 years later look more primitive despite their beautiful multicolor images. Here it becomes again clear, that we have to redefine our opinion about the overall capabilities of our ancestors. They were definitely not as primitive as we previously believed.

Their competencies, skills, talents and artistic expression
including speech was far more sophisticated. Their level of cognitive capabilities and intelligence allowed them to create these pre-historic masterpieces.

**Aurignacian Sophistication**

The Chauvet artists 36,000 years ago had expert knowledge of animal anatomy and movements. Because they carefully observed animals during hunt, watched and studied their behavior in different activities. From memory they reproduced the stalking and hunting lions in every fine detail, including their courtship and mating urges and compulsions plus internal group combats of rhinoceros.

Their creations include many complex compositions of groups of animals of the same species, but also their acting together with other species. The artists perfectly used uneven wall contours and niches to give their depictions more dynamic and movement drive.

Various images were intentionally wrapped around rock curves, folds and deliberately placed in alcoves. These are truly creative picture-perfect spatial arrangements.

**Meaning & Interpretation**

Paleolithic cave art is only possible through strong beliefs, important rituals, deep seated shamanic cults and resilient tradition of passing knowledge down to younger generations. This might explain the various child foot prints found here and at other caves.

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 here.

Nevertheless the question arises, why hand prints were used, but human figures and faces were drawn? They certainly had the needed artistic skills and talent to depict human figures with faces. But was it too early in their mythical development?

Hand prints might have served as proven contact with the mythical “underworld” by touching these 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 female hand prints. But every angel we look at poses more questions.
Animal Motifs

Again some figures for the detail hunters amongst us. Over 1,000 figures cover the walls of Chauvet. Different to Lascaux the ceilings were not used as projection surface. Thereof 442 animal images could be identified.

Nevertheless it is the greatest diversity of all cave art with fifteen different animal species. These are dominated by dangerous and large strong animals, actually not those they hunted. The eighty cave lion images found here represent sixty percent of all cave lion depictions in Europe. Similarly woolly rhinoceros represent seventy five percent of all cave paintings.

Other important animals shown on the walls are over fifty horses, thirty bison, but then only twenty cave bears, despite them using the cave in great numbers for their winter hibernation period. Further animal drawings identified are: ibex, reindeer, aurochs, megaloceros or giant deer, stags, muskox, panther and hyena.

Colors & Images

The majority of animal images are painted in charcoal black made from scots pine, which proved best for quality drawings. Only a few red and rare yellow images exist made from red and yellow ochre, all these were created in one chamber. The rare yellow drawings consist of only two small horse heads. Most images were done in outline shapes with fine shading creating the artistic expression.

Engravings were done with flint stone tools or fingers on smooth humid calcite surfaces. Certain geometric signs are specific to Chauvet like the “butterfly” with two red lobes and a central stick like body, plus the rounded “W” shape sign. Other signs found here are: dots, lines and schematic hatches.

Hand prints have again an important meaning. Seven positive and five negative hand prints are spread out through the cave. Positive 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 addition about five hundred hand palm imprints were counted, some could even been classified as female or child.

Fertility Symbols

The important fertility or female sex symbols are not missing at Chauvet. Six single depictions of vulva were found on the walls in different places. But the most intriguing symbol is a unique drawing of female legs with a vulva and an upper body of a bison, plus a lioness behind.

They might represent the myth of transformation to animal gods or human sexual contact with gods and spirits. Imagine that these images were painted on a hanging finger like rock, which is very much looking like a phallus symbol. It needs no further explanation if you look at the telling picture
Superimpositions

In pre-historic rock art superimpositions play always an important role. I have not heard a single plausible theory from any expert at the various sites I visited. But then there might be a logical explanation.

Here is my argument trying to combine the facts: most rock art motif are depictions of animals, these are often found close to water sources where animals were best hunted and superimpositions often are done on the same rock despite other rocks nearby are left untouched.

Let’s go back in history and think mystical and take the pre-historic spears as an example. For those who do not know the site and its story, at Schöningen in northern Germany 300,000 years ago hunters ceremonially buried their spears with the killed animal remains. To honor and appease the animal’s soul, hunters might have created an engraved image of it. And when they had a favorite hunting spot the rocks around it were again and again engraved one on top of the other.

In the Coa valley in northern Portugal I have seen the most superimpositions of over twenty animals on top of each other. One actually could barely distinguish single animals.

At Chauvet we also see many superimpositions, but mostly of the same species, created at the same time. A good example is the tight line of multiple long rhinoceros horns only showing the front animal.

These superimpositions were possibly created to show the interactions of animals like the typical concentrated group hunt of lions in several places. I actually would have called the Chauvet cave not after one of its three discoverers, but the “Lion Cave”. Despite the fact the cave was most frequented by bears, lions are the real pre-historic mythical animals of the Aurignacian artists depicted on these cave walls.

Preparation & Paintings

The high humidity makes the calcite covered wall surfaces soft and allowed here a seldom used technique, finger tracing or smudging. This leaves unique bright white outlines of the animal bodies on the wall.

I know only one place, where this technique was possible to be applied, here at Chauvet. For the most important complex compositions the rock surfaces were rubbed off to create an even white calcite surface to be painted on.
Techniques Used
Nine techniques were used: stomping, drawing, engraving, perspective, silhouetting, use of wall contours, finger tracing with smudging, impressions of movement done in one case by a double pair of bison legs and finally three dimensional representations.

Often two or three techniques were combined. This proves how highly skilled and talented our ancestors already were 36,000 years ago. It also shows the high sophistication of these first pre-historic paintings.

The single or few creator theory is also thought-provoking. Some scientists believe that the specific styles of animal drawings indicate, that one artist or only very few created most of the paintings here. Their arguments are based on the way how the ears of rhinoceros were drawn on both sides of the back line, the muzzle and brow line of bear images or the precision of eye expressions.

Special Panels
There are so many fascinating compositions of animals images found here. One of the most intriguing for me is the arrangement of groups of animals around a “water source” in the Hillaire chamber. This special creation needs to be explained. A few days after heavy rains water starts to flow out of a small hole at the foot of the wall in one corner of this chamber like a small spring. Around this alcove an interesting arrangement of animal paintings was created. The idea might have been to depict animal life at a natural water hole.

Here we have nine groups of animal figures including rhinoceros, lions, horses, aurochs, reindeer and stags. The famous triptych of panels is over ten meters long including horse panel, lion alcove and cervid panel. The panel of engraved horses include twenty animals all created on a four square meter space.

And then there is the twelve meter long panel including on the left side the rhinoceros panel with seventeen animals, and on the right side the lion panel with sixteen animals including male, female and cubs in the famous bison hunting scene.

These panels contain other remarkable detailed scenes, such as the typical lion stalking for hunt, a lion “mating dance”, rhinoceros fighting for supremacy in the group and multiple rhinoceros all in line possibly drinking and being only distinguishable by the number of horns. The horse heads panel shows the artist capabilities to express animal behavior and emotions through different head expressions.

Other Findings
Disregarded by most visitors, the remains found on the floor of the cave tell a rather fascinating additional story. Yes it is true, that only animal bones were found, but no human remains. Some of these bones have teeth scratch marks from carnivores, so we can assume, that they were killed outside and carried inside and did not entered and used the cave.

The over two hundred bear skulls found, confirm that bears hibernated in this cave. But one bear skull was left intentionally by ancient man on a solidary rock facing the entrance of the cave. This rock has fallen from the ceiling and was positioned by man, so that its flat surface was on top. Possibly it was used as a kind of an altar, because rests of charcoal from small fire places was found around it.

Signs of Ceremonies
And what about the two bear front leg bones stuck intentionally into the ground close to cave entrance? Were they marking the entrance to an important sanctuary? And these are not all traces man left in the cave besides his impressive paintings. In addition several rocks and bones were intentionally moved in the so-called skull chamber around the altar. Even some calcite blocks were removed from the wall and placed as steps to cross soft grounds.

And then there is the creation of a water basin made from clay. The explanation might be logical. But did man really transported water up from the river? And how did he do
that? What kind of container did he use? Ceramics were not yet in use. So could it be hides made watertight with wax? Or was he collecting small drips from the ceiling?

**Human Footsteps**
I was really stunned about another discovery on the cave floor and the theory around it. A long trace of perfectly clear footsteps of an eight year old boy were found. And along his path he regularly scratched his natural light torch stick against the walls to increase light intensity.

Was he fleeing because he was followed by a wolf? Or was the wolf his tamed companion? So far we have proof, that the first tamed and domesticated animals like dogs used for hunting appeared much later about 15,000 years ago.

But if the wolf killed the boy in the cave, why did we not find any human bones? And why did the wolf not fear the fire the boy carried and followed him nevertheless? And why are his traces next to the boy’s and never on top? Well possibly one day we can push the start of animal domestication further back in history, like through new discoveries in Saudi Arabia in 2011 regarding horses.

**Pre-historic Fauna**
The animals most hunted at the time were: reindeer, wild horse, aurochs and bison. But most depicted in the cave are other species. For example the cave lion’s weight was about 250 kilograms. The woolly mammoth was the heaviest with six tons and reached a tusk length of over two meters. The woolly rhinoceros was half the weight and its horn became over a meter long. They all became extinct at the same time around 10,000 years ago.

Only the cave bear died out earlier about 30,000 years ago. It was a huge animal and reached three meters when standing on hind feet. The aurochs weight was 700 kilograms, but he became extinct only 2,000 years ago. Imagine the megaloceros or giant deer was as heavy and its antler span reached over three meters.

**Climate & Flora**
The Ardèche valley had a warmer micro climate with average temperature five degrees and was colder than today. Maximum winter temperature reached minus twenty degrees. In this environment only light forestation like in southern Sweden today with fir, birch and juniper trees survived. Aurignacian man camped in sporadic hunting spots at rock shelters along animal migration routes.

**Replica Cave**
The important replica project started in 2007 and was finally concluded in April 2015 when the Caverne de Pont d’Arc, as the Chauvet cave replica is called opened. The French State spend over fifty million Euros to build up the replica with the latest 3D technology.

The new park includes a museum, visitor center, book shop and restaurant. Over 500 specialists modeled the millimeter precise polystyrene walls with robots. All paintings were applied by expert hands. They needed one day for three square meters. One third of the total wall surface or 3,000 square meters were reproduced. The administrators of the replica cave expects about 350,000 visitors per annum, but the park is big enough to handle that.