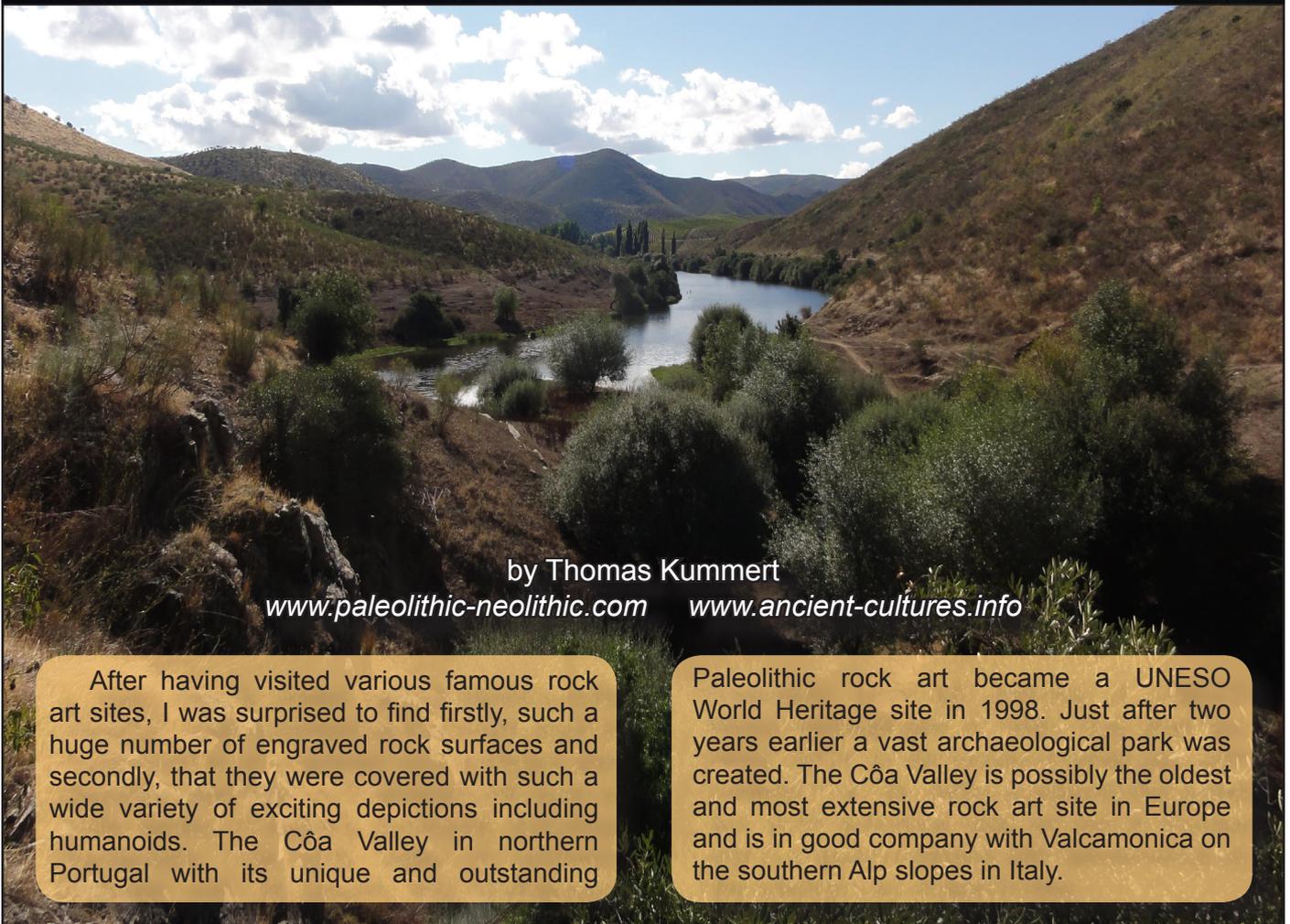
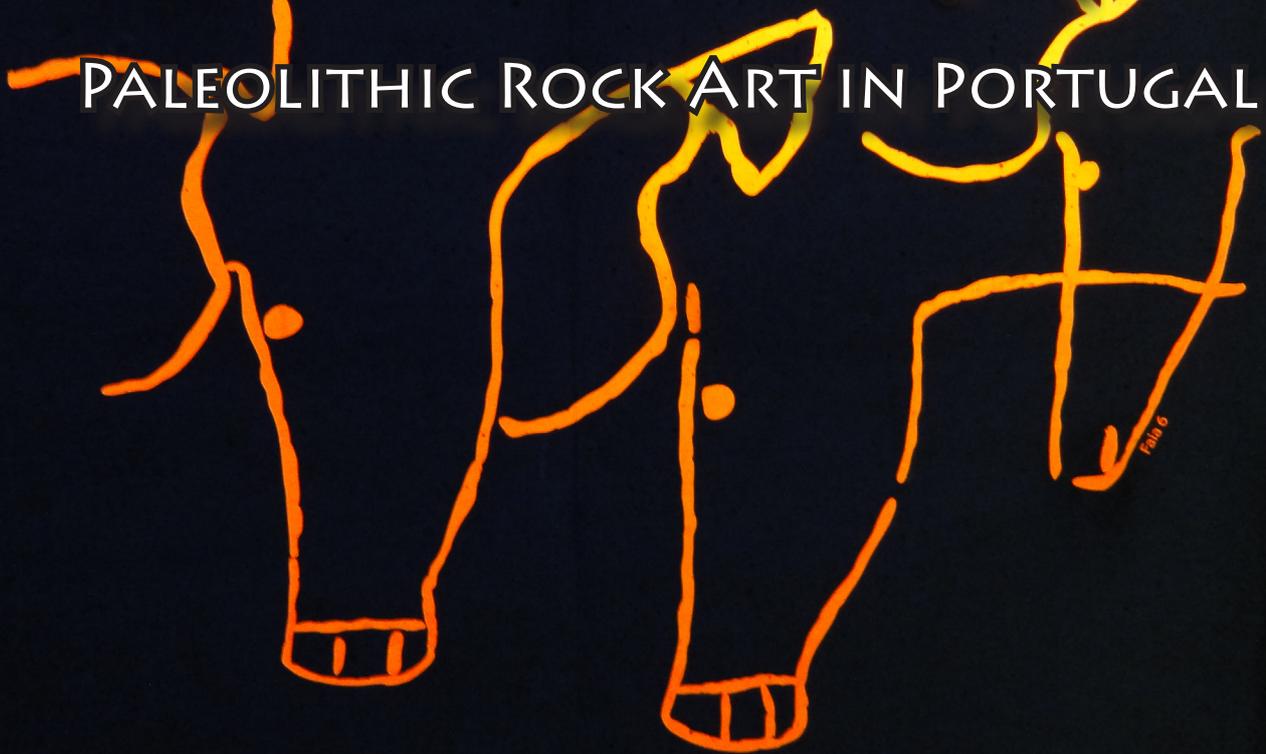


COA VALLEY

PALEOLITHIC ROCK ART IN PORTUGAL



by Thomas Kummert

www.paleolithic-neolithic.com www.ancient-cultures.info

After having visited various famous rock art sites, I was surprised to find firstly, such a huge number of engraved rock surfaces and secondly, that they were covered with such a wide variety of exciting depictions including humanoids. The Côa Valley in northern Portugal with its unique and outstanding

Paleolithic rock art became a UNESCO World Heritage site in 1998. Just after two years earlier a vast archaeological park was created. The Côa Valley is possibly the oldest and most extensive rock art site in Europe and is in good company with Valcamonica on the southern Alp slopes in Italy.



Aurochs head well visible on a panel with various superimposed other animal depictions

The Côa Valley is about hundred fifteen kilometers long, but the rock art is concentrated near its confluence with the Douro River and spills over along the Douro. The first hundred kilometers it runs through a granite dominated area, only last seventeen kilometers are a schist and greywacke area. These softer schist rock surfaces were preferred by ancient men for their highly sophisticated and surprisingly artistic rock art engravings.

But unfortunately seismic activity affected the rock art covered surfaces through frequent panel splitting and movement. Also the fine line incisions are often difficult to recognize for the untrained eye and are pointed out and well explained by the expert guides. The best is to book a night tour, because an artificial light source from the side makes the fine lines more visible through the shadows created.

Côa Rock Art Age

There are various Côa Valley sites, which are open to public visits today. Well informed guides walk and talk you through the major sites called Canada do Inferno, Fariseu, Ribeira de Piscos, Penascosa and Siega

Verde in the south. Over thirty important new sites were discovered since 1997. Today around 420 rock surfaces covered with multiple engravings have been studied.

There are thousands of depictions and about half thereof are still unstudied. Most Côa sites were engraved with rock art during the Upper Paleolithic Period including Gravettian, Solutrean and Magdalenian human occupation. The most ancient Paleolithic rock art sites are concentrated around the four ancient beaches of the Lower Côa River, today unfortunately flooded by rising waters from the Pocinho Dam.

Around twenty schist and greywacke rocks on the left Douro River side have much later Copper, Bronze and Iron Age dating. And at the Faia site rare Neolithic paintings were discovered too. That means that ancient men engraved rocks at Côa for nearly 30,000 years.

The Time Line

Just to give you the big picture of human development starting in the Lower Paleolithic with the move of *homo ergaster*



*StProjection: human figure at Piscos **

“Out of Africa”. He already used various Oldowan stone tools, called after the Tanzanian location, where they were first discovered.

In the Middle Paleolithic we had already well trained hunters, who could throw their spears up to sixty meters wide to kill wild horses. Please see my separate article “Paleolithic Spears” about this world sensational discovery in Schöningen Germany in 2008.

At the beginning of the Upper Paleolithic ancient men started to produce first art and musical instruments. During this period the Côa rock art started to be created. Most sites from the Gravettian Period are situated in the area close to those old Côa beaches.

Lower Paleolithic	2,6 - 0,3 million BP
Middle Paleolithic	300,000 - 40,000 BP
Upper Paleolithic	40,000 - 10,000 BP
Gravettian	32,000 - 22,000 BP
Solutrean	22,000 - 17,000 BP
Magdalenian	17,000 - 12,000 BP

During the Magdalenian Period rock art moved downstream to the confluence with the Douro. Rock art panels are now found at higher elevations and further away from the river. The sites are also more scattered in the wider landscape adjacent to the river. We encounter also the densest coverage with animal or zoomorphic depictions during this period. The depictions now start to include many red deer *cervus elaphus* and for all motifs the incision technique is used from now on.

Human Settlement Sites

The oldest human occupation in the area is dated around 30,000 - 26,800 BP. Fariseu is the most studied, because it was excavated right in front of a rock panel covered with important engravings. The excavation also revealed further engravings further down on the rock surface, which were covered up by various sediment layers. This is also the first site, where the date of engravings could be directly linked and thereby undoubtedly confirmed via excavations to 18,400 BP. Here also some small loose rock plaques were found with fine line engravings.

But one fact so far is difficult to explain with certainty. Why are over 80% of all sites found on the left river side? Has that to do with the location of human settlements? Were ancient men able to cross rivers? Some experts assume so. We also have to assume, that animals roamed on both sides of the river. There is no natural answer to that question, other than the sun rise. We know from various other rock



* all projections taken from the museum at Vila Nova de Foz Coa

art sites, that depictions were created on purpose on surfaces, which were illuminated by the rising or setting sun rays. As the Côa run precisely south north, this might explain the choice of left or western river side.

Specific Site Information

The oldest Paleolithic rock art or “archaic sanctuary” with deeply pecked depictions is situated on the Lower Côa River between Faia and Canada do Inferno including two other important sites Quinta da Barca and Penascosa. For orientation please see the map in this article.

At Canada do Inferno the first Paleolithic rock art was discovered and this significant site has over forty rock panels covered with phenomenal engravings. These include seventeen aurochs depictions and a wild horse in nearly live size. One rock surface also shows three of the most realistic and artistically best depicted horses in an unusual style for Côa rock art. All these were created during the Magdalenian Period between 17,000 - 12,000 BP.

Another most unique decorated rock plate is to be seen at Penascosa. And at Quinta da Barca a rock with deep multiple superimpositions is to be found, called the “spaghetti rock”. But at Fariseu this is topped by a vertical panel with ninety four superimposed motifs.

Most are deep pecked animal or zoomorphic depictions including bovids, equids, caprids and cervids, except fish. This site was used by ancient artists between 18,400 - 11,000 BP. Same as at Canada do Inferno and Fariseu also offers sixteen auroch figures.

On another Fariseu panel a human figure is similar to those

human figures to be seen at Ribeira de Piscos. Therefore Fariseu is also regarded as a Magdalenian site.



Rock panel at Penascosa

Unique Côa Superimpositions

Côa superimposed motifs are really unique. I have not seen an ancient rock art site with so many and frequent superimpositions like Côa. In the early phase, it is assumed by local archaeologists, superimpositions have been used by their creators to depict illusions.



Detail of nice aurochs head above

So they have been engraved that way intentionally! Is the fact proof

enough, that superimpositions were used despite enough free available space on the rock panels? That leads us to another curious question. Did their creators want to express possibly, that huge herds roamed here?

But the problem for a clear answer is, that these superimpositions are nearly impossible to identify and also pre-existing lines were re-used and re-engraved. Goods examples we find at Fariseu, Quinta da Barca, Penascosa and Canada do Inferno.

So that leaves the important question of multiple superimpositions still unanswered. Let's try to approach it from another angle. We know that ancient men lived in balance and harmony with nature specifically flora and fauna, which were his important nutritional resources for survival.

For him each being animal had, what we call today a soul, or similar living creature “spiritual value”. So when killing an animal, it's soul and the gods, he had prayed to for successful hunting, needed to be appeased. At Schöningen for example the killing spear was buried with the animal's skeletons. It is a unique example of first cult practice in human history already 300,000 years ago.

When looking at prehistoric rock art, we encounter the first basic question. Why were animals engraved on rock surfaces? Was it really only for artistic expression? Or was it to pray for hunting success? Or was it simply a message to others passing by, these animals roam here?

But why do we find so many animal depictions superimposed on top of each other? Interestingly



The important Penascosa site has various rock panels to be visited

the majority of animal rock art depictions are found close to water and often are linked to hunting.

Now let's consider that these depictions were engraved to honor the killed animals and appease the gods. They should live on through their picture on the rock surface at the place, where they were killed. That could explain the numerous superimposed engravings in the same place, where animals were watering and subsequently killed.

Painted Rock Art

Painted rock art in the Côa Valley is rare, only one percent of depictions are painted. The main "paint site" is Faia, which shows a group of four auroch heads, partly engraved and partly painted in red. Painted rock art is only preserved at Faia. The reason is, that Faia is the only granite rock art site at Côa. Further, Faia being situated under a rock overhang, it was not so much exposed to the influence of weathering like all the other "open air" sites.

The Faia aurochs are dated to be Paleolithic, but there are on the same panel interestingly also some later Neolithic human figures, also painted in the same red color. This leaves us with an interesting question. Were motifs at other sites also painted, but not conversed on schist, due to direct exposure to elements?

Experts think, that the aurochs depictions at Vale de Figueira were also created with both techniques, engraving plus

painting, as only half of animal's body is engraved. The same is suggested for some engravings at Ribeira de Piscos.

Engraving Techniques Used

Is it really surprising, that at Côa all, at the time known, engraving techniques were used? Not really, when we consider the enormous spectrum of artistic engravings created here. It started with deep line pecking, either with or without initial outline via fine incision. And included the pecking and abrasion technique too.



Scraped red deer at Penascosa

Later fine single line and multiple line incisions followed. We mentioned already the limited paintings. Scraping was another rare technique used too. The large deer at Penascosa is the best example - see photo left.

Pecking Details

Deep pecking was the first technique used. And the most archaic engravings were executed using this technique. Pecking represents about 30% of all engravings.

Animal depictions were done in profile and normally in a larger size. But they were engraved only with a few straight lines. Animals were created with a single front and hind leg, with open ending lines and therefore no hoofs.

Heads were depicted elongated and with twisted horns, or semi-twisted in frontal, or semi-frontal view. Their back lines were curved and bellies portrayed large and hanging. All these attributes are typical for the Gravettian Period between 32,000 - 22,000 BP.

Incisions followed later on pecked depictions and became the most dominant engraving technique representing 45% of all rock art work. Multiple line full body incisions are the latest technique used at Côa.

Perfect multiple line examples can be seen at Ribeira de Piscos and Penascosa. At the beginning of rock art creation at Côa during the Gravettian and Solutrean Period the upper schist rock surfaces were used, possibly to achieve maximum visibility. Incised depictions were positioned mostly in the center of panels.



The most common size of depictions is between thirty to sixty centimeters. The smallest motifs measure just about five centimeters. But the largest are about two meters high, like the aurochs at the Ribeira de Piscos site, or a horse at Canada do Inferno.

Animal Motifs

Various *zoomorphic* or animal figures can be seen. But four main species dominate the unique Côa rock art complex. These are *equids* or horses, *bovids* or aurochs, *caprids* like ibex and chamois *rupicapra rupicapra*, the latter indicative of colder climate. These three species represent approximately 20% each of all depictions.

Finally *cervids* like red deer *cervus elaphus* and fallow deer *dama dama* represent 10% of the engravings. Rather rare are fish, which for example can be seen at Penascosa.

But still today many animals could unfortunately not be identified, because they were either unfinished, wildly superimposed or damaged over time.

Animal Animations

The use of animations in engravings is an unusual style in Paleolithic rock art, but typical for the Côa Valley. They were only used for animal representations. Local archaeologists are convinced that animations are proof of early artistic capabilities and expression of Paleolithic engravers. They were mainly used after 16,000 BP during the Magdalenian Period.

For animations different styles were used. Animals in groups were identified, as well as double-headed animals, depictions with multiple perspectives, confronted animals and later transformation of animal species. Let's try to shed more light on these fascinating early animation techniques.





Rock art at Penascosa



Ibex detail from panel at the right

Animals were often depicted in groups and are found at all major four sites able to be visited. These group depictions belong to the early phase of Côa rock art.

Double headed animals show one body with two or more heads, only one example shows also multiple legs. Possibly they are showing a male plus female pair, like at Fariseu. These depictions occur with multiple species like horses, ibex, chamois, aurochs and deer.

Multiple perspective means, the body is depicted in profile and the head in frontal view. This is rather unusual for the early Paleolithic rock art. An example of an ibex can be seen at Penascosa and of aurochs at Quinta da Barca and also at Ribeira de Piscos.

Confronted positioned animals are very rare depictions at

Côa. But transformed animals are more common. They are previously created animal engravings, which were transformed from one species into another at a later stage.

For example horse into deer at Canada do Inferno, or horse hybrid into aurochs at Vale de Moinhos. Transforming and retouching techniques are also encountered in prehistoric cave art paintings.

Human Motifs

It is no surprise that *anthropomorphic* or human figures, as well as mixed beings were also created by prehistoric men at Côa. They were found only on few rocks so far. The studies of various presumed human figures are not yet finalized.

All human representations are found around the mouth of the

Ribeira de Piscos Creek flowing into the Côa River. The only exception are those human depictions at Fariseu.

For example Ribeira de Piscos shows an ithyphallic figure in a complex of superimposed motifs and was created during the Magdalenian Period. Here in total sixteen figures were identified, some are unfortunately still unclear.

At Fariseu two human motifs were identified. All human figures are clearly created with two legs, but often it is uncertain, if a male or female is depicted.

It has to be noted, that Paleolithic human figures have strange looks compared to the very natural depictions of animals from the same period.

Possibly human figures represent a message, rather than depicting



Projection: hunter at Faia *



Projection: human figure at Faia *



Projection: hunters at Faia *



Côa River with interesting Ribeira de Piscos site

a person, experts presume.

Let's follow this interesting thought. If the human figurations were intended to depict a divine representation with certain attributes or shaman rituals, this would explain the composite figures, possibly showing mask dancing or other rituals.

We can compare these with the numerous panels with dancing scenes, found in the Saudi Arabian desert at Jubbah. This unique site has the world's largest human depictions with over two meters in heights.

And it also shows the largest groups of dancers of over twenty figures, including animal mask dancers. For more information please see my article "Fascinating Jubbah".

Paleolithic sexual motifs as depicted at Ribeira de Piscos are very rare.

Possibly this scene represents male masturbation linked to fertility? Other possible sexual depictions outside Côa were found at La Marche with a face to face scene, but no sexual organs are visible here.

And a scene at Enlene shows an

explicit front-dorsal intercourse. Depiction of single sexual organs are found in Paleolithic rock art especially for female and are more commonly depicted for fertility purposes.

Sign Motifs

Those motifs are normally common in ancient rock art, but are rare at the Côa Valley sites. Here we find for example bundles of converging incised lines, scalariforms, zigzags and wavy bundles. These signs occur only together on panels with animal depictions.

One of the most interesting signs can be seen at Vale de Figueira. Two combined scalariform motifs are united at their base by a straight line and topped by a semicircle.

The most notable signs were found at Vale de José Esteves and include a set of geometric and abstract signs.



Ribeira de Piscos site



Côa River at Canada do Inferno

Existence of a Côa School?

Despite its Paleolithic age the animal depictions are rather standardized or stereotyped. This is true for all four main species engraved at Côa.

This provokes an intriguing question. How is that possible? Was it one ancient group of men, who moved around and created all the rock art at Côa? This is rather unrealistic, as the work was crafted over numerous generations.

We do know, that ancient artisans did not yet use individual artistic expression. So it must have been a highly defined common skill to engrave rock art at the time.

Or was it the first “school” of creative art in history? All this, plus the developed animation techniques used, suggests, that rather developed and sophisticated groups of humans were hunting and living in the Côa Valley about 40,000 - 10,000 years ago.

So they were able to visualize these stereotyped animals and recraft them on rock panels. But can we call that a “school”? Taking all prehistoric rock art sites I have visited into account, I don't really think so.

Otherwise prehistoric men at Côa would have started to depict many other animals living in the area at the time. Animals which they must have hunted as well.

So why did they only depict four species?

Let's analyze the development of the employed rock art styles



a little further. Looking at the techniques used in antiquity and their execution by our ancestors, it was possible for



experts to detect the different phases of style development of Côa's Paleolithic rock art. Archaeologists realized during their intense research, that different styles existed and their sequence became obvious.

Many of these styles we have explained above. So it is no surprise, that the expert findings from Côa are rather consistent with other Paleolithic engravings in Europe. But the research work at Côa is far from finished.

The availability of new technology, as recently first used at Valcamonica in Italy, will certainly amaze us in future with many new discoveries.

I hope this new fine scanning technique will be used in future also at Côa and reveal many more secrets of our Paleolithic ancestors.



Travel & Visit Tips

A trip to the Coa Valley in northern Portugal can be combined with a visit to the numerous Douro wine farms, of which many offer accommodation. Because at the Archaeological Parks center at Vila Nova de Foz Coa, there are few hotel rooms available. Be aware that the mountain roads to Vila Nova de Foz Coa are all very narrow and have endless curves. So plan in more time to get there. Only one tour starts at the museum, the others start in small villages you need to find. It is also advisable to book your visits to the sites well in advance. All sites can only be visited with guides, who take you there in 4x4 vehicles. It is not advisable to visit the sites in mid summer, as it can get very hot and you need to walk certain distances to reach the isolated sites. Visit the modern museum at Vila Nova de Foz Coa first. It gives you a good first impression what to expect, has a well stocked book shop and coffee shop as well as restaurant. The guides speak well English, but for other languages you need to enquire when making your booking.