CAVE ART - Curated Transcript of BBC In Our Time podcast
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In Our Time is hosted by Melvyn Bragg. Melvyn's guests on this podcast are:

Alistair Pike
Professor of Archaeological Sciences at the University of Southampton

Chantal Conneller
Senior Lecturer in Early Pre-History at Newcastle University

And

Paul Pettitt
Professor of Palaeolithic Archaeology at Durham University

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[Melvyn Bragg] Hello. In 1940, a dog called Robot fell into a hole at Lascaux in the Dordogne. His owners explored the hole deeper and discovered thousands of cave paintings of bulls and horses and deer that are now famous. Around the world there are many more caves like this that stone age people tens of thousands of years ago, decorated with handprints or abstract symbols or images of animals. They're fascinating in themselves, perhaps even more so are the questions they raise of how they were made and why, and what that tells us of their creators and what it meant to be a human in a world of Neanderthals as well as Homo sapiens. With me in their homes to discuss cave art are

Paul Pettitt, Professor of Palaeolithic Archaeology at Durham University,

Chantal Conneller, Senior Lecturer in Early Pre-History at Newcastle University, and

Alistair Pike, Professor of Archaeological Sciences at the University of Southampton.

[Melvyn Bragg] Alistair Pike, can you give us a broad outline of what cave art is and where in the world it is found?

[Alistair Pike] Well, if you include rock shelters, which, after all, really are just kind of shallow caves, then cave art is found on every continent except for Antarctica. And it kind-of consists of a variety of forms from engravings that are usually made with perhaps a stone tool scratched into the wall to bass relief sculptures, where they're carving out a texture in the cave wall, to painted abstract symbols, and also kind-of fully figurative polychrome paintings, which in Europe are mostly of animals.

[Melvyn Bragg] When we're talking about cave, is that the only environment where these works are created, or is it simply where they were best preserved?

[Alistair Pike] Though we do find some examples of Paleolithic art in the open air, notably in the Côa Valley in Portugal. And this is an area where there's low deposition and low erosion, so the rocks are preserved. So it may well have been that there was a lot of art out in the landscape and it's really [that] the caves have protected it from erosion and from ice sheets and so on. But equally, we find art in the very deepest, darkest parts of the cave. And there's something special about those caves that are attracting these artists, because it's not a place where humans are living. So I think art is kind of multipurpose. There's some art which was designed to be seen from a distance, and there's some art that was done in small niches that was designed to be hidden.

[Melvyn Bragg] You use the word paleolithic? Can you tell us what that can you put that into years?

[Alistair Pike] Yes. The Paleolithic, which is divided into different stages, starts at about 2 million years ago, and comes down to the beginning of the holocene. So the end of the last ice age at around 10,000 years ago. We think the oldest piece of cave art is 65,000 or older than 65,000 years, but there are other forms of symbolic behavior that date back to at least 115,000 years.

[Melvyn Bragg] So basically, for the purposes of this program, we're talking 55, 65,000 years to 10,000 years?

[Alistair Pike] Yes.

[Melvyn Bragg] Thank you very much. Chantal Conneller, we mentioned Lascaux. Can you please describe that to us and why it was so very important and what period it was created? Well, that's three questions, I'm afraid. Never mind. I'm sure you're up to it...

[3:18]
[Chantal Conneller] Well, when you enter Lascaux, you come to really one of the most spectacular parts of the cave, the Hall of the Bulls, and this has got about 130 figures

in [it]. This includes sort of horses, the bulls themselves, which are large, aurochs, wild cattle, and deer as well. And this is on a fantastic scale, really.... There are four immense bulls, for example.... One of them is about five and a half meters. So this is art that's sort of really designed to be impressive. And one of the important things about Lascaux, it's got a very dazzling white, sort of natural calcite gleam in ... the first couple of chambers, so this art really stands out. And this is very large chamber. It's about 20 meters... One gets a sense [that] these are really beautiful images, really spectacular, really impressive. Lots of people could fit into this chamber. We can imagine that this is art that was meant to be perhaps seen by large groups of people and admirers. And this contrast with some of the other art at Lascaux. As Alastair said, we get art in the distant depths of caves and small chambers and niches. So, for example, another part of Lascaux was known as the shaft. This is a five meter deep shaft into the ground - [to get here] people ... have been lowered down on ropes. And here we see quite different type of art, art that's a bit more mysterious. Perhaps not everyone, only few people, are meant to see it. We have here an image of a charging bison that's wounded, and next to it, a really rare image of a human. I think it's the only one in this particular cave, but it's a human that seems to have a bird's head. And next to this is a very enigmatic bird on a stick. So this is obviously a really interesting image that's very meaningful in some way, but it's perhaps it's a lot more secret. Perhaps only its maker saw it.

[Melvyn Bragg] So, Chantal, you use the word impressive. Who are they trying to impress?

[Chantal Conneller] Well, this is a chamber that the whole social group could potentially fit in. And we know that adults and children are going into these caves. So certainly the immediate social group who created it. We do have sites at this time period where we do seem to have more people meeting up and exchanging things. And in some ways these painted caves mark these landscapes for people who might be wandering through but also for future generations. We have people coming back and making new marks on some of these painted caves several thousand years later.

[Melvyn Bragg] Thank you very much. Paul, can we get a sense of what it was like to experience these multicolored paintings in caves without natural light?

[Paul Pettitt] It was certainly very different to today. Obviously, we see these things statically lit with electric light whether we're looking at them in books, in museums or in the caves themselves. And obviously they didn't have these benefits at their disposal. The light sources they had were either small little hafts [?] - literally burning small amounts of wood fuel on the caves floor or little lamps just made by taking a small block of stone, a cobble perhaps, battering out a little concavity in it so it forms a natural bowl, filling that with some animal fat and a little wick, perhaps of juniper wood. It would give you a little light, perhaps of a meter or two's diameter. It might last half an hour before you needed to replace the fat. That obviously is nothing like a powerful torch of any form. So, caves are obviously mysterious, frightening places. The other thing our paleolithic artists wouldn't have known about is how caves form, what they are, and most importantly, what acoustics explain particular noises and so on. It would all [be] mysterious, not to mention dangerous in places. It's a very tactile experience to explore these mysterious places. And we have to remember that in caves where light stops, life stops. We have lots of evidence that these hunter-gatherers of the paleolithic

are occupying cave mouths but they don't really need to explore particularly deep into the dark zone. They might want to ensure there aren't any sleeping carnivores in the back before they bed down themselves. But beyond that and the fact that we can find art several kilometers into very difficult systems suggests that there is a real importance for being there that we assume goes beyond that quotidian. So we have to remember in that shifting light we're surrounded by impenetrable darkness, everything is moving, shadows are elongating. And we certainly can see in some of the art this concern with animating it as well. So the art becomes not so much [a] fixed picture on the wall but a second or two of a little film image rather like a flick book image, and thereabouts. And finally, the very fact that, as Alastair's already mentioned, some of the art is in very difficult to access, difficult to see, places. The very positioning, the difficulty of getting there suggests to us that actually we should think of this as a form of installation art. You know - the difficulty, the discomfort, the way that one's position changing alters the view of the art, and so on, is all part of this overall experience in a very mysterious and frightening place.

[Melvyn Bragg] So what's your view? Why they would take the trouble and to face the dangers, to go that deep and that far into these caves, to do these things?

[Paul Pettitt] To an extent, we can say that in some cases it would be simple curiosity. Obviously, these places offer shelter from the very severe climates these people are living in - it is the Ice Age, after all. But really, the extent to which these groups have brought in materials, pigments from various sources, equipment, kit if you like, and lugged it through often very deep caves, suggest to us that, of course, this isn't simple graffiti. This isn't - "I got here far to the back of the cave! Aren't I clever." - that it is planned; it is deliberate; and it presumably forms part of wider activities that we might call ritual, cosmological, and this kind of thing. And I think there's a lot of themes that we can find in the art that further support this notion that they are there for non-normal purposes.

[Melvyn Bragg] Let's just have a bit more information about what's going on. Alistair Pike, you've pioneered a way of dating images where there's no carbon. Could you summarize that for it? And basically, how are you dating these images?

[10:34]
[Alistair Pike] Yes, there's a real difficulty in dating cave paintings by radiocarbon dating, which is the kind of goto dating method for most archaeology. And the reason for that is that not all paintings contain organic carbon. And also radiocarbon really has an effective limit of around 50,000 years, so it can't take anything older than that. So we've been using the radioactive decay of uranium to thorium in a method called uranium thorium dating. And that can work out the age of a sample that incorporated uranium at its formation. And that's not the case for pigments, but it is the case for calcium carbonate formations in caves similar to stalagmites and stalactites. These are thin layers of calcite that form. And if they form on top of paintings, we can use the ratio of thorium to uranium to work out how long has elapsed since that layer formed. And because it's on top of the painting, that gives us a minimum age for the art. In a few really rare examples, we have painting that's done on top of an existing layer of calcite and then maybe even calcite forms again on top of the painting, so we have a kind of sandwich of dates, and that way we can get a minimum and a maximum age.

[Melvyn Bragg] Can you just flesh it out with numbers?

[Alistair Pike] Probably from the end of the Ice Age, to around 18,000 years ago, you have a period of painting that's very figurative. It includes the wonderful polychrome bison of Altamira Cave in Cantabria. And the period before that going back to maybe 27,000 years, you see a lot of red outline animals. So they're not filling them in, they're not trying to make them look completely realistic. And then the period before that, and back to the point at which humans arrive in Europe, you see a lot of symbols being painted, abstract symbols that we probably don't know the meaning of. But what we've been able to do is to take samples on top of some of these symbols and show that some of them date to older than 65,000 years. Now, that makes them something very different, because we know that there were no modern humans in Europe until around 42,000 years ago.

[Melvyn Bragg] So this is rather radical. So what is it telling us?

[Alistair Pike] It's telling us that these paintings must have been made by Neanderthals.

[Melvyn Bragg] ...Previously, just to set these [paintings] in context, I mean, in the late 19th century, when Neanderthals stirred the interest of people, to a great extent, they were considered to be inferior in every way - "nearer chimpanzees than humans" was one one line... That seems to have been blown out of the water by this, doesn't it?

[Alistair Pike] Well, it should have been, yes. But the kind of notion that Neanderthals were kind of dumb, brutish creatures, which originated in the original definition of what a Neanderthal is - when William King defined the species, he identified it as a separate species, and he said it was devoid.... Neanderthals were devoid of all theistic concepts. They had no god, if you like. And to him, that represented something that was very uncivilized and very backward. And to the extent where when they were debating what they were going to call this new species, a German scientist, Ernst Heichl, suggested that the name "homo stupidus", the stupid human. And you would think that actually, once you can demonstrate that Neanderthals are painting and in fact, what they're painting is indistinguishable to what modern humans, who at this point are only in Africa and the Near East ...It's the use of very basic mineral pigments, it's painting symbols, nothing figurative, then you suddenly realize that we should never, you know, we should not have this idea about Neanderthals being kind of dumb and brutish.

[Melvyn Bragg] What's your revised view of the Neanderthals? How should we think about them now?

[14:12]
[Alistair Pike] In terms of symbolic capability, that they were just as able as modern humans were. They had the capacity to think and express themselves symbolically, and this may have even included some form of language. And what's really interesting is... we've always looked for the origin, the evolution if you like, of ... the ability to exhibit symbolic behavior within the kind of modern human lineage. But now we've found it in Neanderthals, we should perhaps start looking much earlier on, perhaps in

the last shared common ancestor between Neanderthals and modern humans, perhaps half a million years ago.

[Melvyn Bragg] Chantal, what techniques did people use to make the works? What skills would they need?

[14:48]
[Chantal Conneller] Well, there's a variety of different techniques, yes, from the very simple to very complex. So at the most basic level, [cave pools?] quite often have a calcium carbonate sheen or clay through which people can drag their fingers. Then we have engravings using flint tools, which is a very common way to decorate these caves, and we even sometimes find the worn flint tools in these caves as well. So, simple engravings, but also more elaborate bath relief, for example. We also have line drawings made with black pigment, quite often charcoals used or burnt bone, but also mineral as well, black mineral, manganese dioxide. But the more elaborate ones, the polychrome images, are made through a variety of different types of mineral pigments.. [various] iron oxides, which produce reds or yellows, white. A variety of different pigments are used, mica, elite or calcium carbonate taken from the cave. And these pigments we sort of ground up, and again, we sometimes find evidence for this on the floor of caves, and mixed with binders, so water or animal fats, for example. And then these could be applied, there's something evidence the use of brushes made from animal hair or pads. Also stencils as well, either made from hide, or people use their hands as stencils as well. People could spray paint with using pigment in their mouth and then even sort of spitting it directly or through hollow bone. And these all give quite different effects and sometimes sort-of effects of depth and shading, which give a lot of these paintings quite a lot of realism and sense of motion and the animal.

[Melvyn Bragg] Can I bring Paul in now? Paul, how skillful would you say that some of these works were?

[16:53]
[Paul Pettitt] Well, to an extent, the answer depends on what particular phase we're dealing with. So, for example, if we're dealing with Alistair's greater than 65,000 year old Neanderthal phrase, not very, because this is a non figurative art, not that that needs to be unsophisticated, but it's made of covering the body or the hands and fingers with pigment and pressing them against the wall and a few variations thereof. So obviously something that most parents have an example of, that their children have done on their fridge. But when figurative art appears, and we think at the moment, that seems fairly clearly exclusive to Homo sapiens, whether we're a different species to Neanderthals or otherwise, when that appears, in my opinion, between 36,000 -37,000 years ago, fairly abruptly, in several parts of Europe, the animal outlines that are being created, that are being drawn, with wet pigment, are fairly simplistic. And it's only a few thousand years after that that we can start seeing a concern for naturalism. And it's from this point we can start saying they're very accomplished in terms of their ability to think, "I want to draw a horse and that looks pretty dynamically like a horse". But really it's only from the time of Lascaux, as Chantal mentioned, about 20,000 years ago, the late Upper Paleolithic, we call it, that we can really see all the spectacular iconic aspects of Upper Paleolithic art. So these great scenes of all of these herd animals, these "lawn mowers of the Pleistocene grasslands", bison, wild cattle, aurochs, horse,

red deer and so on, that we can see them interacting in these little film clips, if you like, from the tundra. And also a concern with perspective, a concern with detail.

[Melvyn Bragg] Alistair?

[18:53]
[Alistair Pike] What I find really interesting is that there are a significant number of paintings that are of animals where they've not needed to paint a complete animal. What they've done is taken the topography of the wall and simply kind-of highlighted it. So you'll find a kind of bulge on the wall, a bit like the bosses on the ceiling of the Polychrome Chamber in Altamira. They've wrapped the bison around them. There are some examples where they've used the cracks to form the back of animals and so on. And so they're using a real economy to express these animals. And it's almost as though the animals were already there on the wall and they were just highlighting them by just putting perhaps a horn on or perhaps putting a hind leg in or something.

[Paul Pettitt] Yes, I think absolutely. And of course, the idea of technical skill is a modern concept, and I'm sure in places like Lascaux, in Altamira, in Niaux [?], this was very important. But I quite agree that much of the art we have is very incomplete, and what seems to have been important is the creation of the art, rather than "I'm going to make an engraving that then lots of people can come to enjoy - it's me creating it". That's important and it's getting that message across that, yes, this is a bison I'm drawing.

[Melvyn Bragg] Chantal, if Homo sapiens has more in common with Neanderthals than was once thought, how does it change ideas about what it means to be human?

[Chantal Conneller] Now, for a few years, art has been seen as the sort of last bastion of human exceptionalism. And I think it's really exciting, these new findings suggesting Neanderthals are making art as well. It just shows what we see as something quite key to humanity is shared. It's shared across species and very different people looked at cave walls and were keen to leave their imprint, leave their sign, and saw their relationship to these particular places.

[Melvyn Bragg] How does that change the idea of what it is to be human?

[Alistair Pike] Well, I think it completely changes it. No longer can we hold these anthropocentric and to some extent eurocentric, views of the kind of primacy of humans. The fact, the idea, that they are at the very top of the evolutionary tree, because one of the characteristics that have always been attributed to humans, ie. symbolic behavior and painting and so on, we can show that's now shared with Neanderthals.

[Melvyn Bragg] Paul?

[Paul Pettitt] I think it's looking increasingly unlikely that the Neanderthals were a distinct species to us now, the more we have genetic sequences from the two, so the answer would be there that, well, this is cultural variation. We can see a lot of variation among chimpanzee groups from group to group, so we might expect it between Western European Neanderthals, Near Eastern Neanderthals, Homo sapiens, and so

on. So to me, it's not surprising that Neanderthals are producing art in deep caves. But as Chantal says, the important thing is, what is the variability here? You know - that their behavior leaving behind a hands stencil could be just as symbolic as writing a phrase of Shakespeare's or something like that on the cave wall. We work with very blunt tools when we talk about symbolism. So really it's about behavioral variability and what works and what helps you survive in these difficult climates.

This might be an area where everyone has a different view, but what was the purpose of the art? Why were they doing it?

[Paul Pettitt] Well, for the first 100 years or so that the age and authenticity of the art was recognized, people would forward umbrella theories - one idea that would explain the whole of the art. And obviously, for the figurative phase alone, we're dealing with some 25,000 years, and it changes quite significantly over that time. So there will be, of course, a number of reasons for it, some of it public, if you like, some of it group orientated.

[Melvyn Bragg] What were these reasons?

[Paul Pettitt] Well, when it was first shown to be authentic, this was the late 19th century, and we see this very Victorian view of art that, well, it's aesthetics, isn't it? You're in a deep cave. You're probably bored because it's snowing outside, and you draw the animals that are important to you, and it's simply that. It has no function, it's not a religion or anything like that. And it's really only when we come into, say, the 1920s, that people are now observing, shall we say, small scale tribal societies elsewhere around the world and demonstrating that art is rarely that - it always has some kind of function - magical function. So the idea that ... sympathetic magic ...was either produced to create fertility or to ensure success in the hunt, for example. And then as we come through to the 60s and 70s, to the Information Age, the notion that it's didactic, you know, you can learn a lot about your prey animals, it comes about. And then finally, from the late 90s, this awful New Age notion that it's all about shamans in altered states of consciousness and and stuff like that.

[Melvyn Bragg] Alistair?

[24:09]
[Alistair Pike] First of all, I would I'd just like to add to what the the sort of interpretive side of of looking at cave paintings. And one of the ideas that I'm quite keen on is really about how you survive as a hunter gatherer in the Ice Age and the role that cave art may have played in that. And if you are kind-of hunting animals and gathering, then you don't want to be in an enormous group because you just have to travel much further to get enough food to feed everyone or move the whole group continuously around the landscape. And so there's this idea that, in fact, what would happen is that groups would break off into smaller groups and they might spend a season or a good part of a year in their smaller groups. But this creates certain problems. One of which is inbreeding is that if you have a small group, then your mates are selected from people who are much more likely to be related to you. So the way that this kind of model would work is by having an aggregation event where you bring all these small groups back together and then they can interbreed with each other, but also they can swap knowledge. They can swap knowledge about hunting grounds and how they've

managed to survive the year and so on. And we wonder whether or not these ... large caves with very public large spaces, with big impressive cave paintings, might have formed a part of that kind of aggregation of these hunter gatherers. But then on the other hand, we have very personal pieces of art. And I think the hand stencils are perhaps one of the most intimate kind of relationships you can have with the artists themselves, because they would have stood in almost the same place in a cave as you, the observer, and they would have had the same kind of body attitude, you may have had to crawl underneath a small ledge because these are not always positioned on nice flat walls. In fact, some of them are quite deliberately hidden away. And that gives you a real sense of connection with the past and with the artist.

[Melvyn Bragg] Just your hand outlined on the wall?

[Alistair Pike] Well, some people just say it's like a graffiti tag. It's like saying, I am here. But actually, if you look at the location of these hands, you've got to ask yourself, who are they actually saying that to? Because some of them are... you wouldn't be able to see them if you just were walking down a cave. So, for example, one of the 65,000 year old hands stencils in Maltravieso cave in Estremadura in Spain is actually underneath a kind of little overhang of the wall. And to see it, you actually have to lie down on the cave floor and kind of shimmy in. It's a bit like trying to lie down underneath a table and it's about 50 to 70 CM above your head. Now, that doesn't strike me as a kind of demonstration of "I've been here". That's something a little bit more personal, I think, it's about putting something in a very particular and special place within a cave.

[Melvyn Bragg] Chantal, we have some smaller objects of art from the Stone Age, portable art it's called. How do these objects relate to the art in caves?

[26:57]
[Chantal Conneller] Well, there's some similarities, particularly in the sort of themes we see. So we get animal bones and flatstones engraved with animals and geometric designs that are found across cave art and some of this more portable art. And there's similar sort of play between material and form. So, as Alistair said, the shape of the cave is used ... if it looks like a horse's head, for example, horses painted. And we can see this similar interesting play with form in decorated tools. So animal bodies are sort of fitted in to tools quite often with huge, with quite a lot of humor. So we get this class of objects, spear throwers or atlatls, which have a hook on the end to keep the javelin in place and animal bodies are sort of contorted into this to create...particular forms. So a bird beak might be the hook or a mammoth might lift up its tail. We even have a sort of fawn defecating with a bird perched on it which acts as the hook for this. So we do see similarities, we also see some differences as well. So some of the cave art is so much based on the cave as a place and this other material is portable, it can be carried around with you, but it's also found in much more domestic contexts. And there's quite a complementarity sometimes between cave art, caves with lots of engravings in them, and adjacent caves with lots of this portable art. And a lot of this portable art seems much more impermanent than cave art which lasts for very long periods. We get evidence it's engraved, then perhaps broken, that's perhaps reused in much more sort of domestic context. So it's much more temporary art, but also much more sort of domestic art, whereas some cave art, cave art seems to be set apart from daily life and perhaps visited only on special occasions.

[Melvyn Bragg] Paul, what does cave art tell us about who was where, when, and why they moved around?

[Paul Pettitt] Well, to an extent we can tell that the groups, the individuals, whoever they were creating the art, came from very widely in the landscape. We can source the minerals used for the pigments in the art. For example, Lascaux has six or seven different sources of different colored pigments from 40 to 50 km away. We can do even more when we look at stone tools that we can source to their geological outcrops originally. So we know that these people are moving hundreds of kilometers over the course of an annual year in pursuit of the wild animals they're almost entirely dependent upon for survival. So it's a highly mobile life that leads them to particular points in the landscape where particular animals are aggregated. And Lascaux is beautifully important here because as a late French specialist Norbert Aujoulat demonstrated so beautifully, Lascaux is actually a calendar of rutting, it's a calendar of sex, of creation. And a lot of the art has creation in mind here too. So what it shows is horse, the extinct wild cattle, the aurochs, and red deer all in their rutting coats, in their finest, as it were, and in their rutting behaviors. They actually rut based on modern analogies of those animals at different times of the year. We have three seasons of creation represented in Lascaux. So these are the kind of sites that, as Alistair says, these groups aggregating to keep information and mates flowing and so on and so forth, and preserve this important information from a very far flung environment.

[Melvyn Bragg] Alistair there are clearly differences over time and space, but you see similarities too?

[31:00]
[Alistair Pike] Well, there are lots of similarities, especially amongst the kind of symbols that are used, and these have already been explained as entoptic phenomena...

[Melvyn Bragg] What does that mean?

[Alistair Pike] [It] is really the way that your brain is kind of hardwired. So if you are in a kind-of dark room and you start to see patterns on the wall, those patterns seem to be something, a product of the brain, so they're shared between individuals. So we seem to see the same symbol.

[Melvyn Bragg] I have to hold you up for a moment. Do you mean that everybody in this dark cave, if they see shapes on the walls, are seeing the same sort of shapes because of the way their brain works?

[Alistair Pike] Yes, not all at once... but especially if you have ... There's been lots of experiments of depriving people of kind of sound and light, also experiments people taking psychoactive substances and getting them to do sketches, and you see these geometric shapes, they appear again and again.

[Melvyn Bragg] What bearing does this have on cave art?

[Alistair Pike] Well, that might explain why you find symbols in Argentina that you also find in Australia despite the fact that the cave art might differ in age by 25,000 years and they are 12,000 miles apart.

[Melvyn Bragg] Paul?

[32:10]
[Paul Pettitt] This notion that it's altered states of consciousness has been largely disproven. What caves do is make us hypersensitive to those shadows, shapes and so on and so forth. And when we are into doing figurative art, it suggests the shapes of horse and so on in the morphology of the cave walls. That's as far as it goes. We don't need drugs or jumping up and down for several hours to start seeing these lines, which are in any case, absent largely from the Paleolithic caves of Europe. This may well explain some rock art, say North America or thereabouts, but as an explanation for Ice Age art, it's really nonsense.

[Melvyn Bragg] Chantal, comparisons are often made, they've been alluded to in this program so far, between modern art, contemporary art and cave art. What connections do you see?

[Chantal Conneller] Well, I think I think this is quite an instructive exercise because it shows us really what's particular about paleolithic art, but also some similarities. So, I mean, my colleagues have talked about evidence. We got evidence for children in caves, but we've also got people who are really good at art, specialists, similar range of people producing the art as today. But there's some real differences. So some of the main themes we see in Western art over the last couple of centuries, portraits and landscapes for example. These are not themes in Palisk art. We see very little evidence of vegetation, and we see hardly any images of humans. There's perhaps seems to be a taboo on the accurate representation of humans. What we see is really much more abstract and all part-human, part-animal. There's also other differences, really. We see in our current day art as commodities, whereas paleolithic is inseparable from its sort of context of creation. And there's perhaps a sort of broader contrast between art of the last few centuries has sort of really focused on representation as sort of to decorate something, something we admire, something that's consumed visually versus paleolithic art, which is much more sort of if we take analogies from small scale societies across the world. Art is much more about intervention, about doing something in the world. Paul mentioned the idea of sympathetic, sympathetic magic, but that does seem to be the case for at least some paleolithic art. It has a purpose, it does something.

[Paul Pettitt] What analogies with artists like Picasso tell us is that these people were thinking about animals. They had an intimate knowledge of their ethology, appearance and so on. And at least the ones who have left an artistic record were able to do it very very well. But I think beyond that, it doesn't really help us when we're really reduced to just looking at them and saying, "wow, aren't these people clever back then?" And this kind of thing. So, of course, it's not surprising. It's far more difficult to hunt a one and a half ton bison, dangerously you know, and difficult. I should imagine it's a lot easier to remember what that animal is like when you're butchering them so frequently and reproduce it. I don't know why we're so hung up on art being so fantastic.

[Melvyn Bragg] Theirs, you mean, or ours?

[Paul Pettitt] Theirs. You know, mostly people appreciate the art in terms of aesthetics: "Isn't it wonderful that these people could do it? They're us. They have the same brains and nervous systems." Okay, they're living a long time ago. But really, there's a lot more difficult things they had to deal with daily in their environments.

[Melvyn Bragg] Yes, but just to stay around this for a moment or two, if it's not much different, what does that say about the way that the mind is working over that time? Art is supposed to be and the creativity of an imagination that goes into art is supposed to be seminal in the construction of what human nature is. And how do you think that idea plays into what you've just said?

[Paul Pettitt] I think very well. We have to remember that we evolved as a hunter gatherer dependent on wild animals in the main. So to an extent, our brains have evolved around the importance of animals. So it's no surprise that many of the mechanisms our brain has - the ability to make sense out of a random pattern very, very quickly, this kind of thing, reflect animals. It's no surprise either that if you think about the rise of CGI and advertisements, many of them on television have some kind of animal or anthropomorphicized animal, which I gather sell things far better than another human would as well. So they're still with us. And that's not even to mention dogs and cats and this kind of thing. So what it does tell us, of course, is that although figurative art was not necessarily inevitable and it probably didn't come out of nothing, that somebody had the idea of, "oh, I'll draw one of those bison". But the important thing is that it's animals. And that was probably an inevitability. As soon as the brain is able to make things up very, very quickly and interpret ...faces in the clouds and this kind of thing, then perhaps for a hunter gatherer, it's inevitable. And that, to me, is the importance of the link.

[Alistair Pike] It's been kind-of said, I think, by people who are struggling with the notion that somehow Neanderthals had the equivalent symbolic abilities as modern humans, that Neanderthals were making hand stencils and doing little symbols and squiggles on cave walls. But look at Lascaux and look at Altamira, and surely that represents a massive difference in the cognitive abilities of the two. But actually, as we know from even just looking at art history, that art and what people do with art, is completely culturally determined, determined to some extent by fashion as well. And so it could just be that the difference in behavior is that they didn't need animals.

[Paul Pettitt] Absolutely.

[Alistair Pike] They didn't need to paint animals. They needed to paint hand stencils and squiggles. And it was only until the later period where the cultural demands on the groups were such that this kind of thought process and need to depict the animals around them.

[Melvyn Bragg] Can I... Paul Pettitt, can we come into the end now? But we just skipped over the idea that this might be some sort of magic or something to do with spiritualism is there more to be said about that? How we just let it go?

[38:45]

[Paul Pettitt] Yes, I think there is. We have to remember that it's a social enterprise. It probably is part about all saying that we're singing from the same song sheet, shall we say. So in a way, if you think about it, I suppose, as a Christian church service, it's people coming together with a shared practice, a liturgy almost, if you like. And that involves the perpetuation of the animals that these people are hunting on which they're critically dependent as well. So if you have to say there's anything, and I'm careful of not generalizing 25,000 years and so on, something that does come out time and time again is that it's almost some kind of magical way to renew those animals, to bring them back into the world. And that's very much how hunter gatherers of the recent past think.

[Melvyn Bragg] Can I ask you briefly, each of you, to say what would be most exciting for you to discover about this cave art in the next 10-15 years?

[Alistair Pike] We currently have three or four examples of Neanderthal art, and that really is not enough for us to be able to characterize it, for us to be able to work out what its distribution is, what the differences are between what's important to Neanderthals and what's subsequently important to modern humans. So I think, really, if we were going to spend some time continuing this work, we would go out and try and find as much Neanderthal art as we could.

[Melvyn Bragg] Chantal?

[Chantal Conneller] I think I would agree with the view that much better dating, but not just for the early art. I think these universalistic models that... none of us are particularly keen on are very much based on seeing it as an entire thing and not really picking out the themes that do change throughout the time. And only then can we sort of assess the significance of the art much more in its particular social context.

[Melvyn Bragg] Paul?

[Paul Pettitt] Chronology, yes, and geography too. So in terms of the geography, we only recently know that in Indonesia we have very similar art, hand stencils and also figurative art, as early as 40,000, which suggests that it was part of the behavioral repertoire of Homo sapiens, at least as we dispersed out of Africa. But we have nothing in between. So obviously, survey of everywhere between Europe and ... Indonesia, to see how common it was or whether in fact it's very exceptional.

[Melvyn Bragg] Well, thank you very much. Thank you, Chantal Conneller, Paul Pettitt and Alistair Pike.

And the In Our Time podcast gets some extra time now with a few minutes of bonus material from Melvyn and his guests.

[Chantal Conneller] None of us particular fans of these broad universal explanations, such as shamanism, but I think some of the work that's associated with that is quite interesting for thinking about the nature of caves and life in the paleolithic. So, as I

mentioned, the idea of certain rocks, shapes, suggest an animal form. Clots, the French archaeologist, suggested this is seen as sort of spirit animals trying to emerge from another world behind the cave, and that painting them helps bring that out. And similarly sort of hand stencils ...you spit paint all over your hand, that paints you into the cave, into perhaps this important spiritual membrane. And we see offerings stuck into crevices into the cave, bits of animal bone, flint tools, occasional beads. So perhaps a concern to a world behind the cave wall, I think is quite an interesting idea.

[Melvyn Bragg] And is the idea of going into the underworld part of that? Of going into the cave?

[Chantal Conneller] Yes, it's such common imagery across history that caves are entrances to the underworld, either the world of the dead or another ... the realm of spirits, for example. So, yeah, the sort of scariness of caves, some of these are several kilometers long, people going in it, it's an ordeal, it's dangerous. Really getting the sense that you're going into the earth into something dark, that's quite different. It does really fit in very well to those ideas [of] caves, as entrances to an underworld.

[Melvyn Bragg] Anybody else?

[43:24]
[Paul Pettitt] Yeah, I think the important thing is that we have to remember that the greater majority of cave art is undated in any absolute sense. Now, we have a lot of schemes, relative stylistic comparison, all this that we think are fairly safe. But it remains to be seen that there's a lot of surprises probably ahead of us. Much of archaeology, certainly prehistoric archeology, went through its great period of getting dates for things with the advent of radiocarbon and dendrochronology in the mid 20th century. But because of the difficulties, and it's only been in the last few years, as Alistair says, that we've been able to start doing this. So we have to remember we're still in the dark to an extent, and, as Alastair says, we have these great dogmas and we make great generalizations. So people take the 25,000 years of the Upper Paleolithic as a block and say, "look, they've got Lascaux", which might be, you know, half of that age, and so on. It really is the same as as taking, say, a very early Iron Age community, pre Roman Iron Age, comparing it with late Roman or early medieval and saying, look how different the two are. You know,"Aren't the early Iron Age people much less sophisticated than our early medieval people?" And so on. So it's really important that we have to nuance, as Chantal said.

[Alistair Pike] Can I just come in there? It's really interesting, the analogy you make there, but you can actually compare what Neanderthals were doing with what modern humans were doing, if you look at the African evidence. So at 70,000 years, we have an engraved ochre block. It's got a kind of hash mark on it, if you like, along with a kind of pebble that's got a similar kind of X's on it, maybe with an ocre crayon. We've got perforated shell beads, maybe 100,000 years ago in Israel and 70,000 in Morocco, and then some kind of scrape lines, geometric patterns, if you like, on ostrich shells from Jeep Kloof rock shelter in South Africa. And this is what modern humans are doing, how they're expressing themselves symbolically. If you compare that with what Neanderthals were doing sometime before 65,000 years ago, you really can't tell the difference. They are painting squiggles and lines, doing hand stencils and so on. And

it's the misunderstanding that somehow what came much later represents what humans ability is versus what we know that Neanderthals did.

[Paul Pettitt] Quite right. I think they're both variations on a theme, both biologically and behaviorally, in the artistic realm. Neanderthals are into bodies, either their own bodies and extending them into the landscape by art, or by suspending little bits of animal bodies, bones and teeth on their bodies as jewelry, whereas we overlap with that in Africa, but also we seem to be developing this non figurative, geometric incisions that might reflect perhaps clothing patterns on clothing or something like that. So again, nuancing is the important thing.

[Melvyn Bragg] Do you think there's going to be lots more caves that will be discovered over time?

[Paul Pettitt] Yes.

[Melvyn Bragg] I mean, any dogs around called "robot"..[laughter]

[Paul Pettitt] Tends to be speleologists these days. The Spanish are doing wonders. There's one or two caves a year discovered with paleolithic art in them. That might only be one or half a dozen images, but it's there. Less so in France. And also in other countries. The first examples in the Czech Republic have just been found. Some in Germany, we've had some in Britain now. So where Ice Age humans are present in some abundance, then we're much more likely to find it in other countries, yes.

In our time with Melvyn Bragg is produced by Simon Tillotson.