

Audio file

[119029-MysteriesoftheBayeuxTapestry.mp3](#)

Transcript

The Bayeux Tapestry is an extraordinary work of art. Made in the 11th century, it tells the incredible story of the Norman conquest of England. Betrayal, bravery, invasion, and bloody battle. It is a truly epic saga. Nearly 70 meters in length, the tapestry depicts hundreds of characters, animals, buildings and ships, illustrating the end of the Viking and Anglo-Saxon era and the beginning of the age of chivalry. The tapestry still holds many mysteries. Who commissioned it? Who created it? Where was it made and for what purpose? Archaeologists, historians, biologists, anthropologists, and even astrophysicists are joining forces to unravel its mysteries, analyzing every detail to shed light on this pivotal moment that shaped history on both sides of the channel. For centuries, the tapestry was safely kept at Notre Dame de Bayeux Cathedral in Normandy. No other textile work of this stature has survived through the centuries. If you look closely, the characters, animals, and objects are actually embroidered onto the linen canvas. Strictly speaking, it is not a tapestry, but an embroidery made-up of nine layers of linen sewn together. This confusion dates from its rediscovery in the 18th century, when it was mistakenly called the tapestry. The tapestry is now housed in its own museum, which is responsible for its conservation.

I should be probably more pleasure comparing the restoration. The restoration. For example, with a very important to all the land, he had to report the show over the love. I think in partly the motive community, broader the motive community, retribute in only personal, perfect man, perfect difference, the tonality. I think the land, the color synthetic composition, different original. To.

Protect the fragile textiles, the tapestry is kept in a controlled environment where humidity, temperature and light are carefully regulated. To unlock the mysteries of the tapestry, it is important to understand the story it tells about the battle to control England in the 11th century. This man with a beard is Edward the Confessor, King of England. He is pointing to Harold Godwinson, a powerful Anglo-Saxon earl. Edward sends Harold to Normandy. Edward has no children and appears to designate William, Duke of Normandy, as his heir. In France, Harold helps William fight his enemy, the Duke of Brittany. It is a victorious expedition, and the two brothers in arms return triumphant. A little further on, the tapestry depicts Harold swearing loyalty to William on some holy relics, appearing to confirm that William will inherit the English throne.

But everything is about to change. Harold returns to England, where the ailing King Edward dies. The English nobles select Harold to succeed Edward to the throne. Learning that Harold has betrayed his oath, William assembles a powerful fleet and crosses the channel. He and his men set up camp near Hastings. The 2 armies meet. The battle is bloody and merciless. A third of the tapestry is dedicated to depicting this ruthless bloodbath. Then A Latin inscription reads, Here King Harold is killed and the English army flee.

The Bayer Tapestry ends suddenly with the Battle of Hastings, and you see these people kind of running away from the battle at the latter stages. So we'd like to think that something else came after that, and perhaps the Bayer Tapestry showed that. Maybe it was the submission of the English in Burke Hampstead to William, or even it could have ended with William being crowned, perhaps in Westminster Abbey.

The mystery of how the tapestry ends is the first of many. But innovative research techniques are starting to provide some answers. At the Bayer Tapestry Museum, scientists have found a way to study the embroidery without disturbing it, and above all, without taking samples. This hyperspectral camera is capable of detecting the exact colors used in the embroidery. The collected data will then be able to map the different dyes. The scientists spent two weeks scanning the entire tapestry. .

I've seen the name, the capture, this was on the meter. When you permit, it's possible to connect the nature, the colorance, or shack, feel the land, presence, laboratory, and. We don't want to be scientific, but we have different analytics in the present, so the zones, the comparisons of the tapestry.

Identifying and recovering the original colours is one of the research projects into the Bayer tapestry. Scientists are also looking for answers to other questions. The first of these is the tapestry's origin. Where does it come from? There are no references to it in contemporary texts.

At the moment I'm stitching an outline stitch, it's called stem stitch, just around the hair of one of the attendants to the dead king, Edward the Confessor. This is two scenes, which we can see here. The front is really important for telling the story, but for me, I find the back really interesting. It tells us how the embroidery stitched each of the individual areas within the motif. So we're looking at the king who's died here, and we can see that the outline stitches were worked first, and then the filling, the bayer stitch, was worked over the top. which is what you can see happening here. By looking at the back of the embroidery, we can also tell the order in which it was worked. There's a seam running through, which you can see here. So we think that the towers were worked first, then the process stopped. The seam was joined, and then the embroiderers worked the inner bits with the floor ceiling crossing over it here, the letters, the figures and the tongue of the gargle just touching the edge of the seam here.

Although I say I find the back really interesting, you can actually tell things from the front of the tapestry as well. You can see in the top that the stitching is very regular and the placement of the lines are quite equal. Whereas on the bottom you can see that the lines are not as regularly placed, the stitching isn't as regular. So that indicates that somebody was working the top half of this seat and then somebody was working the bottom half, suggesting therefore that there was a team of people working this motif.

In the 11th century, when the Bay of Tapestry was probably made, it's fairly likely that the people who made it would have been women embroiderers. It's almost certainly that that's the case. Most of the sources, particularly in Anglo-Saxon England, talk about women making embroidery work. And indeed, the English were very famous for making embroidery work in the 11th century.

.

Clues found in the embroidery help support this theory.

In particular, Old English, it's a talk.

So, there's a lot of similarities in other manuscripts, but probably one of the most famous ones, or most exciting ones, is the Saint Augustine's Gospels. Where you have this scene in the Bayeux Tapestry of Odo at the head of a feast, a Norman feast scene, and that seems to be borrowed from the Last Supper scene in this manuscript, which is Italian, but came over with St Augustine to Canterbury, to England, at the conversion of the Anglo-Saxons, so way back in 597.

So the Bayeux Tapestry may have been embroidered in Canterbury. But who commissioned it? The answer may be found in the embroidery itself, where one character appears regularly, and is always shown in a good light. Odo, Bishop of Bayeux, Earl of Kent, and William the Conqueror's half-brother.

Odo, a supposed hat, a commendator, and he's confirmed. He could have thought a lot of himself, so some people.

Sort of see him as a bit arrogant and flamboyant. Now, I suppose the kind of question is, was he kind of looking at every detail and saying, right, that has to be like this and that has to be like that, or was he kind of a bit more standing back and saying, right, okay, I just want a tapestry that celebrates me in the Norman Conquest, as it were? So to some extent, the Bayeux Tapestry is, of course, a product of those that won the Battle of Hastings and to present themselves in the most favorable light. And also, it's obviously produced by the defeated, the Anglo-Saxons. But in my view, it's more of a combined sort of project.

Let's say, *De trace, de l'or travite comin.*

In Latin, the usual word for horse is equus. Only the French would use the word Kabali. Parabolon is from the French to talk, instead of the Latin loco. This cross-shaped sign means and to the Anglo-Saxons. Finally, Harold's brother's name is Gerth. Writing it with a cross D is typically Anglo-Saxon. But why was it made? Is the tapestry being used to legitimize William the Conqueror's claim to the English throne? One detail that suggests this theory is the depiction of a mysterious comet.

Thank you. I recommend this on the putty core, the putty planet, the system solar, the diameter, the glass, the organic mineral. In Munalie, that's calculated a trajectory in the comet. In particular, the comet. (()).

The comet in the tapestry is Halley's Comet.

The observation disaster, the... The Comet, the Comet, the Comet. .

And in the end, we are in a float of a calculation.

Halley's comet is shown as a divine sign, condemning Harold for betraying his oath to William and taking the throne of England. However, in the first part of the tapestry, Harold is far from being shown negatively.

He is often portrayed in ways that enhance his status.

The question is why in the Bay of Tapestry is Harold sort of celebrated in this sort of way? And my view is that I think it's quite important that he stands up to William. He needs to be a suitable adversary. William, within the Bay of Tapestry, can't be fighting someone who's not very good at warfare, who's not very well respected. It gives William a lot more credence in many ways to defeat such a respected military leader, and also someone who seems quite important within Anglo-Saxon society.

Ultimately, the purpose of this artwork is to justify the invasion, while attempting to reconcile the victors and the vanquished. But reconciliation failed. The English began to revolt, first in Dover, Hereford, and then Exeter. Soon, the Midlands and the whole of the North were ablaze. William the Conqueror ruthlessly put down these revolts, giving rise to his bloodthirsty reputation.

The Bayer tapestry could have been made initially with the idea that this was going to tour in various parts of Kent, so Odo could show that his role in the Norman Conquest of England. And that idea was sort of put on hold or shelved when it realised that wasn't really going to suit this new narrative of the Norman Conquest. And then it was taken to Bayer and probably just made as a gift to the cathedral.

This may be why the tapestry ended up in Bayeux. In England, its story was redundant. But the tapestry is hugely important and contains many precious details that describe this period. 623 figures, 994 animals, 438 plants, including 49 trees, 37 buildings, 32 boats, Tools, weapons, clothes--it offers an abundance of historical information.

I'm going to observe the tapestry by you, and we can regard the archaeologist, one of the weapons and documentary of the M.C.K., and they love the followers of the decorate the reality, the representation. . Citizen represents construction. So, tip the object particularly, I'm looking at part of Dotro's image, I'm looking to see part of the deconvoluted archaeologic.

One of the most significant 11th century objects represented in the tapestry are the boats. In the 1960s, Danish scientists discovered 5 Viking shipwrecks known as the Skudalek from the same period as the tapestry. These longships were built in different parts of Europe, but were found together 1000 years later in Denmark. The wrecks provided archaeologists with a template to reconstruct these boats. But to understand the manufacturing techniques, the tools, colours, sails and rigging, they have relied on another source, the Bayeux tapestry.

This is school del number 3, the one we're standing with here. And the decision of actually rebuild it or reconstruct it makes 1,000 questions come along. And then you have to find out what kind of tree you are going to pick up in the forest. And you have to find out what kind of tools you have to use and how to make the planks and so on. That's what we call experimental archaeology. If you are a boat builder, you start to look after tool marks, because the tool marks give you a hint of what kind of tools they used. A saw, for example, makes certain tool marks, and there is no saw marks on any of the boats from the Viking Age. So we can't use the saw. So how do we build the ship without using a saw? That's the next question. And so we look at different sources to find tools which match the tool marks we can see on the original boat. And the Bayeux tapestry gives us a lot of these tools that they use in the scene of boat building. It's one of the very few iconographic sources that we have from the Viking Age. Here you have got everything. You've got the boat building. the work in the forest, the dressing up the planks. We can see that this guy with the axe is actually having this, almost this kind of axe in his hand. It's not for chopping heads, it's more for chopping in wood. You can see the similarity of these two axes here. There is another guy with this kind of an axe who is working on dressing the planks. So after they have went into the forest, they bring down the trees and cleave out these planks because they didn't have the saw. And here you can see that a guy standing with the plank between his leg, chopping like this. And that's exactly how we use it as well.

It's a light axe. It's really thin, but it has a long blade. And you can see that it's just a little bit curved this way. which means that it chops the material really nicely.

Here you have a scene where they are actually building a boat. And inside the boat there is a guy standing with a drill. It's A replica of an archaeological find, but the handle is inspired by this guy, by this handle of the drill.

Thanks to the tapestry, we know that the Normans inherited longships from the Vikings. And William the Conqueror's longship armada made an ambitious invasion of England possible. At the end of the summer of 1066, William gathered his ships. The success of the invasion depended on his army being able to cross the Channel in one go. At daybreak on the 28th of September, William the Conqueror's ships, men, horses, weapons and supplies landed on the English coast. Three days earlier, Harold's army had defeated Harold Godwinson's invading Norwegian force at Stamford Bridge in Yorkshire. Immediately marching nearly 300 miles south, the Anglo-Saxon army met the Norman invaders 7 miles outside Hastings.

This is the place where the Battle of Hastings was fought on the 14th of October, 1066. One thing we do know is that shortly after the battle, this was regarded as being the spot where King Harold's body was found on that fateful day.

The Bayeux Tapestry includes valuable details about the soldiers, their armour and the weapons they used.

For anybody who's studied the Bayeux Tapestry, they will recognise immediately the figures who are standing around me. They are obviously 4. Armoured men of the 11th century. These people are dressed in exactly the manner they see the soldiers of the Bayeux Tapestry being dressed. If you have a closer look, for example, you can see this chap is carrying a very characteristic kite-shaped shield, a shield which became popular in the 11th century. This person over here, on the other hand, is carrying two things which distinguish him as being a member of the Anglo-Saxon army. He's got an Anglo-Scandinavian battle axe, a really formidable weapon. And to defend him, on his back you can see he has a rounded shield. Interestingly, some of the Anglo-Saxon soldiers in the Bayeux Tapestry are carrying rounded shields. There's another clue that they're English, by the way. They're wearing beards, these two. We know from the historical sources, it's the Saxons who sported moustaches and beards, unlike the Normans on the other side, who tended to be clean-shaven. But what you will notice is that generally speaking, the Normans look very much like the Anglo-Saxons. For example, the sword being carried here by this chap is sort of the sort of swords which have been carried by people on both sides of the Battle of Hastings. And again, a weapon designed to cause extreme trauma. And you can see why it was necessary for the soldiers on both sides to wear mail tunics in an attempt to defend themselves. And if you look at this Norman, he's carrying a long spear, a really versatile weapon which allows him to keep his enemy at a distance while still being able to cause harm to him. And it's exactly this sort of long weapon you'd expect to see William the Conqueror's cavalry carrying as they charge up this hill, trying to break the Anglo-Saxon line, get beyond them, and kill King Harold.

The difference here, the combatant English, the combatant Norman, the available solution, representing the Norman, English, and Fantasy.

The Norman archers are just shown in the lower border, but it's probably fair to say that in the actual battle, those Norman archers were probably really useful. They were obviously firing arrows into the shield wall in the hope of breaking up those troops. So in reality, William had to use both the archers and his Normans on horseback to break up the Anglo-Saxon shield wall, even if the Bay of Tapestry is concentrating on just the cavalry. As the battle gets on, it gets more confused and more complicated, and you get Normans and the Anglo-Saxons fighting, horses flying through the air, people dying in the borders. So it becomes a very complicated picture. It shows how violent the battle was in 1066.

Guillaume appears in person. He'll have you to watch about today. So we can increase the risk important. Dollar partnership together. Dire. In a few dollars.

Horses are represented throughout the tapestry. There are 182 in a range of stylized colors. Data collected by the hyperspectral camera is beginning to reveal the characteristics of the dyes used to create these designs. The yellows are extracted from weld. The blues from Indigo and the Reds from Madder.

Observe. Perfect.

When the dyes coloring each strand of wool have been identified by the hyperspectral camera, Clarice Chavan attempts to recreate them. The madder is immersed in water for two hours at 90 degrees. An aluminium-based solution is heated for two hours to fix the dyes to the wool.

The wool is then immersed in a dye bath and heated for one hour. It's important.

This process helps age the dyes.

The respect for the reflectance of the community.

Clarice Chavan repeats this operation for each of the 10 colors found in the embroidery. It's a huge undertaking. But if successful, it will reveal what these horses originally looked like 1000 years ago. And this feast. The food in the Bayeux Tapestry represents the culinary traditions that the Norman elite brought to England.

Archaeological excavations from Oxford Castle provide evidence of this change. The castle was used by the Anglo-Saxons before the conquest. then by the Normans from 1067. By studying the waste from both periods, scientists can compare their eating habits.

Hi, Becky.

Hi, What have you got there?

Oh, these are the fish bones.

Oh, excellent.

You've got some well-preserved material.

Yeah, it's really nice, actually. And Ben's stuff is good as well.

Yeah, you've got some great watering tea.

In these taxa, so we've got a lot more pigs being represented in the Norman period. I think we can be confident in saying that pork is a signature of the Norman diet. In fact, the word pork comes from that Anglo-Norman French, so we can see linguistic changes that are happening in the diet as well. Another thing that really changes is we can see a lot more birds, chickens in particular, being represented. So here's a We see a lot more of these being represented in the Norman period. And we even see that on the Bay of Tapestry. So if we have a look here, you can see that there's this scene and they're cooking some little chickens. Have you guys seen this?

Chicken on a skewer.

Chicken on a skewer. Chicken kebabs. So we've got the evidence and we've got the artistic data there as well.

And also, once we get beyond 1000 AD and into the era of the Norman conquest, we have bones of large marine fish, large sea fish. The eating of sea fish becomes much more common after the Norman conquest. So it's a real shift. What we see is what's called the fish event, and fish eating becomes more common for a number of reasons. So if we look at the Bayeux tapestry, we can see the dining scene here, and two of the Normans They're eating fish. I wouldn't like to tell you what sort of fish. They're fairly undiagnostic, complete fish. It does show that fish had become an important part of the elite diet.

I think it's really interesting, actually, because this scene from the Bay Tapestry is copied from another manuscript. And on that manuscript, it doesn't have the fish represented. So these have deliberately been placed in the Bay of Tapestry, and I think, the whole scene is like a Last Supper. To me, this is suggesting that the Normans are pious. The reason that they've been, or will be, successful in the battle is because they have God on their side, and that's demonstrated by the way that they're eating as well.

So what this archaeological evidence is really telling us about is what people were eating, and also about the supply of food to these communities. But the tapestry also tells us something really interesting about the culture of eating that goes around that as well, doesn't it?

Yeah, I think absolutely. If we take a look at the Bay of Tapestry, we can see that there are real differences in the way that food is being presented. So here, this is Harold, he's just got off his ship and he's feasting at Bosom. And you can see that there's not really much food on the table. There's lots of alcohol. And that's in the historical evidence as

well. People are talking about how the English just love drinking beer, not wine, lots of beer. But if we compare this scene to the back to the Norman scene, We've already seen that there's lots of different kinds of food being prepared in fancy ways on skewers and in pots. And the way that it's being eaten is a lot more sophisticated. We can see that there are... knives, cutlery laid at the table, which is not something that you see in the Anglo-Saxon feasting scene. It's almost as though we're seeing cuisine as opposed to food, you know? And I think that that's what we're seeing around the table and is reflected in all of this archaeological material.

In addition to their cuisine, the Normans also introduce a new kind of feudal society that starts to change the landscape. Mott castles, wooden fortifications built on top of earth mounds, spring up at strategic locations across the country. These rapidly constructed military outposts evolve into imposing stone fortresses, like the castle at Okehampton in Devon.

Okehampton Castle is a very early Norman castle, and it's built by someone called Baldwin de Brion. Baldwin was a major Norman magnate, a big landholder. We know that he was present at the Battle of Hastings. He was a trusted military commander, and he established this castle in a strategic position in the very centre of the county of Devon. On the top of the motte, we can see a keep or donjon. It's a rectangular tower. Now, in its early phase, that's a Norman feature, but it was later heightened and raised and modified in the 14th century. The archaeology of the site really exemplify the development of a Norman fortress, a motte and bailey castle, into a much more fully developed domestic site. In the ranges of buildings below us, we can see a great hall, a kitchen, chapel, some very splendidly appointed domestic lodgings with large windows and fireplaces. So very much in its later phases, a country house as much as a castle. So in the Norman period, Okehampton Castle was part of a wider explosion of castle building across the English landscape. Castles were built in large numbers, many hundreds of them, to hold down centres of population, to siege strategic resources, and also to stamp the mark of Norman authority on the English landscape.

But William the Conqueror would transform more than the English landscape.

Eventually, it was the case that William started to change things quite radically. He, in the end, he absolutely almost removed all of the English aristocracy from power, and much of the clergy as well.

I'm a grand proprietor, Terrien. I'm a mile, so I'm sank. I'm a mile. On very tablet, prepossession the latter on glass. Let's appreciate by you. You have the propagande destiny. Ah, they could survey the miraculous end of the new point. You're doing singularity exceptional and particularly the transformation of the Society... ...and we have anchored this element... ...and the operation of the Society Nouvel...

In Bayeux, the team from the Sorbonne have successfully reconstructed the tapestry's original colours. The effect is remarkable.

It's .

The Bayeux Tapestry tells an epic story. And invaluable research provides us with a wealth of new knowledge about the 11th century world that created this remarkable work of art. Knowledge that can be passed on to future generations. The Bayeux Tapestry also reminds us of our shared history and how English, French, and wider European destinies are linked.

Learn from the past to understand the present with an award-winning podcast. The rest is history.

Listen on BBC Sounds.