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1015

The Year in Review

An 8th-century 'magical scroll'

4

The Decline and Fall of the Mongol Empire

10

I Robot, Saint

25

10 Natural Disasters from the Middle Ages

The Medieval Magazine December 28, 2015

The Decline and Fall of the Mongol Empire

A historian on the internal factors that led to the decline of the Mongol Empire.

The Year in Review

Most magazines are looking back at 2015. We take a look at 1015.

The Peaceful Part of the Norman Conquest of England

What happened between the Battle of Hastings and William's coronation on Christmas Day, 1066?

10 Natural Disasters that Struck the Medieval World

Here are ten of the most important natural disasters that took place in the Middle Ages.

Table of Contents

4 Medieval 'magical scroll' unfurled digitally

6 Early Medieval Norwegians like their bling

10 The Decline and Fall of the Mongol Empire

12 Isidore of Seville on... Years

13 1015: The Year in Review

17 The Peaceful Part of the Norman Conquest of England

20 10 Natural Disasters that Struck the Medieval World

25 I, Robot Saint

27 Book Review: Hidden Britain by Alvin Nicholas

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Cover Photo: St. Olav alter frontal, c. 1300, probably made in Trondheim, Archbiship's Pallace Museum, Trondheim

Medieval News

Medieval 'magical scroll' unfurled digitally

A mid-8th century scrolll discovered in Jordan. Photo: Rubina Raja

Danish and German researchers have been able to use CT scans to digitally unfurl a silver scroll from the 8th century. It has revealed an 17 lines of text in an unknown language thought to have been made by a Jewish 'magician' living in Jordan.

In 2014 researchers from the Universities of Aarhus and Bochum were excavating a building in the Jordanian city of Jerash that had collapsed in an earthquake in the year 749 when they found a small metal case with a thin, complexly folded metal plate inside. The metal sheet turned out to be silver mixed with gold and had writing.

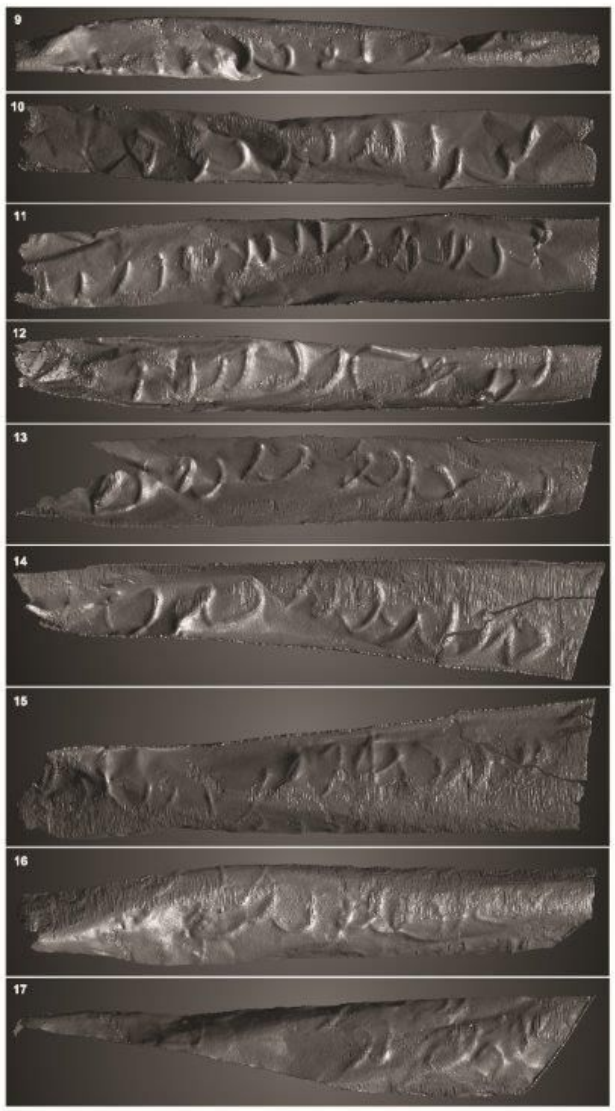
Such amulets were well-known in Antiquity and served as magical protection. This find, however, was impossible to unfold without destroying it. The danger was therefore that the sheet would never be read. Therefore, the scroll, after it had been removed from the metal case and conserved, was computer tomographed.

Thereafter it was through the training of a philologist possible to digitally unfold the silver sheet with a technique which until now only had been applied to uncomplex folded metal sheets or to papyri, where the technique differs greatly. The results are stunning. The small silver sheet (4 cm by 10 cm) turned out to carry 17 lines of pseudo-Arabic script.

Although the script cannot be read, it gives us a unique insight into the continuation of Semitic and Greco-Roman magic traditions well into the early Islamic period. The case of the non-destructive unfolding of the scroll shows in which ways the potential for understanding cultural phenomena through small contextualised objects can be unleashed when archaeological methods, philological expertise, natural science methods and digital imaging are combined.

"Digital imaging allows us to gain insight into the contemporary secrets of the magical texts which otherwise were not meant to be seen again after they had been folded and placed in a container. In this case, it turned out that the text was written in pseudo-Arabic, that is, it was written with Arabic letters shaped nicely as words which actually make no sense. This phenomenon is well known in antiquity – one could write incantations and spells in a secret or unintelligible language. Another explanation is that the "magician" who produced the scroll did not actually speak Arabic, but rather produced one for an Arabic-speaking person. This is a good example of the passing down and continuation of cultural traditions in the early Islamic period, which stemmed from a Greco-Roman and Semitic culture sphere" says professor Rubina Raja, center leader at UrbNet and main author of the article.

You can read the article "Revealing text in a complexly rolled silver scroll from Jerash with computed tomography and advanced imaging software", which was published in Scientific Reports, on **Nature.com**



The scroll digitally unfurled - photo by Rubina Raja

Early Medieval Norwegians liked their bling

By Nancy Bazilchuk

Seen from the air, the peninsula that is home to the mid-Norway town of Ørland and the nation's Main Air Station, looks like the head of a seahorse with its nose pointed south.

It didn't always look this way, though.

A couple of thousands of years ago, Ørland's peninsula looked more like the crook of a finger, with a bay sheltered on its southern side. At that time, Norway's land area was still recovering from the last Ice Age, and the weight of the ice was so great that it actually depressed the ground, creating a bay. The land has since risen up, or rebounded, to form the dry land we know today.

That 1500-year-old sheltered bay and the fertile fields surrounding it turned out to be the perfect home for a settlement of Iron Age Norwegians – Norwegians who actively traded and liked their bling, if archaeological finds from the recent dig are any indication.

"This was a very strategic place," says Ingrid Ystgaard, project manager at the Department of Archaeology and Cultural History at the Norwegian University of Science and Technology's (NTNU) University Museum. "It was a sheltered area along the Norwegian coastal route from southern Norway to the northern coasts. And it was at the mouth of Trondheim Fjord, which was a vital link to Sweden and the inner regions of mid-Norway."

New facilities and expanded runways

Ørland has long been known to archaeologists as a potential treasure trove of finds, because of its strategic location.

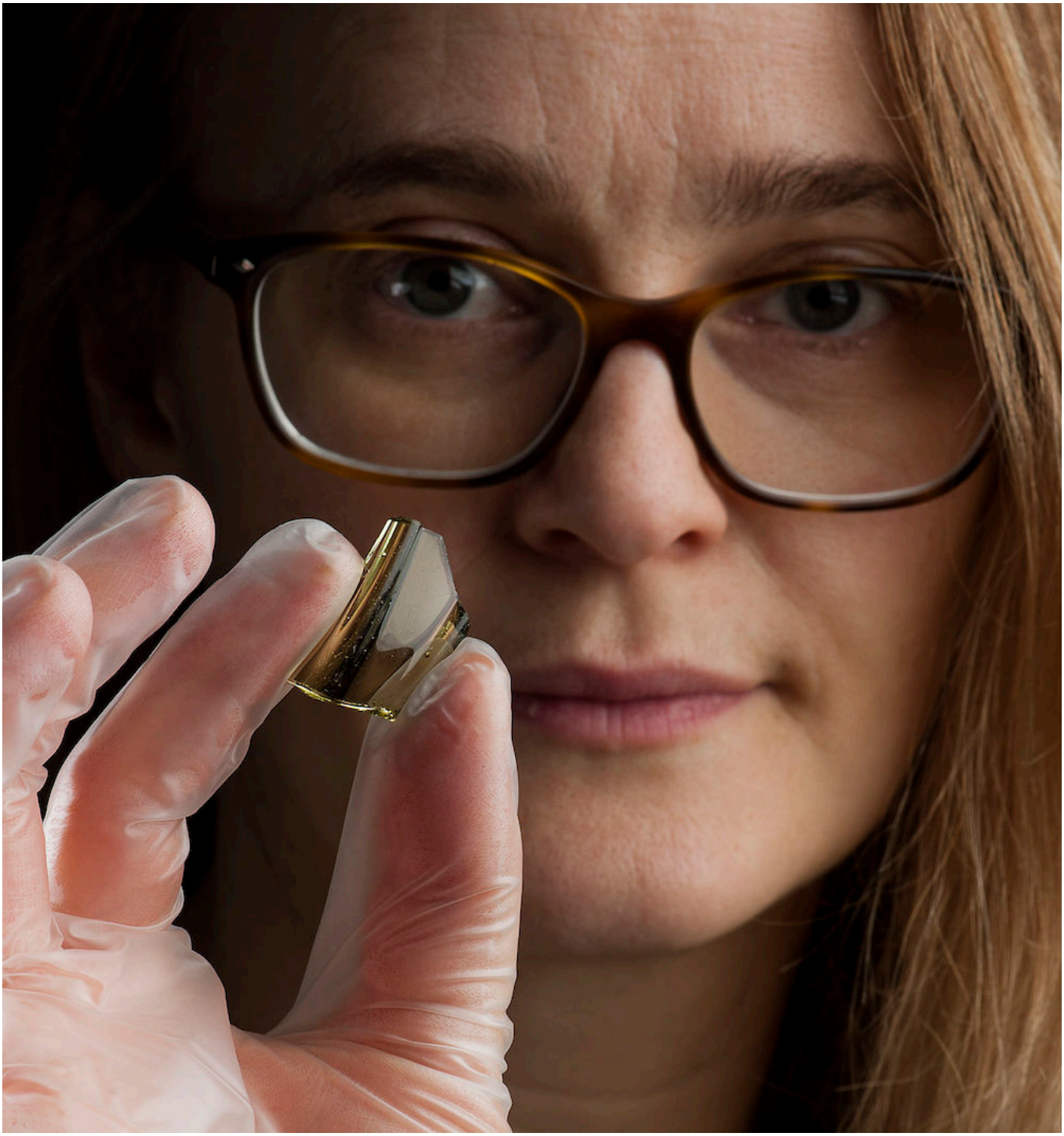
But because archaeologists can't just go around digging up areas where they think there might be interesting remains, they have to wait for the opportunity to arise – as when Norway made the decision to purchase 52 new F-35 fighter jets.

The jets will need new facilities at Ørland, and the Air Force will also expand existing runways to accommodate the jets. Norwegian law requires a preliminary archaeological study of any construction site, and additional follow-up if anything of significance is turned up.

Size of the site adds significance

The size of the expansion puts the total area that archaeologists first need to study at roughly 91,000 m2, or nearly three times the area of a good-sized shopping centre.

This, Ystgaard says, is a bonanza, because the size of the area allows archaeologists to see how different longhouses, garbage pits and other finds relate to each other.



Ingrid Ystgaard, an archaeologist at the NTNU University Museum and project manager for the archaeological survey at the Ørland Main Air Station, holds a shard of a glass beaker imported from the Rhine area in today's Germany. These glass beakers were of great value and show that the farm was relatively well off, with access to products from the continent. Photo: Åge Hojem, NTNU University Museum

"We're really able to put things in context because the area is so big," she said. The size of the dig also means there are lots of archaeologists at work, and for a long time.

More than 20 field staff will work a total of 40 weeks out on the site, until the end of the 2016 field season. The budget for the project is NOK 41 million, or about EUR 4.2 million, excluding the cost of the big excavating machines, and room and board for workers..

Bones and bling

It's probably safe to say that few things excite archaeologists more than garbage dumps – or middens, as they are called in the trade. Even today, our trash says a lot about how we live – what we eat, what we wear, what we do for fun or work.

But it takes some really tough trash to survive 1500 years. Mostly, what archaeologists find are beads, glass and metal objects and ceramics, if they are lucky.

"Most of the time we don't even find middens at all on sites that are older than the Mediaeval period," Ystgaard said.

In this case, however, the team has also found lots of old animal and fish bones – mainly because the soil in the area is made from ground-up seashells, which isn't very acidic. Normally, soil in Norway tends to be more acidic, and eats away at bones.

"Nothing like this has been examined anywhere in Norway before," Ystgaard said.

There are enough bones to figure out what kinds of animals they came from, and how the actual animal varieties relate to today's wild and domesticated animals, she said. The archaeologists have also found fish remains, from both salmon and cod, and the bones from seabirds, too.

The middens have also provided others surprises. One was a delicate blue glass bead and several amber beads, suggesting the former residents liked their bling. Another was the remains of a green drinking glass that was characteristic of imports from the Rhine Valley in Germany.

This last is also a testament to how well off the former residents of this area were, Ystgaard said. "It says something that people had enough wealth to trade for glass."

Holes in the ground tell a story

To the average person, the discoloured soil in a distinct polka-dot pattern that makes up most of what the archaeologists have found looks like – well, dirty dirt.

But for an archaeologist, the patterns and their context help tell a story and give significance to any items that they find.

The whole process of digging up a huge field is an impressive juxtaposition of big excavators, brought in to carefully peel off the top layers of soil, and archaeologists working with hoes, trowels, sieves and even paintbrushes and toothbrushes.

In the case of the Ørland site, the excavators are brought in to remove the layer of soil that has been recently farmed. Norwegians have farmed this land for a long time – in fact the name of the farm, Vik, the Norwegian word for bay, reflects its early origins as a farm on the bay that was here 1500 years ago. Now, the shoreline is 1.7 km away.

"The excavator operators are incredibly skilled," Ystgaard said. "You can ask them to remove 2 centimetres of soil and they can do it."

Farmstead in the shape of a U

As the excavators whittle away the soil, centimetre-by-centimetre, the archaeologists are on the lookout for the discoloured soil that means there was an accumulation of organic material.

In this case, the size and the type of discoloured soil may indicate a fire pit or a place where posts for longhouses were placed. Really big discoloured areas near the longhouses are generally middens.

So far, these marks in the soil show that there were at least three buildings arranged in the shape of a U. The two longhouses that were

parallel to each other measured 40 metres and 30 metres and were connected by a smaller building.

The 40-metre longhouse contained several fire pits, at least one of which was clearly used for cooking. Other fire pits may have provided light for handwork, or for keeping the longhouse warm.

Not far from here – but outside of the bounds of the site – Ystgaard expects there are graves, too, and a harbour with boat houses.

"There was a lot of activity here," Ystgaard said of the site. "Now our job is to find out what happened here, how people lived. We discover new things every day we are out in the field. It's amazing."

These marks in the soil are part of a larger find that show there were three buildings here arranged in the shape of a U. The size of the buildings and associated finds show that the owners of the farmstead were relatively wealthy. Photo: Åge Hojem, NTNU

The Decline and Fall of the Mongol Empire

In the thirteenth-century Genghis Khan would begin to forge one of the largest empires in world history. The Mongols would rule a vast swath of territory ranging from Hungary and Syria to Pacific Ocean. But why did their rule not endure?

David Morgan, a leading scholar on the Mongols, tackled the question in his article "The Decline and Fall of the Mongol Empire," which was published in the *Journal of the Royal Asiatic Society*. He concludes "that in all cases, 'fall' was the result of internal factors, about which there was nothing that was inevitable, and that there is little evidence of a long 'decline'."

Morgan, who is a Professor of History at the University of Wisconsin-Madison, finds that many historians still take it as granted the idea first promulgated by Edward Gibbon from his book the Decline and Fall of the Roman Empire: "Empires may not fall until they have previously undergone a process of decline." He asks if this was true for the Mongols.

In 1260 the Mongol Empire founded by Genghis Khan broke up into four smaller empires - the Yuan Dynasty in China, the Golden Horde in Russia and the Pontic Steppes, the Ilkhanate in Persia and the Middle East, and the Chaghatai in Central Asia. These four Mongol states each continued on and even expanded, at least until the 14th century. The Chaghatai Dynasty lasted until 1658.

Morgan analyzes each of these states and looks at the reasons behind for their collapse. He finds that in each case, they faced little outside threat, and fell because of internal factors.

The Yuan Dynasty, which was started by Qubilai Khan, ended in 1368, when the last Yuan (Mongol) emperor, Toghon Temur, was driven out of China and back to Mongolia. Morgan writes, "The predominant feature of the final years of Yuan rule, however – if one is looking for evidence of 'decline' – is the increasing frequency and seriousness of native Chinese revolts, especially in south China, and a loss of grip on the part of the central government. The Mongol armies were no longer of a quality to be able to deal effectively with these problems. More important, there were not enough of them; and the fourteenth-century neglect and impoverishment of Mongolia itself had meant that few new recruits could be hoped for from the homeland."

Despite this, Morgan believes the Yuan Dynasty could have fended off the Chinese rebellions and maintained their empire for years to come if had not been for some poor military decisions.

The article also deals with the Mongol empire in the Middle East, known as the Ilkhanate.

Mounted warriors pursue enemies. Illustration of Rashid-ad-Din's Jami al-tawarikh, early 14th century.

Morgan rejects notions that there was a decline during the reign of the last Ilkhan Abu Sa'id (1316–35), citing some evidence that economically the Ilkhanate was more prosperous than ever. Instead, Morgan writes that "Abu Sa'id's problem was much the same as Henry VIII of England's: his difficulty in providing a male heir. Henry managed it in the end, after a fashion. Abu Sa'id did not, and there was therefore no unchallengeable member of the line of Hulegu available to succeed him when he died in 1335. Various expedients were tried by several factions. But essentially the throne was up for grabs, and the central government disintegrated as a result. Parts of the khanate fell under the control of what would now probably be called warlords – some Mongol, some not."

He also notes that two more nomadic empires - the Golden Horde and the Chaghatai Khanate - lasted much longer, and their collapses were due more to internal factors rather than any outside threat.

Morgan concludes, "Parts of the Mongol Empire continued for a very long time; and as it happens those were the parts which retained more of the traditional steppe lifestyle. Other parts collapsed much earlier, and those were the more sedentary areas, where more accommodation to local mores had been necessary, and where less of the nomadic lifestyle had survived. But even in those cases, an examination of the actual events suggests that the Mongol regimes could perfectly well have continued, had different decisions been taken at various points or had different circumstances prevailed."

The article, "The Decline and Fall of the Mongol Empire" appears in Volume 19, Number 4 of the *Journal of the Royal Asiatic Society* (2009).

Isidore of Seville on...

Years

Isidore of Seville's, 7th-century work ***Etymologiae***, includes sections talking about what days, months and years. Here is how he described the latter:

The year is the orbit of the sun, when it returns to the same place in the heavens after the passage of 365 days. It is called a year (*annus*, cf. anus, "ring") because it wheels back upon itself with the recurring months – hence also a ring (*anulus*) is so called, as if it were annuus, that is, a circle, because it returns upon itself. So Vergil (Geo. 2.402):

And the year (annus) wheels back upon itself along its own tracks.

Thus, among the Egyptians before the invention of letters, it was indicated by a dragon depicted as biting its own tail, because it turns back upon itself. Others call it annus from the term N (i.e. "renew"), that is, from its renewal, for it is always renewed.

There are three kinds of years. The lunar year is of thirty days; the solstitial year, which contains twelve months; or the great year, when all the heavenly bodies have returned to their original places, which happens after very many solstitial years. The era (*aera*) of particular years was established by Caesar Augustus, when he first described the Roman world by conducting a census. It was called an era because everyone in the world promised to render a coin (*aes*, gen. *aeris*) to the state.

The Etymologies of Isidore of Seville has been edited and translated by Stephen A. Barney, W. J. Lewis, J. A. Beach and Oliver Berghof, and was published by Cambridge University Press in 2006

Click here to visit the Publisher's website for more details

1015: The Year in Review

While most magazines look back at the year 2015, we decided to go back a thousand years earlier to see what were some of the major events of 1015.

Byzantines, Bulgarians and the Battle of Bitola

Events in southeastern Europe mostly focused on the continuing warfare between the Byzantine Empire and Bulgarian Empire. In the previous year Emperor Basil II had led the Byzantines in a significant victory over the Bulgarians at the Battle of Kleidion. Now, the Byzantines were campaigning into the heart of Bulgaria and the new Bulgarian leader Gavril Radomir was murdered by his cousin Ivan Vladislav in August of 1015 while they were hunting - perhaps with the support of Basil. Ivan initially wrote to Basil promising to subject himself to the Byzantines, but in fact was promising his own supporters to continue the war.

After a failed attempt to assassinate Ivan, Basil II resumed his military campaign into Bulgaria. According to the chronicler John Scylitzes "he blinded all the Bulgarians taken prisoner. He advanced as far as the city of Achrida (the Bulgarian capital) where stood the palace of the kings of Bulgaria. He took the city, rendered the situation secure and wa about to advance further" when he heard that two of his military commanders and their troops "were taken in an ambush by the Bulgars under the illustrious and experienced command of Ibatzes and all killed. Broken with grief at their loss, the Emperor returned to Pelagonnia and came to Thessalonica in hot pursuit of Ibatzes."

The year ended with the Bulgarians taking back their capital and Byzantine hopes for a conquest of the region dashed.

On the left an image of Byzantine Emperor Basil II from the Madrid Skylitzes; on the right an image of Holy Roman Emperor Henry II from an 11th century manuscript.

Events in Germany and Poland

Bishop Thietmar of Merseburg, an important official in the regime of Emperor Henry II (1014-1024) recorded in his chronicle some of the events of 1015, including continuous warfare between Henry's forces and that of Duke Bolesław I of Poland - this caused by the latter's failure to send troops in support of Henry's campaign in Italy. Thietmar noted victories on both sides. He also mentioned an interesting incident that happened while Henry was staying at Imbshausen:

a certain peasant arrived from the West, bringing a new mandate for the emperor which he would reveal only to him. He still carried the goad that he was using to drive the oxen before his plough when a dove from heaven ordered him to undertake the legation. He was so tall that all who saw him were astonished.

The Battle for Sardinia begins

In 1015 the island of Sardinia was largely self-governing but under threat from other states and pirates based in the Western Mediterranean. In that year the ruler of Denia and the Balearic Islands, one of the many Islamic taifa states of Iberia, launched an invasion of Sardinia, but was repulsed by a joint expedition from Pisa and Genoa. The Pisans and Genoese received support from the Papacy to remove Muslim influence from the island, which some historians believe to be a kind of proto-Crusade. The battle for the island would continue in 1016.

Anglo-Saxon England - a year of maneuverings

The previous year had seen the death of Swein Forkbeard and the return to power of Æthelred the Unready. In 1015, we would see various schemes taking place, starting off with Eadric Streona, the Ealdorman of Mercia, organizing the murder of Siferth and Morcar, two of the leading nobles of the kingdom. According to William of Malmesbury, Eadric "had lured them, by his soothing expressions, into a chamber, and deprived them, when drunk to excess, of their lives, by his attendants who had been prepared for that purpose."

It was another episode in Eadric's life that would make him - in historian's eyes - one of the great villains of Anglo-Saxon England. It appears though that he was acting under the orders of Æthelred, who followed up by imprisoning Siferth's widow, Aldgyth. Whatever plans the king had were undone by his son Edmund, who freed Aldgyth and married her, then proceeding to take control of Siferth's and Morcar's lands.

The *Anglo-Saxon Chronicle* reports that Eadric raised an army and wanted to betray Edmund, but in the end never attacked him. Instead, he took 40 ships from King Æthelred and joined the forces of Swein Forkbeard's son Cnut, who had just returned to England from Denmark. Cnut had landed at Sandwich, and had started raiding into England, intent on gaining the English crown. The Encomium Emmae Reginae describes the scene of Cnut's fleet of 200 ships:

For here was so great a quantity of arms, that one of those ships would have very abundantly supplied weapons, if they had been lacking to all the rest. Furthermore, there were there so many kinds of shields, that you would have believed that troops of all nations were present. So great, also, was the ornamentation of the ships, that the eyes of the beholders were dazzled, and to those looking from afar they seemed of flame rather than of wood. For if at any time the sun cast the splendour of its rays among them, the flashing of arms shone in one place, in another the flame of suspended shields. Gold shone on the prows, silver also flashed on the variously shaped ships. So great, in fact, was the magnificence of the fleet, that if its lord had desired to conquer any people, the ships alone would have terrified the enemy, before the warriors whom they carried joined battle at all. For who could look upon the lions of the foe, terrible with the brightness of gold, who upon the men of metal, menacing with golden face, who upon the dragons burning with pure gold, who upon the bulls on the ships threatening death, their horns shining with gold, without feeling any fear for the king of such a force?

The stage was now set for war to break out in 1016, pitting three contenders - King Æthelred against his son Edmund as well as the Danish youngster Cnut.

Death of Vladimir the Great

Vladimir Sviatoslavich had ruled Kievan Rus' for over 35 years when he died on July 11, 1015. He had an eventful reign, converting to Christianity in 988 (and bringing the rest of his kingdom into that religion as well) and coming to dominate a swath of territory from Ukraine to the Baltic Sea. Following his death, his sons would seek to replace him, with his eldest child Sviatopolk gaining the nickname 'the Accursed' for ordering the deaths of three of his brothers.

The Rise of Olaf II

The death of Swein Forkbeard had also left Norway without a king, and Ólafr Haraldsson was seeking to fill this void. He was only about 20 years at the time, but had already had an eventful career as a warrior, fighting from the Baltic nations to England. His claim to the throne was slight - he was a great-great-great-grandson of Harald Fairhair, the first king of Norway, but Ólafr had a religious mission to unite the country and bring it under Christendom.

According to The Ancient History of the Norwegian Kings, by Theodoricus Monachus, "it is said that while in England Ólafr visited a certain hermit, a man of great holiness, who foretold him many things - that the Lord would lavish on him the abundance of His grace, and also by what sort of death he would pass from the light of this world to Christ."

In 1015, Ólafr arrived in Norway with two ships carrying 120 men, to begin his reign as Olaf II.

Murder of Aquilinus of Milan

Buried in the Basilica of San Lorenzo of Milan is a man named Aquilinus. According to some sources he was a German priest who took on the life of a wandering preacher. He left Germany and went to Paris, where he miraculously cured the people of a cholera epidemic. He then came to Italy, where he spoke out against heretics such as the Cathars, Manichaeans, and Arians. In 1015 he was in Milan when one of these heretics attacked him, stabbing him in the throat. Afterwards his body was found and buried in the Basilica - he is now regarded by the Catholic Church as a saint and martyr. However, other sources state he lived and died in the seventh-century.

Michaelsberg Abbey is founded

In this year Bishop Eberhard of Bamberg decided to create his own Benedictine monastery, which was named after St. Michael. For the first hundred years the abbey was small, with sources suggesting that during that entire period only about 90 monks resided there. The monastery grew in the 12th century, amassing over 441 pieces of property during this time, and would continue on until the 19th century.

Michaelsberg Abbey depcited in the late 15th century

The Peaceful Part of the Norman Conquest of England

Panel from the Bayeux Tapestry - this one depicts Bishop Odo of Bayeux, Duke William, and Count Robert of Mortain

The *Anglo-Saxon Chronicle* reports that "on Christmas Day archbishop Ealdred consecrated him king in Westminster; and William gave a pledge on the Gospels, and swore an oath besides, before Ealdred would place on the crown on his head, that he would govern this nation according to the best practices of his predecessors if they would be loyal to him." The William the chronicle speaks of was the Duke of Normandy, who just ten weeks earlier had defeated and killed King Harold Godwinsson at the Battle of Hastings.

What took place between October 14th, 1066 and December 25th, the day William was officially crowned the new King of England? This topic has been explored in the recent article, "William the Peacemaker: the Submission of the English to the Duke of

Normandy, October 1066 – January 1067" by Paul Dalton. He found that in the weeks and months after the battle, the leader of the Normans effectively used diplomacy and negotiation to complete his conquest of the Anglo-Saxon kingdom.

In the aftermath of the Norman victory at Hastings, Duke William had hoped the remaining English leaders would surrender. Instead, they went to London and choose Edgar the Ætheling, grandson of Edmund Ironside, to be their new king. It seemed that another military engagement would be likely.

As this was happening, William and his forces marched through south-east England, where the Duke managed to gain the peaceful submission of a number of areas. Dalton writes:

It emerges first at Dover. Its citizens were prepared to surrender, but some of William's men burnt part of the town. William 'padi for the repair of the buildings and gave compensation for other losses.' But references to William expelling Englishmen from their homes to provide his soldiers with lodgings, strengthening Dover's fortifications and installing a garrison indicate that imposition of harsher terms of surrender. His actions were probably intended to intimidate other English strongholds into submission. 'Immediately terror spread out beyond the town to all neighbouring cities, boroughs and places.' Fearing complete destruction, Canterbury despatched messages to offer William tribute, fealty and hostages. 'Afterwards many more [settlements], holding firmly to their own rights ... made gifts to the king'. English settlements unprepared peacefully to submit and offer William loyalty, security and money faced the loss of rights or destruction. But William was also prepared to offer terms, including protection and the preservation of urban privileges to encourage such surrenders.

Evidence can also be found that William was prepared to make deals with the ruling elite of England, such as Queen Edith, the widow of Edward the Confessor, who was able to keep much of her land and wealth in return for her submission. So did Stigand, Archbishop of Canterbury, who came to William and renounced his support from Edgar the Ætheling – he would keep his ecclesiastical offices for another four years.

Datlon, who is a **Principal Lecturer at Canterbury Christ Church University** and has done extensive research on the political and ecclesiastical history of the Anglo-Norman world, finds that an important event was a meeting held at Berkhampsted, which lies just west of London. Here William met with many of the remaining leaders of the Anglo-Saxons, including Ealdred, archbishop of York, Edgar the Ætheling, Earls Edwin of Mercia and Morcar of Northumbria, the leading men of London, and Bishops Wulfstan of Worcester and Walter of Hereford. The D-version of the *Anglo-Saxon Chronicle* reports that they:

submitted out of necessity after most damage had been done...and it was great folly that they had not done it earlier, since God would not make things better, because of our sins. And they gave hostages and swore oaths to him, and he appointed them that he would be a gracious lord, and yet in the meantime they ravaged all that they overran.

Dalton notes that much was left unsaid about what deal was made at Berkhampsted, including what would be the fate of Edgar the Ætheling, but he believes there are signs that show "it was agreed that although Edgar's royal status would be modified (he was not to be king), it would also be respected. Edgar might have obtained from William a grant, or at least a promise, of lands – of a 'premium', in other words, to secure his support for the peace – and assurances regarding the respect to be shown to the royal status and dignity of his kinswomen."

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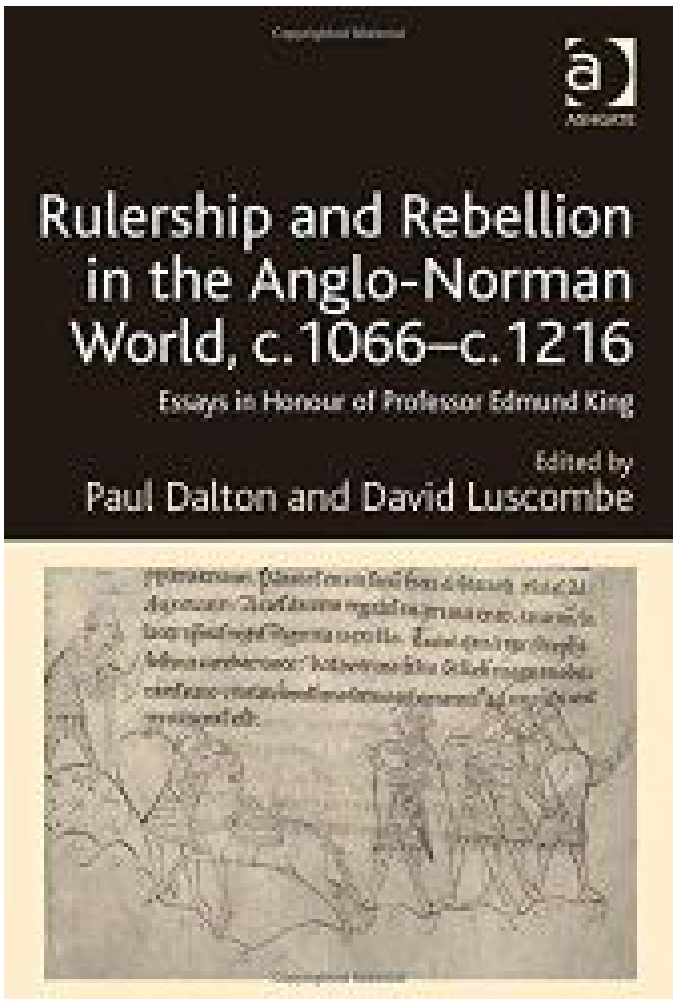
Soon after London also submitted to William after threats and offers were made, which paved the way for the Duke to get his coronation at Westminster Abbey. In the following weeks more deals and submissions were made, allowing the new king to solidify his hold on England.

Dalton writes:

There is no doubt, and the point should be emphasized, that the talks involved William threatening and terrorising the English into submission, and demanding (at sword point) homage oaths of loyalty, hostages, money, gifts and other acts of supplication: but the English surrenders were far from unconditional. The peaces they made with William were often contractual, involving obligations on both sides. Some of the English negotiators made demands to William before submitting, and William often confirmed (for a price, and in the short term at least) many English leaders in their dignities, lands, offices and rights, and made more general promises about ruling the English well; though his assurances were not to endure and might have not been entirely sincere.

He concludes that "Wiliam's success in England by January 1067 owed much not only to his military abilities but also to his negotiation skills. Unquestionably a conqueror, he was also an accomplished peacemaker, albeit a remarkably brutal, threatening and ruthless one."

The article, "William the Peacemaker: the Submission of the English to the Duke of Normandy, October 1066 – January 1067" appears in *Rulership and Rebellion in the Anglo-Norman World c.1066 – c.1216: Essays in Honour of Professor Edmund King*, which is edited by Dalton along with David Luscombe. Published in 2015 by **Ashgate**, it has over a dozen articles, including pieces by Judith A. Green, Katharine Keats-Rohan, Paul Latimer, David Crouch and Nicholas Vincent.



10 Natural Disasters that Struck the Medieval World

Natural disasters could have a huge impact on the medieval world – they could ruin cities or regions, and leave tens of thousand dead or homeless. These disasters – earthquakes, floods, volcanic eruptions – were written about by chroniclers of the time, who left vivid accounts of the destruction they caused. Here are ten of the most important natural disasters that took place in the Middle Ages.

1. Destruction of Antioch in 526

During the period of the Roman Empire, Antioch was one of the great cities of the Eastern Mediterranean – it has been estimated that it had a population of over a million people – and a leading centre for Christianity. However, it was already in decline in Late Antiquity, caused in part by earthquakes. The worst of these took place in late May 526. The chronicler Pseudo-Dionysius describes the scene:

It was a terrible and distressing collapse, impossible for anyone to recount. Such was the violent and harsh disaster, which was sent from heaven, that fire alight and consumed those who had escaped from the terrible vehemence of the cataclysm of the earthquake and the collapse: the sparks flew and set fire to everything on which they settled. The earth itself from below, from within the soil, surged, seethed and burned everything which was there. Thus the foundations as well, together with all the storeys above them, were lifted up, heaved up and down and burst apart, collapsed, fell and burned with fire... In the end no house or church or building of any kind remained, not even the garden fences, which had not been torn asunder or damaged, or had not disintegrated and fallen. The rest burned, crumbled away and became like an extended putrefaction.

Even the Patriarch of the city could not escape the destruction:

When the residence collapsed and fell, he happened to fall into the cauldron. The whole of his body sank down in it, and he was cooked in the pitch. His head was found

Medieval image of an earthquake, with ruins and fallen stars, and the dead in holes. British Library MS Royal 19 B XV f. 11v

of his body sank down in it, and he was cooked in the pitch. His head was found (hanging, as if he had) fainted, outside the rim of the cauldron. Thus he was recognized from his face, while his bones were found stripped of the flesh in the pitch…And fear and trembling seized all who saw it.

Between 250,000 and 300,000 people died in the earthquake. The Byzantine Emperor sent 500 pounds of gold so that the city could be rebuilt, but Antioch never recovered and throughout the Middle Ages it continued its decline until by the 15th century when it had only a few hundred people remaining.

2. The Year without Summer

In 2013 scientists announced that they had discovered that a volcano located on Lombok Island in Indonesia exploded sometime between May and October 1257, in it was the largest blast the Earth had seen in 7000 years.

The discovery has helped historians to understand the events of 1258, where cold temperatures ruined crops and brought famine to much of Europe. The English

temperatures ruined crops and brought famine to much of Europe. The English chronicler Matthew Paris wrote that during this year "the north wind blew without intermission, a continued frost prevailed, accompanied by snow and such unendurable cold, that it bound up the face of the earth, sorely afflicted the poor, suspended all cultivation, and killed the young of the cattle to such an extent that it seemed as if a general plague was raging amongst the sheep and lambs." It is believed that London saw as many as 15,000 deaths that year, and some scientists speculate the volcanic explosion was one of the factors in the Little Ice Age that affected global temperatures from the 14th to 19th centuries.

3. The Great Drowning of Men

The coastal areas around North Sea were prone to flooding in the Later Middle Ages – numerous chronicles report various floods between the 11th and 15th centuries. One of the worst was the Saint Marcellus' flood or Grote Mandrenke ('Great Drowning of Men') that took place on January 16, 1362. At least 25,000 people were killed when an Atlantic gale swept in northwestern Europe, affecting the British Isles to Denmark. To learn more see The Great Wind of 1362

4. The Kamikaze

The Mongols under Kublai Khan tried to invade Japan twice in the 13th century – the first time in 1274 and the second in 1281. On both occasions the fleets were destroyed by typhoons, which the Japanese believed was heavenly assistance. They called these storms Kamikaze, meaning 'divine wind'. The massive fleets under the Mongol command – the second was reportedly four thousand ships carrying 140,000 men – were destroyed by the typhoons, leaving the invaders either drowned or captured.

5. The Sicily Earthquake of 1169

On the morning of February 4, 1169, a powerful earthquake struck the eastern coast of Sicily, which levelled towns, produced a tsunami, and may have even cause Mount Etna to erupt. Sources place the death toll to be between 15,000 and 25,000. One chronicler, Hugo Falcandus, describes the scene:

a terrible earthquake shook Sicily with such force that it was een felt in Calabria, around Reggio and nearby cities. The extremely wealthy city of Catania suffered such destruction that not a single house survived within the city. About 15,000 men and women together with the bishop of that city and most of the minks were crushed under collapsing buildings. At Lentini a fine town belonging to the Syrcausans, the weight of collapsing buildings shaken by the same earthquake killed most of the townspeople. Many fortresses were also destroyed in the territory of the Catanians and Syracusans. In a number of places the earth gaped open and produced new watercourses while closing up some old ones, and that part of the summit of Etna which faces Taormina seemed to sink down a little. At Syracuse the very famous spring called Arethusa, which

seemed to sink down a little. At Syracuse the very famous spring called Arethusa, which according to legend brings water to Sicily by secret channels from the city of Elis in Greece, changed from a trickle to a great flow, and it water turned salty because of the amount of sea water mixed up in it.

6. The Tauredunum event

The Swiss city of Geneva was devastated in 563 when a landslide on one end of Lake Geneva caused a tsunami throughout the narrow. A couple of historical accounts explain what happened, including Gregory of Tours' History of the Franks:

A great prodigy appeared in Gaul at the fortress of Tauredunum, which was situated on high ground above the River Rhône. Here a curious bellowing sound was heard for more than sixty days: then the whole hillside was split open and separated from the mountain nearest to it, and it fell into the river, carrying with it men, churches, property and houses. The banks of the river were blocked and the water flowed backwards. This place was shut in by mountains on both sides, for the stream flows there through narrow defiles. The water then flooded the higher reaches and submerged and carried everything which was on its banks.

A second time the inhabitants were taken unawares, and as the accumulated water forced its way through again it drowned those who lived there, just as it had done higher up, destroying their houses, killing their cattle, and carrying away and overwhelming with its violent and unexpected inundation everything which stood on its banks as far as the city of Geneva. It is told by many that the mass of water was so great that it went over the walls into the city mentioned. And there is no doubt of this tale because as we have said the Rhone flows in that region between mountains that hem it in closely, and being so closely shut in, it has no place to turn aside. It carried away the fragments of the mountain that had fallen and thus caused it to disappear wholly.

In 2012 researchers at the University of Geneva examined what had happened in the Tauredunum event, and **concluded that a similar landslide could cause another tsunami on the lake**.

7. The Syrian Earthquake of 1202

On May 20, 1202 an earthquake struck southwest Syria. It is believed to have been about a magnitude of 7.6 on the Richter scale, and was felt as far away as Sicily. The earthquake caused extensive damage to both Crusader and Muslim communities throughout the Eastern Mediterranean, leveling cities and castles. While one contemporary source places the number of dead at 1.1 million, modern historians believe that the figure was more likely in the tens of thousands. The devastation was seen as an important factor in the extension of a truce between Crusaders and Muslim states.

8. St. Lucia's Flood

On December 14, 1287, a massive storm tide swept into the Netherlands and Northern Germany, breaking dikes and leaving between 50,000 to 80,000 people dead. It is considered the sixth worst flooding incident in recorded history, and left permanent changes to the landscape of the Netherlands – for example, the Zuiderzee was partially created by the storm, making it an inland sea. The same storm also killed hundreds of people in southern England.

9. The Sanriku Earthquake of 869

Japan lies along one of the most active fault lines in the world and is often struck by earthquakes. One of the earliest ever to be recorded took place off the northeast coast on July 9, 869. Scientists believe it was very similar in size and scale to the 2011 earthquake and tsunami that hit the same region. A contemporary source reveals the destruction it caused:

a large earthquake occurred in Mutsu province with some strange light in the sky. People shouted and cried, lay down and could not stand up. Some were killed by the collapsed houses, others by the landslides. Horses and cattle got surprised, madly rushed around and injured the others. Enormous buildings, warehouses, gates and walls were destroyed. Then the sea began roaring like a big thunderstorm. The sea surface suddenly rose up and the huge waves attacked the land. They raged like nightmares, and immediately reached the city center. The waves spread thousands of yards from the beach, and we could not see how large the devastated area was. The fields and roads completely sank into the sea. About one thousand people drowned in the waves, because they failed to escape either offshore or uphill from the waves. The properties and crop seedlings were almost completely washed away.

10. Tornado strikes London in 1091

The Chronicon ex Chronicis of John of Worcester relates that on October 16, 1091, "a violent whirlwind from the south-west shook and demolished more than six hundred houses and a great number of churches in London. Rushing through the church of St. Mary, called " le Bow," it killed two men, and tearing up the roof and timbers, and whirling them for a long time to and fro in the air, at last drove six of the rafters, in the same order in which they were before fixed in the roofs, so deep into the earth that only the seventh or eighth part of them was visible, although they were twenty-seven or twenty-eight feet long."

While rare, tornadoes have been recorded in many medieval sources. One scholar has found at least **21 instances where a tornado was seen** in Britain during the Middle Ages.

I Robot, Saint

By Danièle Cybulskie

Virgin de los Reyes – a medieval robot – photo by Ubayrbd / Wikipedia Commons

While it's easy to think of the Middle Ages as a backward time in which everyone struggled with the most basic things, medieval people were no strangers to some pretty cool technology, including robots. Instead of using automata (robots) to replace themselves at work, however, the people of the Middle Ages used them for something they found even more important: inspiring devotion.

There is evidence from as early as the thirteenth century of the construction of "robot saints" which could move independently and gesture using complex systems of cogs, hinges, and leather straps, powered by "steam, water, or the latent energy held in a winding mechanism like a clock" ("Robot Saints", p.55). Built mostly from wood, the still-extant Iberian robot Virgin de los Reyes features a painted wooden head, with arms that were covered in white kidskin to give it the appearance of human skin, and hair made from gold thread ("Robot Saints", pp.56-57). She was always dressed in finery. According to Christopher Swift in "**Robot Saints**", the Virgin and the figure of Jesus with which she is situated "can perform an almost endless number of human gestures and choreographies" (p.56) because their arms can bend and rotate in all the same ways human arms can.

Medieval faith had a firm focus on the tangible, so it isn't really that surprising that robot saints became a part of it. From rosaries to sculpted cathedrals, religious figures were always available for medieval Christians to look at and touch. Special effects were used in early religious drama (as Swift notes, p.73), and painted wooden effigies were a familiar sight at the funerals of the elite. Automata, in this context, don't seem to be an odd next step.

There is a famous example of a devotional robot – the Rood of Grace in Boxley, England – that was held up by Protestants in the sixteenth century as all that was wrong with Catholicism. Apparently, this wooden figure of Jesus on the cross could move its eyes and mouth, and was a huge draw to Boxley Abbey. While the sixteenth-century Protestants were up in arms over this type of robot fooling people into believing in miracles, I think that the truth is much closer to what Swift suggests: "that medieval Christians may have appreciated moveable sacred statues not for their miraculous qualities, but for their mechanical, technological, and ultimately theatrical capacities" (p.59). If they considered a stone sculptor's talent a gift from God, it seems logical that they could equally appreciate the technology behind a moving sculpture – after all, people understood clocks that worked with the same mechanisms.

Besides just making something really cool, it seems (as Swift says) that the aim of creating these robot saints was to inspire contemplation, much like the giant puppets that are still used in religious-themed parades today (and seen in **James Bond films**). While these robots could be a vehicle for medieval spiritual practice, in the same way as using a relic in hopes of increasing the power of prayer, we shouldn't automatically assume that medieval people believed that these robots were "real" in the sense that they were living or sentient.

Next time you come across someone who doubts the mechanical genius of the people of the past, show them this **awesome (and creepy) video** of a sixteenth-century monk automaton, lovingly called "Monkbot" in **this really great article by Radiolab** on how he works. I also recommend reading Christopher Swift's article "**Robot Saints**" in full to get a better sense of how robot saints fit into medieval devotion. Clearly, modern people aren't the only ones fascinated by the mystery and mechanics of robots.

You can follow Danièle Cybulskie on Twitter **@5MinMedievalist**

Hidden Britain: Secret Tunnels, Lost Chambers and Unknown Passageways

By Alvin Nicholas

The History Press, 2015
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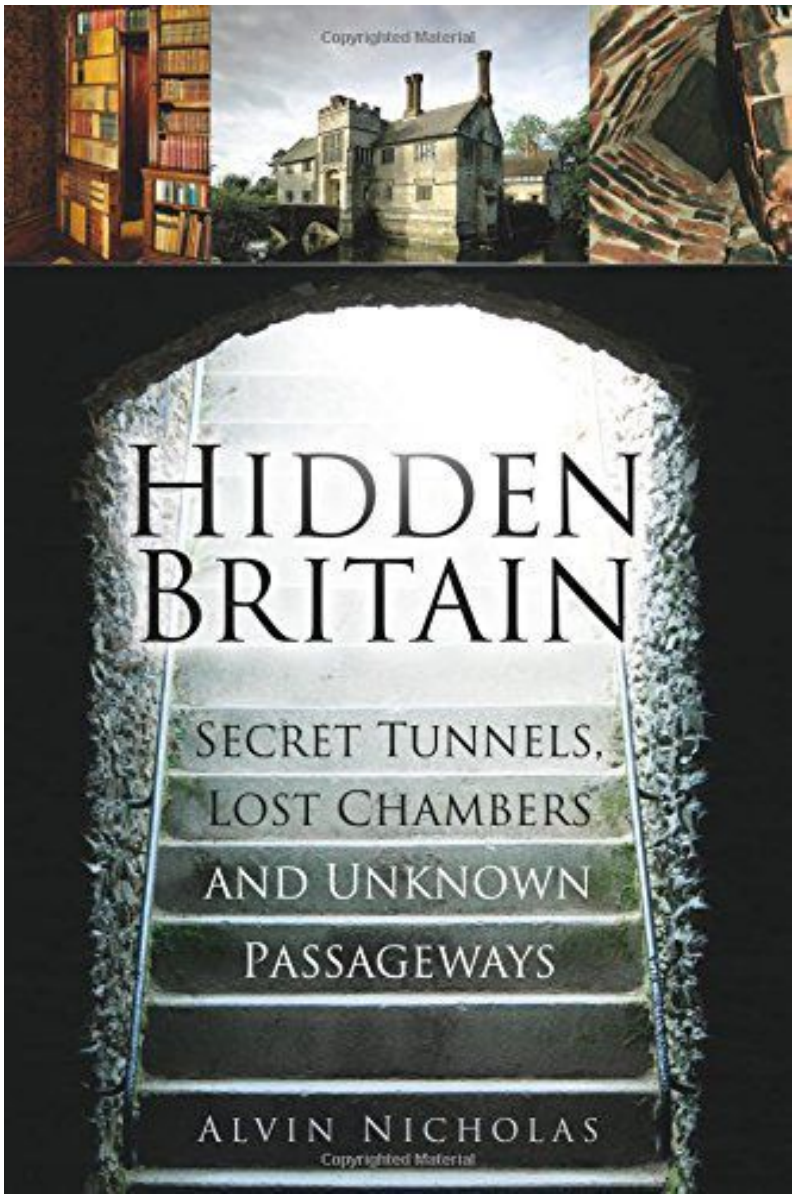
Reviewed by Sandra Alvarez

Tourism with a twist? Tired of the same old tours and droning guides? Alvin Nicholas's book on manors, mansions, castles, nooks and crannies, reveals there's more to Britain than meets the eye. This is definitely not your average castles tour book. It's an excellent resource for tourists, sleuths and adventurous spirits who are interested in more than the same old sites and regurgitated historical facts. You can take this book along with you and be your own guide on your next trek through Britain.

Nicholas, who is a certified Mountain Leader and lectures on heritage management, has put together a compact, yet comprehensive, guide to popular and lesser known historical sites around Britain. It's jam packed with incredible stories, great escapes and ghostly wanderings. What's also fantastic is that it covers more than one period and building type: Medieval, Tudor, Stuart, Georgian, Regency and Victorian; private homes, castles and hideaways. It's all here in under 200 pages.

It's a quick read, and neatly divided into regions: South West England, Southern England and London, East Anglia, Central England, Northern England, Wales, and Scotland. This is especially useful if you're planning on visiting a specific area, or passing through one and want to know what's nearby and where to stay. The book covers the basics and provides an overview of what's open to the public, and when, allowing you to tackle the sites in manageable chunks. Although not everything is open to the public, Nicholas still provides a worthwhile read full of interesting tidbits, exciting tales, or little known facts about each place. My only complaint is that the pictures in the book are all black and white. While I like black and white photography, I would've liked to see a splash



white photography, I would've liked to see a splash of colour between the pages as well. Other than that, this is really an outstanding little book.

Aside from being a great reference guide, it's the stories that I liked most. The book has a section devoted to priest holes, passage ways, tunnels, and grim discoveries. As you go through the chapters, each place has a bit of interesting history about the period and the site's importance, followed by a snippet that isn't common knowledge, like a family scandal, a dark secret, hiding places and local legends. There are many great stories, but my favourites have to do with the priest holes that recusant Catholics created during the Tudor and Stuart period when they were hunted and persecuted for refusing to accept Protestantism. Some of the tales here would make great movie fodder, e.g., miraculous escapes, political intrigue, eventual capture and murder.

I will definitely keep it as a reference and start planning my travels around Britain wth the help of this book. I travel a lot, so it's nice to have something handy that's thorough, yet portable, and speedy to read when I'm looking for places to see on the fly. If you're a history buff, Anglophile or just planning on visiting Britain, this is a must-have guide for your trip.

Click here to visit the publisher's website to learn more about *Hidden Britain: Secret Tunnels, Lost Chambers and Unknown Passageways*

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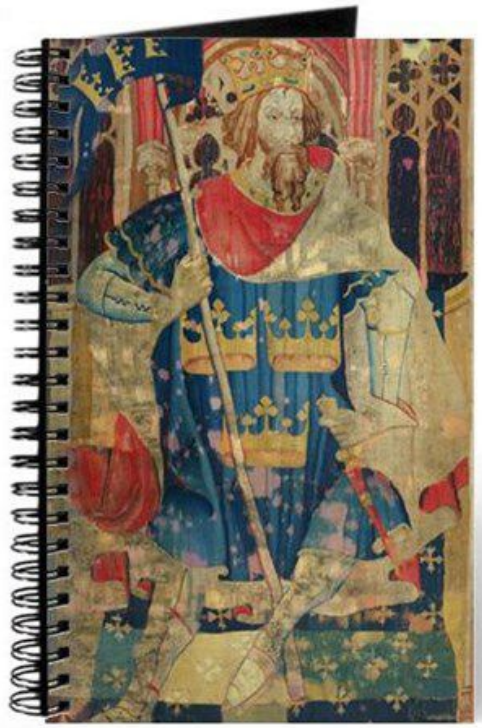

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