Professor's Pigpen Code

Several puzzles include a selection of strange symbols to solve these you have to crack the Professor's pigpen code. He drew three symbols in the letter he wrote to Rachel, which can be downloaded from the 'Crime Scene Report' page of the website.

First symbol represents divided by nine.
Second symbol represents religious discord.
Third symbol represents the Kingdom's four corners.

These symbols form the basis of his pigpen code.
Each symbol is split into nine parts with each representing a letter of the alphabet as follows:

We then have a translation for the pigpen code:
P2 Fibonacci Numbers

The Professor wrote ‘Fibonacci 1-3-1-5’ on page 2 of the Journal. This was a clue to a date with the numbers ‘1-3-1-5’ referring to the first, third, first and fifth numbers of Fibonacci sequence.

Here are the first ten numbers in the Fibonacci sequence: 0-1-1-2-3-5-8-13-21-34.

So the first number in the code, 1, represents 0. The second number in the code, 3, represents 1. The third number in the code, 1, represents 0, again. And the fourth number, 5, represents 3.

Putting this together, we get a new number sequence 0103, which when converted to a date is March First.

Answer: March First (Also, known as St Andrew’s day)
The Alchemist symbol contains a Latin phrase. Well actually just a bunch of random Latin words, which the Professor had drawn as a clue. Start at the top to the right of the cross. Take the first letter of each word. When you get to the end of a line start on the line below to the right of the cross. The first letter of each word spells a phrase; 'NO FRENCH KING FOR ENGLAND'.

This refers to a fact Richleau uncovered about the historical mystery. When Richard the Lionheart died there were two potential successors - John, Richard’s brother, and Duke Arthur of Brittany. By rights Duke Arthur had the stronger claim being the son of John’s elder brother. However, Arthur was an unpalatable choice for the English Lords as he was French and hence to closely aligned to the French King, Phillipe II.

**Answer:** No French King for England.
The Arabic numbers are 3, 6, 12, 14 & 19 and they identify specific words in the poem. The third word is ‘hush’, the sixth word is ‘creche’ and so on...

So applying the Arabic number to the poem we get the following words: Hush, Creche, Trophy, Full and Echo.

These words are a rather difficult anagram of ‘Church of the Holy Sepulchre’

Could this be the location? A later puzzle will reveal that this is actually one of the Professor’s red herrings.

**Answer:** Church of the Holy Sepulchre
P35 Stained Glass Window

The stones around the window contain Morse code. The stones denote 'dots', thick stones denote 'dashes' and dark-shaded stones denote spaces between letters.

Starting bottom left and working clockwise we get the following Morse code sequence:

... = F
/-. = O
/- = N
/- = T
/ = E
/... = V
/.. = R
/. = A
/... = U
/.. = D
/.. = A
/... = B
/... = B
/ = E
/-. = Y

Translating the Morse code we get the answer Fontevraud Abbey. This Abbey, in the Loire, is where (most of) Richard of the Lion is buried along with his father, Henry II, and his mother Eleanor of Aquitaine.

Could this be the location? A later puzzle reveals that this place is also a red-herring

Answer: Fontevraud Abbey
On page 67 the Professor has listed pairs of Holy Places:

- St Bartholomew & Church of the Holy Sepulchre
- Latin Exchange & St Sbas
- St Mary of the Germans & St Martin’s
- St Cosmas & Church of the Repose
- St Cosmas & St Bartholomew
- Latin Exchange & St Sbas
- Templum Domini & St Mary of the Germans
- St Martins & St Sbas
- Church of the Repose & St Damians

Each pair of places points to a letter in the map’s border. For instance taking the first pair, if you draw a line from St Bartholomew to the Church of the Holy Sepulchre and extend it to the border, it will point to the letter T.

Working through each pair reveals an object, the ‘True Cross’… but is this object we need to find?

Answer: True Cross
P72 Solomon Bible Code

The Professor has written out the part of the Book of Chronicles which describes King Solomon building the Temple in Jerusalem. And within it there is a code in two parts.

There is something funny how the Richelau has broken up the sentences. For the first part of the puzzle you have to work out that the number of words in each sequence of words represents a number and this number corresponds to a letter’s place in the alphabet. For example, the first sequence of words – “King Solomon decided to build a temple where the Lord would be” – has 12 words and therefore represents the twelfth letter of the alphabet, L.

If you work through the passage you end up with the following sequence of letters:

L C P W C T A U G X G P V G G P

This doesn’t seem to make much sense until you work out the second part of the puzzle – the letters have been shifted by two as indicated by the passage’s title ‘Chronicles Book TWO – Chapter TWO’. For example, the first letter in the sequence L shifted back two places in the alphabet is J and C represents A and so on. Working through the code reveals a date ‘January Seventeen’.

Is this the date we are looking for? This date is a nod to the ‘Holy Blood and the Holy Grail’ as it was the date on which Priest Sauniere discovered the Renne-le-Chateau mystery.

Answer: January seventeen
P74 Arabic Palm Symbol

To solve this puzzle you have to count the lines on the trunks of the palms. Starting bottom left and working clockwise reveals the following sequence of numbers.

23, 8, 15, 9, 19, 15, 21, 18, 6, 18, 9, 5, 14, 4

These numbers represents letter places in the alphabet where 1=A, 2=B etc.

So the number sequence translates to 'Who is Our Friend'.

By providing this clue, the Professor has indicating to Rachel the importance of the character he refers to as Our Friend i.e. Elias of Dereham, the man who masterminded the whole historical mystery. Once you get to Elias of Dereham a lot of the mystery starts to make sense.

Answer: Who is our friend
This puzzle is a classic Vigenere cipher. For more information on how Vigenere ciphers work, have a look at the excellent University of Rhode Island site.

First, you have to work out the keyword, which is 'mosque'. Then apply the keyword to the sequence of letters.

Once decrypted, you get the phrase 'from north and east and south and west shall be your answer'. This is an allusion to how to crack the manuscript code, i.e., you have to find four places in the manuscript and locate the place where they intersect.

**Answer:** from north and east and south and west shall be your answer
The Professor wrote ‘With pairs of Arabic numbers and a square, five by five, you will find the answer, but alas you will not find our good friend’ at the top of page 81 and this was a clue how to solve the puzzle.

The first step in this puzzle is to translate Arabic numbers into pairs as follows:

53-54-24-12-24
42-51-43-41-14
51-24-34-54-11
41-51-41-11-24
44-32-54-24-44
53-24-51-43-53
54-43-31-51-31
23-11-42-33-44
53-44-32-24-53
43-51-11-43-41
23-51-11-15-51

The next step involves working out what ‘a square, five by five’ means. This refers to the alphabet grid code used extensively by Michael Stadther in his ‘A Treasure Trove’ mystery. Notice how the letter Q in ‘sSquare’ is crossed out. You need to arrange the alphabet in a 5 by 5 grid but omit the letter Q, as follows:

1 2 3 4 5
1 A B C D E
2 F G H I J
3 K L M N O
4 P R S T U
5 V W X Y Z

Now you can crack the code. The first pair of numbers is 5 and 3. This refers to the letter 5 across and 3 down in the grid i.e. the letter O. Working through the sequence you end up with the phrase ‘Our friend persuaded Arthur to renounce claim to throne and leave for Outremer’. This is a reference to the historical mystery in which Elias of Dereham persuaded Duke Arthur to renounce his claim to the throne in order to preserve peace in England following King John’s death.

**Answer:** Our friend persuaded Arthur to renounce claim to throne and leave for Outremer
If you Googled the places and dates, you would soon realize these are all references to the Holy Lance, the religious relic purported to be the spear that pierced Christ's side. It's allegedly had a checkered history, including being:

- Found by Emperor Constantine's mother in Jerusalem in 326
- Carried in the pomerel of Charlemagne's sword, 'Joyeuse', whose capital was Aachen in 742
- Uncovered by Peter Bartholomew in St Peter's Church, Antioch in 1093
- Rumoured to have been part of the ransom paid by King John to the Holy Roman Emperor for the release of Richard the Lionheart in 1194.
- Claimed to have been in the possession of the Nazis in Nuremberg in 1938, then being taken either by General Patton to Washington DC or by a Nazi submarine to Antarctica, depending on who you believe, in 1945.

Search for the 'Holy Lance' on Wikipedia [1] for more interesting (and dubious) facts.

Is this the object that we needed to find to solve the mystery? Surely, it's too obvious and besides which of the five versions of the (claimed to be) real thing would we need to get our hands on?

**Answer:** Holy Lance (also known as the Spear of Destiny, the Holy Spear, the Lance of Longinus, the Spear of Longinus or the Spear of Christ).
To solve this puzzle you have shift the letters around the capitalize line in the middle – ENGLAND. The letter shifts are denoted by the numbers at the top, where minus means shift up and positive means shift down. The first number is 0 so no shift needed and the first letter is E.

The second number is -1 so we need to shift the second letter up by one so X in ‘Excommunicate’ sits next to the E in ‘England’.

The third number is -3 so we need to shift the third letter up by three so C in ‘Richard’ sits next to the X now sitting in the middle line.

And so on until we get the word ‘Excalibur’. Is this famous sword the object we seek? Is it one of the four swords in the mysterious sketch of the Bishop on page 18 of the Journal?

Answer: Excalibur
The pictures on page 104 and the notes on page 105 are all references to the legend of Tristan and Isoldore. ‘Words’ is an anagram of ‘sword’. So this must refer to the Sword of Tristan, which was incidentally reported to have been part of King John’s treasure, which the Professor lists on page 20 of the Journal. Again could this be the object we seek and one of the four swords in the mysterious sketch of the Bishop on page 18 of the Journal?

**Answer:** Sword of Tristan
This is the puzzle that hides the identity of the object we seek! And it's a really trick code to crack.

The first step involves translating the Latin place names next to each pentagram into English: Londinium is London, Eboracum is York and Durovernum Cantiacorum is Caterbury. These English translations provide the keywords for vigenere ciphers in the next step.

For the next step we have to create the vigenere cipher for each pentagram. Starting with the Londinium pentagram we decipher W F V G W using the keyword LONDON and get L R I D I. We use YORK as the keyword to decipher C C V O Y in the Eboracum pentagram and get E O E E A. And we use CANTERBURY as the keyword to decipher E S E E W in the Durovernum Cantiacorum pentagram and get C S R LS.

For more information on how vigenere ciphers work have a look at the excellent University of Rhode Island site.
So we end up with three five-letter sequences – L R I D I and E O E E A and C S L R S – which don’t seem to make sense until we realize they are a code for a Caesar Box cipher. This involves putting the sequences in order and reading downwards as follows:

<table>
<thead>
<tr>
<th>L</th>
<th>R</th>
<th>I</th>
<th>D</th>
<th>I</th>
</tr>
</thead>
<tbody>
<tr>
<td>E</td>
<td>O</td>
<td>E</td>
<td>E</td>
<td>A</td>
</tr>
<tr>
<td>C</td>
<td>S</td>
<td>R</td>
<td>L</td>
<td>S</td>
</tr>
</tbody>
</table>

This reveals the name of the object we are seeking – Le Crosier D’Elias. Elias of Dereham’s crosier, which is depicted in the picture of the bishop on page 18 of the Journal. The phrase ‘one object above all others’ next to the sketch is a clue as the Crosier is above the four Swords.

Answer: Le Crosier D’Elias
This spiral is famously known as a Fibonacci Spiral and this gives a clue to the puzzles. What you needed to work out was the numbers were from the Fibonacci sequence and their position in that sequence corresponded to the position in the alphabet.

For example, the first number is 377 which is the 15th number in the Fibonacci sequence and corresponds to the 15th letter of the alphabet, O. The next number 6765 represents U. And the third number 1597 represents R. So the first word of code is OUR.

Working through the code we end up with the phrase 'our friends fiendish plot louis stood down henry reissued mc soryb left for acre'.

This is a reference to Elias's historical mystery. In 1216 the French prince Louis had invaded and been crowned King of England, is a little known but historically correct fact. In our mystery Elias had used the threat, that Duke of Arthur was still alive and had a better claim to the throne of England, to force King Louis to renounce his claim. Henry III, King John's son was crowned King of England only after agreeing to sign a new Magna Carta in place of the one that King John had claimed illegal. Our mystery then sees Duke Arthur leaving England to join the Crusading Armies in Acre effectively giving up his claim to maintain peace in England. The Professor refers to Arthur as SORYB which means Son of Richard's Younger Brother.

Answer: our friends fiendish plot louis stood down henry reissued mc soryb left for acre
P121 Pigpen Code 53

This one is hard to spot but is a very important clue to the place. It's sitting on the front of the chest in the picture.

Once we have cracked the Professor's pigpen code we can translate the code into 'the place is above 53 degrees north'.

Why is this important? Well there are codes to four different places in the Journal - Fontevraud Abbey, Canterbury Cathedral, Worcester Cathedral, Church of the Holy Sepulchre. All of these are below 53 degrees north, so we know that none of these are the places we seek. So the place must be hidden either in the Manuscript or the study. There is in fact is only one other place.

If you cracked the code in the manuscript you would have found

Stonehenge. Again, Stonehenge isn't above

53 degrees north but once someone submitted Stonehenge as the location, Rachel would have released the missing page of Elias's manuscript, which the Professor kept in a file called named Stone Gallows (another name for Stonehenge). Laying this over the last page of the manuscripts reveals the name of the true location St Mary Magdalene's, Lincoln. Elias really had set a truly ingenious code!

Answer: the place is above 53 degrees north
**P123 Church Scene**

The answer is hidden in the border of the picture. You need to fold the page and line up the letters as follows.

Top in left border
- Our friend negotiated the French invasion

Bottom in right border
- Our friend negotiated the French invasion

Put two parts together
- Our friend negotiated the French invasion

**Answer:** Our friend negotiated the French invasion (Another reference to Elias’s conspiracy).
P133 Two Churchmen Holding A Staff

Under the picture is a phrase 'They died locked in combat with their eyes crossed?' The numbers 2 and 4 are on the line where the 'eyes cross'. If we then take the 2nd and 4th word of the phrase we get 'died in'. And also notice that numbers 1, 2, 4 & 5 are offset.

Put this all together and you get the phrase 'Died in 1245'.

This is a clue to the man behind the historical mystery, Elias of Dereham, who died in 1245.

Answer: Died in 1245
This puzzle is uses a substitution cipher and the key word is MANUSCRIPT.

In a substitution cipher, the letters in the keyword correspond to the first letters of the alphabet – in this case M=A, A=B, N=C etc. Any others letters in the alphabet but not in the keyword match off in order.

So in this case the cipher is:

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
M A N U S C R I P T B D E F G H J K L O Q V W X Y Z

Once we have worked this out we can decode the sequence of letters next to the picture.


Or: Graham Stole The Manuscripts From Helen.

This is a big clue to the backstory. The Professor’s wife, Helen, didn’t die in a car crash, she was murdered by Ben Graham who wanted to get his hand on the manuscripts. It was Graham who sent Elias’s manuscripts to the Professor via his literary agent. Graham had never been able to crack the code in Elias’s manuscripts and the only person who knew of who could was Professor James RIchleau. Could Ben Graham be the person who kidnapped the Professor?

Answer: ‘Graham stole the Manuscripts from Helen
P141 Arabic Number Pigpen

To crack this code, you have to first translate the symbols using the Professor’s pigpen. This gives the following sequence of letters:

DOXEXJP XJBOFZXK IFBP DBQ XOQERO

We then need to work out the symbol at the beginning of the code is the Arabic number 3. This indicates that the letters have been coded using a 3-shift cipher.

So D in the code represents G, and O represents R and so on as follows:

```
A B C D E F G H I J K L M N O P Q R S T U V W X Y Z
D E F G H I J K L M N O P Q R S T U V W X Y Z A B C
```

Once cracked the code reveals the following phrase: GRAHAMS AMERICAN LIES GET ARTHUR.

**Answer:** Graham’s American lies get Arthur

Note: that if you take the first letters of each word you get the word Galga, a reference to Stonehenge and a hidden clue to the location hidden in the code in the Elias’s manuscript.
The Professor scribbled 'The day is the year that Tsar Peter the great founded St Petersburgh and Samuel Pepys died!' on page 147.
Both these events happened in 1703. We can translate this number into a date 17 March, also known as St Patrick’s Day.

Is this the date we are looking for?
Answer: March seventeenth
This looks like an intricate code made up of zodiac symbols but in fact the code is in the phrase ‘Into Trust or Slaughtered’ above the symbols.

It’s a simple anagram ‘Treasure is Truth Not Gold’. This was a reference to the fact that Elias had buried his confession to his part in a historical conspiracy which was way more important that than the lost treasure of King John.

**Answer:** Treasure is truth not gold
P154 Births & Deaths

The following births and deaths are listed on page 154 of the Journal:

Born:
Michael Moore 1954
Tim McVeigh 1968

Died:
Ethelred of Wessex 871
Ethelede II of England 1016
William Shakespeare 1661
Boris Yeltsin 2007

All these births and death happened on the same day of the year, 23 April also known as St George’s Day.

Is this the date we are looking for?

Answer: April twenty third
There are three pigpen codes on separate pages with the place names above them – Vezelay, Jerusalem & Sighisoara. You have to work out that they need to cracked in the same order as the Professor's journey in the Journal.

Use the pigpen cipher to decode the Vezelay code on page 160 to reveal the phrase 'the date is'.

Use the pigpen cipher to decode the Jerusalem code on page 180 to reveal the phrase 'in the tapestry'.

Use the pigpen cipher to decode the Sighisoara code on page 173 to reveal the phrase 'in my study'.

Put these together to form the phrase 'the date is in the tapestry in my study'. An obviously big clue on how to find the date we are seeking. All you need to do now is going to the study page on the site, download the tapestry and crack the date.

Answer: The date is in the tapestry in my study
This a simple puzzle.
Take the first letter from each word in the poem:
“Even now, rather obviously, neither Ferdinand or Umberto need discover the real event, a sweet, ubiquitous, righteous ending.”
And you get the phrase:
“Enron found treasure”
This was theory Helen, the Professor wife, had been working on before she was murdered. Enron owned the Sutton Bridge Gas-Fired Power Station near the site where King John’s treasure was lost.

If this sounds far fetched a company called the South Fenlands Research Company was actually set up in the seventies and its sole purpose was ‘...to recover the lost treasure of King John which is believed to be buried in the low-tide sands of the Wash...’.

**Answer:** Enron found treasure
Curiously, the Professor wrote the following on page 164 of his Journal: ‘used as a greeting - the lowest priced - a very small or inadequate amount of money’.

These are definitions of the words: hello, cheapest and pittance.

And these words are an anagram of the phrase ‘The place is not the place’.

An important clue to the fact that solving the manuscript reveals the location as ‘Stonehenge’. But Stonehenge refers to another one of Elias’s manuscripts not the place. This manuscript is needed to crack the code in the final page of the main set of manuscripts. Laying in over the last page reveals the real location to be St Mary Magdelene’s Church, Lincoln. This missing manuscript was to be released as soon as someone had cracked Stonehenge from the code in the Elias’s manuscripts.

Answer: The place is not the place
P167 Another Pigpen

Use the Professor’s pigpen code to reveal the phrase ‘Mother knew Graham’.

Another big clue to the backstory. The Professor’s wife, Helen, didn’t die in a car crash, she was murdered by Ben Graham who wanted to get his hand on the manuscripts. It was Graham who sent Elias’s manuscripts to the Professor via his literary agent. Graham had never been able to crack the code in Elias’s manuscripts and the only person who knew of who could was Professor James Richleau. Could Ben Graham be the person who kidnapped the Professor?

Answer: Mother knew Graham
P170 And Another Pigpen

Again use the Professors pigpen code to reveal the phrase ‘not a national saints day’.

This is a big clue to the date or more exactly which date it isn’t.

The puzzle on page contains the date 1 March, which is Saint Andrew’s day, the patron saint of Wales. The puzzle on page 147 contains the date 17 March, which is St Patrick’s day, the patron saint of Ireland. And the puzzle on page 154 reveals the date 23 April, St George’s day, the patron saint of England. Knowing that the date is not a national Saint’s day means we can discount the dates.

Answer: Not a national Saint’s Day
P171 Castle Plan

To solve this puzzle you need to take the first letter form each place in the legend. So the first letter is E from ‘elevated courtyard’, the second letter is V from ‘vaulted inner gatehouse’ and so on. Working through each place reveals the phrase ‘even lies indicate a secret’.

And as a further clue to identity of Our Friend, if you takes the first letters of this phrase you get the word ‘Elias’ i.e. Our Friend is Elias of Dereham.

Answer: Even lies indicate a secret
This puzzle is a simultaneous equation using Roman numerals.
The first line can be written as:
\[ A/2 + B = 52/2 \text{ (or 26)} \]
The second line can be written as:
\[ A - B = 19 \]
So \[ A = B + 19 \]
If we substitute \( B + 19 \) for \( A \) in the first line we get:
\[ (B + 19)/2 + B = 26 \]
So \[ B + 19 + 2B = 52 \]
So \[ 3B = 52 - 19 \]
So \[ 3B = 33 \]
So \[ B = 11 \]

Putting \[ B = 11 \] into the second line we get:
\[ A - 11 = 19 \text{ So } A = 30 \]

Using the third line we get
\[ 3011 = \text{diesdieu} \text{ (Latin for date)} \]
So the date is 3011 or 30 November.

Is this the date we are looking for? Well if you cracked the pigpen puzzle on pages 160, 173 and 180 you know it can't be because this code revealed that ‘…the date is in the tapestry in my study’.

Well done if you cracked the date in simultaneous equation but, unfortunately, it was a red herring set by the Professor to put people off cracking the real code.

**Answer:** 30 November
This puzzle includes a sequence of letters
CJL-VCJ-FFV-YIH-QCC-CTF-WSC-TVE.
You have to work out that this is a Vigenere cipher.

For more information on how Vigenere ciphers work have a look at the excellent University
of Rhode Island [2].

It appears that the keyword you need to decipher the code is 'Acre'. But if you try this it
doesn't work.

However, if you read Rachel's blog entry on 16 October she tells us that Abdul found a note from the Professor which contained a mysterious poem:
'A city remains enlightened, A city remains, A city remains enlightened, A city remains enthralled'. The first letters of the first four words spells
ACRE and the first letters of all the words spells ACREACREACREACRE. This the keyword for the cipher.

Knowing this you can decipher the Vigenere code and reveal the answer: Church of the Holy Cross, Acre. Could be the location of the treasure? If you
also cracked the code on page 121, you know that the 'the place is above 53 degrees north'. So, unfortunately the Church of the Holy Cross, acre is
another red herring.

Answer: Church of the Holy Cross, Acre
P185 Dot Mosaic

First you have to work out that the dots in the circles represent pairs of numbers. In the first circle the dots represent 4\1, in the second circle 3\5 and so on.

Next you have to work out that these refer to letters in a five by five grid.

1 2 3 4 5
1 A B C D E
2 F G H I J
3 K L M N O
4 P R S T U
5 V W X Y Z

So 4\1 in the first circle represents the letter which is 4 down and 1 across in the grid i.e. P. The pair of numbers in the second circle 3\5 represent O. Working through each circle reveals the answer: ‘Poor Knights buried the treasure according to our friends will a time a place an object’. A reference to the fact that the Templars executed Elias of Dereham’s will.

Answer: Poor Knights buried the treasure according to our friends will a time a place an object.
P188 Churchyard Vigenere

In this sketch, the Professor reveals that he has worked out how to find the documents and treasure buried in Elias's grave using the shadow cast by a particular object in a particular churchyard on a particular date.

The sketch also includes another Vigenere code for which you have to work out that the keyword is Churchyard.

For more information on how vigenere ciphers work have a look at the excellent University of Rhode Island.

Deciphering the sequence of letters ‘Q B L W T P C N U L U L F Z C Z M F U H T L B R O’ reveals the phrase ‘Our Friend is Elias of Dereham’

Answer: Our Friend is Elias of Dereham