ATHMMIX Solutions by the Rookies Redux

The Newsletter

- The newsletter is headed with pictures of:
 - Pablo Neruda; and
 - the Small Animal Testing Hospital from the University of Liverpool;

signifying Pablo's ATH.

- Each story in the newsletter is accompanied by a silhouetted map of somewhere relevant to the story:
 - Map of Kansas alludes to the Wizard of Oz as Dorothy is from Kansas;
 - Map of the Czech Republic in the article about the Czech chess player;
 - Map of Berkshire with Reading shown in the article Reading on the Increase;
 - Map of Switzerland in the article about Swiss security;
 - Prague skyline including the Charles Bridge the article about the Tennis Chairman mentions Charles and Bridge;
 - Map of Sheffield in the article about Gordon Banks, who was born there; and
 - Map of Greater London in the holiday weather forecast, suggesting that the treasure is to be found in Greater London (spoiler alert: it was).
- Each article has one coloured letter. When arranged in the order of the colours of the rainbow, they spell out **TALLY HO**, indicating that the hunt is on.
- Tally Ho is also a reference to the 2005 ATH entitled a Fox Hunt. In this ATH, one of the themes was **previous ATHs**, and the same theme appears in this ATH. "Tally Ho" appeared on the first page of the 2005 hunt.
- The newsletter is dated Tuesday 18 November, but was released on Monday 18 November. However 18 November 1873 was a Tuesday and it was the day that Lyon Playfair became Postmaster General. The "new Postmaster General" is mentioned in the newsletter. This indicates that Playfair, particularly Playfair ciphers, will be a theme in the hunt.
- The Christmas pantomime is based on the Wizard of Oz (and Brexit, parodied as ATHEXIT). This alludes to the nature of the treasure hunt. We are being sent on a

quest to find the stolen treasure hunt, like the characters in the Wizard of Oz are on a quest to find the Wizard. But just like the Wizard of Oz, it will turn out that the quest itself rather than the destination will give us what we are looking for.

- The ruby slippers in the Wizard of Oz are a famous example of a **MacGuffin** and this also appears to be a general theme. RS's Red Box is also a MacGuffin in that Nero Wolfe thinks he needs to find it to solve the crime but it transpires that he does not.
- Although different from red herrings, the setters have acknowledged the resemblence between them by giving prominence to two MacGuffins that are red. Moreover, the treasure is found in a pink box rather than a red box and the red box in the corner of page 12 is not necessary to find it. Athexit was always possible to find with the Hunt document alone without it being necessary to get muddy again.
- Alfred Hitchcock (page 3) popularised the term MacGuffin while Pearl White (page 9) preferred the term "weenie". In Twin Peaks, the murder of Laura Palmer has been admitted by the writers to be a MacGuffin that was not meant to be solved.
- "Ding-dong" is a reference to the bell-ringing code in the 2009 ATH, so fits with the theme of **previous hunts**.
- The chess champion's "homely" wife's name is Domova, which means "home" in Czech. The chess moves in the match he describes would be:
 - 1e4 Nc6 2. Ke2 Nd4+ 3. Ke3 c6 4. Kf4 Ne2+ 5. Ke5 Qa5#.

This will be useful later.

- The article "Reading on the Increase" refers to the new Postmaster General, as mentioned above this was Lyon Playfair.
 - He is described as an outdoor "type" which may be a reference to the Playfair font (and indeed the main hunt prints all its Playfair ciphers in this font).
 - The reference to linear algebra and the Matrix is a hint that Hill ciphers will be relevant in the hunt.
 - The references to reading lots of novels hint that literature from a wide variety of sources will be a theme in the hunt.
 - There is also a mention of two peaks at Christmas and New Year a reference to Twin Peaks that will be a theme later in the hunt.

- The article on subverting Swiss security:
 - It mentions banks and bank robberies, which will be a theme of the hunt. (lain Banks was also the theme of a previous hunt in 2016 so it fits that theme too).
 - The Gnomes of Zurich is a reference to the Barden Gnomes.
 - It stars Baroness "Bindie Diebin", which is German for "(I) am the thief". Ruth Rendell was a Baroness.
 - The number that the Baroness describes is a parasitic number -10112359550561797752808988764044943820224719. By shifting each letter in the string of letters alphabetically backwards by the corresponding digit in the parasitic number, this decodes to WE HOPE YOU GREATLY ENJOY THE ARMCHAIR TREASURE HUNT.
- The article about the tennis chairman contains several references to Sir Charles Wheatstone, inventor of the Playfair cipher:
 - Reference to his "personal code" the Playfair cipher; and
 - Reference to his "bridge skills" the Wheatstone Bridge was named after him, although he did not actually invent it.
- The article about the Muddy Boots award refers to Gordon **Banks**.
 - This is another reference to **banks** which is a theme of the hunt.
 - "Rod Sill" is Swedish for red herring and of course it was in fact Pele whose header was famously saved. Cap-Pele in Canada describes itself as the world capital of smoked (i.e. red) herring, producing 95% of the world market.
 - Gordon Banks' birthday was 30 December and further information about the award was indeed released on this date.
- The weather forecast mentions "unusually heavy footwear". In the main hunt, "stoneboots" will be needed as a codeword.
- There are several references to **Ruth Rendell** in the newsletter.
 - The story about the chairman dying during his speech is relevant to her: she was forced to resign from the Chigwell Times newspaper after filing a story about a local tennis club dinner she had not attended, and failing to report that the after-dinner speaker had died midway through the speech.

- Three of her book titles are hidden within the newsletter: Going Wrong, The Thief, and The Reason Why.
- The reference to the Chess Champion being made Grand Master in 1997 refers to her winning the Grand Master Award of the Mystery Writers of America in that year. Other thematic authors; Agatha Christie, Rex Stout, and Ed McBain, have also won this award.
- Pride and Prejudice and the Godfather were RR's favourite book and film.
- She was a Baroness.
- West Hills Golf (not Tennis) Club is the site of a murder in a **Rex Stout** novel Fer-de-Lance (a theme later in the hunt).

The Message from Lady Emma

- Lady Emma was indeed the wife of the real Sir Charles Wheatstone.
- The country she refers to is Switzerland:
 - Leicester Square has Swiss Court, the Swiss Glockenspiel Clock and Canton Tree.
 - Charles Wheatstone invented a polar clock, a chronoscope and Switzerland is famous for clocks.
 - The reference to hill walking there are lots of hills in Switzerland. Plus it is a hint of the Hill ciphers to come. Hill ciphers were invented by Lester Hill so the reference to Leicester Square also points us in that direction.
 - The Swiss flag is literally "a big plus".
- Lady Emma refers to her eldest, and the Wheatstones' eldest son was Charles "Pablo" Wheatstone.
- The booking reference is a Playfair cipher. Using the codeword Switzerland, it decodes to **PABLO RIP.**

The Clocks and Message

- On 9 December we were told that the hunt will be released on "*what would have been dinner time tomorrow, were 1582 in Lyon*". In December 1582 France switched to the Gregorian calendar and skipped straight from 9th to 20th December.
- There are three clocks showing 8:05, 8:12 and 8:19. This meant that the hunt would be released and 8:05pm, 20 / 12 / 2019.
- The 8:05 or 20:05 clock, is a further pointer towards the 2005 ATH and its theme of **previous ATHs**.
- Lyon is a further reference to Playfair.

<u>The Main Hunt</u>

- The themes in the hunt include ten different **authors**, one per page 2-9 and 11-12, plus references to a bonus author, **Ruth Rendell ("RR")**, scattered throughout the hunt.
- There is a theme of references to **previous ATHs** also references to **hunt/hunter** throughout,
- There is a theme of **bank robberies** and references to **banks** generally.
- The "postbox" on each page includes encoded messages and hints to the type of ciphers used.

<u>Page 1</u>

• The pictures introduce the **bank** theme and ten of the **authors**.

A Tornado jet banking
Metal band called Rites of Thy Degringolade La Degringolade is a novel by Emile Gaboriau ("EG")
The Red Box is a novel by Rex Stout ("RS") We are told that the treasure is in a red box (it turned out to be more of a pink).
A silkworm. The Silkworm is a novel by Robert Galbraith, aka J K Rowling ("JKR")
Golden Gate Bridge The Golden Gate is a novel by Alistair MacLean ("AMacL")

A	Lightning was a novel by Ed McBain ("EMcB")
	Banks Peninsula, South Island New Zealand
	A tiger cub at a zoo in Abony, Hungary
	The Hungarian Tiger is a novel by Tibor Fischer ("TF")
1	A tortilla.
Contraction of the second	Tortilla Flat is a novel by John Steinbeck ("JS")
	A broken mirror.
	The Mirror Crack'd from Side to Side is a novel by Agatha Christie ("AC")
	Six coins with Napoleon III on the heads side.
	The Adventure of the Six Napoleons is a Sherlock Holmes ("SH") story by Sir Arthur Conan Doyle ("ACD")
	Album cover from Aladdin Sane by David Bowie
YCA	Inventing Aladdin is a poem by Neil Gaiman ("NG")
	NG has also been linked to a film about David Bowie.

PABLO'S ATH IBWXBDKHWCALWGD	Later in the hunt we will note that Hill ciphers are written in bold italics, so this is a Hill cipher. The keyword is hidden in plain sight.
	Using a 3x3 matrix, with the numbers derived from the letters in PABLOSATH, this Hill cipher decodes to EACH PRIME LETTER .
"Pablo's ATH Starts! Find a treasure! It's hidden in South London one year, Leeds the next. I dabble; you must follow your ideas to the end. Rain mustn't stop you. Be in time - don't tarry!"	Taking each prime letter of this paragraph decodes to A BOAT RIDE IS NOT NEEDED BUT WATER IS NEAR This information tells us that the treasure can be found near water (it was near the Lost Pond).
	5 Oreos - a packet of Oreos was hidden with the treasure as a treat for the first team to find it, which, alas, was not us.
	This is an allusion to The Red Box by RS, where the red box contained sweets.
	The Christmas symbols were special festive alphabet emojis that spelled out pablosath.com/christmas.htm. This took us to a page entitled "fa la la la la" featuring "Carol the Ancient Yuletide Troll" - a play on the lyrics from Deck the Halls. This carol had featured in the 2017 hunt, so was a hint that previous hunts might become a theme.
"Carol, the ancient Yuletide troll."	The instructions on page 1 also warn "don't be decked by the boughs of holly," referring to the high holly hedges around Loughton.
	Later there was another festive emoji message put on the website. This led to pablosath.com/chanukah.htm and a picture of a zebra with markings like a menorah. This could also be interpreted as a link to Ice Station Zebra by AMacL .

<u> Page 2</u>

- The author on this page is **ACD**.
- SH was a theme of the 1991 ATH, so this fits with the theme of **previous hunts**.
- There are several pictures of famous redheads. This is a reference to the SH story the Red-Headed League.
- The Red-Headed League is a story involving a **bank robbery**.

	Dylan Thomas, painted by Augustus John. (Augustus John is a link to the 2018 ATH about Ian Fleming, as he was Fleming's mother's partner, and father of his sister Amaryllis).
	Katherine H epburn
	Elizabeth I
A REAL PROPERTY AND A REAL	DH Lawrence
	Isabella of Castile

	Maureen O 'Hara
	Willie N elson
	The White Witch from The Chronicles of Narnia played by Tilda S winton
	Alex M cLeish
	Adele Adkins
PAZ CON JUSTICIA.	Holly N ear
	Painting by Matthias Stom called the Lentil Stew, depicting E sau (and Jacob)
4828m	The unit of measurement, a league , in metres.

• The first letters of the redheads spells out **THE LION'S MANE**, which is another SH story.

\odot	The Adventure of the Yellow Face is a SH story
	The Adventure of the Blue Carbuncle is a SH story.
0.38c → ÔÔ	Here the stone is red, but we also have the dates of Christian Doppler's life.

29/11/1803 - 17/3/1853	A Doppler blueshift with the radial velocity indicated could make a red stone appear blue.
1/6, 1/5, 1/4, 1/3, 2/5,	A Farey sequence missing a ¾.
1/2, 3/5, 2/3, 4/5, 5/6.	The Adventure of the Missing Three Quarter is a SH story.
Ti metaglottizetai os "Diermineas"	"Dubbed as "Interpreter"" in Greek.
Dienninedo	The Adventure of the Greek Interpreter is a SH story.
	The Adventure of the Devil's Foot is a SH story.
	The Adventure of the Second Stain is a SH story.
No.	The Adventure of the Copper Beeches is a SH story.
	Violet Hunter is a character in the Adventure of the Copper Beeches, explaining why these pictures are together.
	SH referred to difficult puzzles as "three pipe" problems. We would give the 2019 ATH a "five pipe" rating.
Skandál!	"Scandal" in Czech.
	A Scandal in Bohemia is a SH story.
	The shock defeat of the Czech Chess champion described in the Newsletter could be described as a Skandál!

0. John wasn't Dr Barton's first name – what was it?	In the SH story the Adventure of the Illustrious Client, Dr John Watson was given the pseudonym Dr Hill Barton.
1. What barbarous forename is not part of the surname?	Conan (the Barbarian) was one of ACD's forenames, not a part of his surname.
2. When Winter's revenge was virulently acidic, what was the client?	Illustrious . In the SH story the Adventure of the Illustrious Client, Baron Gruner has acid thrown in his face by Kitty Winter.
3. Near which establishment do cows apparently walk, canter and gallop?	The Priory School - in the SH story the Adventure of the Priory School.
4. Who took a cruise following a creek?	Katie Holmes - who married Tom Cruise after starring in Dawson's Creek. There is a nominal link to SH.
5. Into which adventure does Sir Harry trespass, masquerading as a drunk rather than a murderer?	Sir Harry Flashman pretends to be a drunk in the SH story the Adventure of the Empty House .
6. What is right at the top of the Olympic construct?	A red circle , referring to the SH story the Adventure of the Red Circle.

- The first question is numbered 0, and we take the whole answer.
- We then take the initial letters of questions 1-6.
- This gives **HILL CIPHER**.

A,	This indicates that we use A=1 when decoding the Hill Cipher.
	Leicester City FC - SH was said to be based on a police officer from Leicester called Francis "Tanky" Smith.
	Solsbury Hill - has the same initials as Sherlock Holmes.
	The Hill Cipher was invented by Lester S Hill

	Keanu Reeves from the Matrix.
	This indicates that we should use a 2x2 matrix when decoding the Hill cipher on this page.
12to	Rod Steiger from the Pawnbroker.
	The initials JW point us towards Jabez Wilson, who is the Pawnbroker in the SH story the Red-Headed League.
JW⇔ PSZEBIGBMOXM	The arrow indicates that the JABEZWILSON would be the result of decrypting the cipher text PSZEBIGBMOXM.
	We know it is a 2x2 matrix Hill Cipher with A=1. Armed with the plaintext JABEZWILSON and the ciphertext PSZEBIGBMOXM, we can work out that the encoding matrix is (19,8) (10,23) equating to (S,H) (J,W) being the initials of Sherlock Holmes and Jabez Wilson (or John Watson).
VQGKKSRIQMTRHSQNOE QNBMCXMINQIAWILXPFEU	Using the same matrix above this decodes to NOW USE REKORBNWAP AS A PLAYFAIR KEY I AND J NO Q
	(the Hill Cipher ciphertext is in bold italics, which is followed throughout the hunt)
YWMZLNJIDMCLNURBNTZ BNV	REKORNBNWAP is "pawnbroker" backwards, so we use the specific name of the pawnbroker backwards i.e. NOSLIWZEBAJ as the keyword in a Playfair cipher with the alphabet as indicated (no Q). This decodes to TAKE SIGNED FOOTPATH WEST
	(the Playfair ciphertext is in Playfair font, which is followed throughout the hunt)

<u> Page 3</u>

- The author on this page is **RS**.
- The Rubber Band by RS is "stretched" to become The Robber Bank, to fit the theme of **bank robberies.**

Hey title particle, if you think your mother is a W, then your sider is a neutrino. You see, a W decays about 10% of the sime to an electron and electron neutrino. Javid 10% of the sime to amount and the second second second second second second tau neutrino, and about 20% to hadrons. Since you are a muon, you need to find a muon neutrino.	RS once said "The minute those two little particles inside a woman's womb have joined together, billions of decisions have been made. A thing like that has to come from entropy." The text describes a particle trying to rejoin with its sister inside its "mother". This quantum entanglement is a form of entropy.
	Eather Coorgo Hunt
	Father George Hunt The Father Hunt is a novel by RS
	An illustration from the Doorbell Rang by Pat Hutchins.
	The Doorbell Rang is a novel by RS
Das nyeb mlu Solo. Tsun oophoroma knetto <u>eihcra niwdoog</u> , bnef nlle! Ymynydddu	 This is a mix of: Sullustese, an invented alien language from Star Wars. It says "We copy General Solo. We'll keep you on our tracking screens. Good luck!" The language includes "Archie Goodwin" backwards as a tribute to the comic book writer. Archie Goodwin is also a fictional character created by RS. Das Oophoroma refers to an article on ovarian tumours by German doctor Fritz Brenner. Fritz Brenner is also a fictional character created by RS. Y mynydd du means "the black mountain" in Welsh. The Black Mountain is a novel by RS.
DOT	A map of the Domnician Republic. Together with the "dot", it refers to the international internet domain for the country .do The crossed arrows indicate swap over.

	A map of the United Kingdom. Together with the "dot", it refers to the international internet domain for the country .uk
	The Rubber Band is a novel by RS (and can literally be stretched).
	Following the instructions above to swap DO and UK, we end up with The Robber Bank. This can be rearranged to The Bank Robber to reach a hypothetical RS novel which would fit the theme of bank robberies .
DOT	
Thematic link, somewhat stretched.	
	Panzer tank
A 1	Panzer tank B4071 in Gloucestershire from Fromebridge to Saul
B4071	
B4071	B4071 in Gloucestershire from Fromebridge to Saul
B4071	B4071 in Gloucestershire from Fromebridge to Saul There is a RS character called Saul Panzer
B4071	B4071 in Gloucestershire from Fromebridge to Saul There is a RS character called Saul Panzer Chieftain mark 11 tank RS presented a radio programme called "Our Secret Weapon",
B4071 Image: Second s	B4071 in Gloucestershire from Fromebridge to Saul There is a RS character called Saul Panzer Chieftain mark 11 tank RS presented a radio programme called "Our Secret Weapon", which was funded by the think tank, Freedom House.
B4071 Image: Second s	B4071 in Gloucestershire from Fromebridge to Saul There is a RS character called Saul Panzer Chieftain mark 11 tank RS presented a radio programme called "Our Secret Weapon", which was funded by the think tank, Freedom House. Alfred Hitchcock

13 m 1 4	Baby cross orbweaver spiders
	The Golden Spiders is a novel by RS
1. 228, 229; 2. 244	The image is from the film Gambit.
07 1.212, 213, 2.150	If one changes these numbers from decimal into hexadecimal they are:
	1. 228 = e4, 229 = e5, 224 = f4
	2. 212 = d4, 213 = d5, 196 = c4
	Interpreted as chess notation, these describe the King's Gambit and Queen's Gambit.
	Gambit is a novel by RS.

1. A	A (the letters ATH appear standing just for themselves).
2. Outraged by his neighbor's plot to kill Caesar, possibly a Zygon	In the RS novel Some Buried Caesar, Osgood was the name of the neighbour of Pratt, who planned to kill a bull called Caesar. It is also the name of a character in Doctor Who, who may or may not be a Zygon.
3. Lily, English and Bean, once of Canterbury.	Rowan : Lily Rowan is Nero Wolfe's love interest; Rowan Atkinson was Johnny English & Mr. Bean; Rowan Williams was Archbishop of Canterbury.
4. Inspector of a Swiss bank, of possible help with matrix inversion.	Inspector Cramer in the Nero Wolfe novels by RS The is a Swiss Bank called Banque Cramer. Cramer's Rule in linear algebra assists with matrix inversion, which is helpful in decoding Hill ciphers.
5. Where did the first murder take place, while the victim was driving (ignoring direction)?	In RS's first novel Fer-de-Lance, the murder takes place on a golf course called (West) Hills.

6. Where the Nemesis is defeated, akin to Peter (the first beater) and George (o quinto).	In the RS novels, Arnold Zeck is Nero Wolfe's arch nemesis. He is defeated in a novel called " In The Best Families ". Someone in the Best family would be kin to Pete Best (the first drummer in the Beatles) and George Best (called the Fifth Beatle by the Portuguese press).
7. Dude or Doxy, start the same and end the same.	Death of a Dude and Death of a Doxy are both novels by RS.
8. Both the hero and his creator are indubitably this.	RS's hero Nero Wolfe is described as weighing 1/7 of a ton. Therefore both he and RS are Stout.

- The first letters of each answer gives **AORCHIDS**.
- Nero Wolfe collects orchids.
- Black orchids in a novella by RS.

	A Ludo board.
and the second sec	Ludo comes from the latin " play ".
- ALAN - ALAN	Parsley, sage, rosemary and thyme. Nero Wolfe, a character created by RS, had a herb garden at the back of his Brownstone.
	This is a lyric from the song Scarborough Fair .
Regal	Scarborough Regal "Stout" (a reference to RS)
arbor an	Play + Scarborough Fair - Scarborough = Playfair, indicating a Playfair cipher.
EX HILL "LAMETTE VALLEY UGON PINOT GRIS 2007	"Rex" Hill wine. A reference to RS and to Hill , signifying a Hill cipher.
	There are nine pictures from the film The Matrix, suggesting that we use a 3x3 matrix when decoding the Hill cipher.

UIYQMSZXRCSDBSB UBHNBZIIKIAHPASU BNFERDMKD	Using AORCHIDS as the keyword in a Playfair cipher, this decodes to NEXT KEYWORD IS DETECTIVE'S FAVOURITE FISH EGGS
OPFEHLVNKRUDKW GHPDCHCPBFPLWO OVRKBW	Using SHADROE (a favourite of Nero Wolfe's) as the keyword in a Playfair cipher, this decodes to ENCODING MATRIX IS THE DETECTIVE'S NAME X
KQNGLKQQLNYEGJ SNLRBPWOPCLHKI DPAVX	Using a 3x3 matrix with numbers derived from NEROWOLFE to decode this Hill cipher gives FOLLOW PATH TO RIGHT BY FENCE. CROSS ROAD.

<u>Page 4</u>

- The author on this page is **AC**.
- The Million Dollar Bond Robbery by AC is a story about the **robbery** of bank bonds.

4	The Big Four is a novel by AC
	"The Blue Train" from South Africa.
	The Mystery of the Blue Train is a novel by AC.
	The Crooked House in Dudley.
	Crooked House is a novel by AC.
	The Man in the Brown Suit is a novel by AC.
• <u>•••</u> ••••••••••••••••••••••••••••••••	Curtain is a novel by AC.
	Cluedo, referring back to the 2002 hunt and the Body in the Library is a novel by AC.

ना की के लग	Five Little Pigs is a novel by AC.
	Tarot cards on a table. Tarot cards refers back to the 2007 hunt and Cards on the Table is a
	novel by AC.
The second secon	Peter Westmacott, a British diplomat.
	Mary Westmacott was a pen name of AC, and she published six romance novels under this name.
	A Wheatstone bridge (as noted in the Newsletter section, this was named after Sir Charles Wheatstone)
	Samuel Hunter Christie was the inventor of the Wheatstone Bridge
-	-
alaray <u>in</u> mesan	The prophet Samuel
	Samuel Christie - Samuel = "Christie" so there is a nominal link to AC.
Retime 🎜	The musical notes shown are two quavers, which are equivalent in terms of time to one crotchet. So two quavers retimed equal a crotchet.
	Mr Crotchet was a pseudonym used by the bank robber Simpson in The Adventure of the Clapham Cook, one of the short stories in
	"Hercule Poirot's Early Cases" by AC.
	Hunters Lodge in Kingskerswell, Devon
	The Mystery of Hunters Lodge is a novel by AC.
RDG1722	RDG is the abbreviation for Reading train station on National Rail.
	The train arriving at Reading at 17:22 leaves Paddington at 16:50.
	The 4.50 from Paddington is a novel by AC.

1. Rembrandt implied it went top to bottom, though right to left would be more normal.	In Rembrandt's painting Balthazar's Feast the words Mene Mene Tekel Upharsin appear in Hebrew letters. The words are written top to bottom, whereas Hebrew would normally would be written right to left. The Moving Finger is a novel by AC. It takes its name from the Rubaiyat of Omar Khayyam, which also describes Balthazar's Feast.
2. Lizzy Borden, predestined in Sheppey.	The band Lizzy Borden has an album called Appointment with Death . The play Sheppey by Somerset Maugham has its character meeting Death at the end, and Death telling a story of his appointment with a man in Baghdad. Appointment with Death is a novel by AC.
3. Who mislaid \$1000000, ending up at Ivinghoe?	In the Million Dollar Bond Robbery, a short story by AC, Philip Ridgeway loses a million dollars of Liberty Bonds. The Ridgeway National Trail ends at Ivinghoe Beacon. Ivinghoe Beacon featured in the 2016 hunt so it is in line with the theme of previous hunts .
4. Emulator of Greek labourer heard a leek chez lui.	AC's famous character Hercule Poirot shares a name with the legendary Hercules and even completes his own set of "labours" in a series of short stories, The Labours of Hercules. Poirot is a homophone of "poireau" the French word for leek.
5. For whom did Merton's Catholicism prove fatal?	Lord Edgware Dies is a novel by AC, in which the murderer kills her husband so that she can marry the Duke of Merton. As a Roman Catholic, the Duke would not marry her if she were divorced, so she had to make herself a widow.
6. Local feature of tidal locking, recognised in part by Blake	Tidal locking is the phenomenon which means that one side of the moon is always facing the Earth, and the other is always the "dark side". William Blake refers to this in his poem Auguries of Innocence as "endless night ". Endless Night is a novel by AC.

- The first letters of each answer gives **MARPLE**.
- Miss Marple is a character created by AC.

	The book is the Huttonian Theory of the Earth by John Playfair , indicating a Playfair cipher.
Churston ? Andover	The ABC Murders, a novel by AC, features murders in Andover, Bexhill and Churston.
	Bex is a character from Eastenders. The character Lucien Bex appears in the AC novel the Murder on the Links. Bexhill - Bex = Hill , indicating a Hill cipher.
20 8 5 13 1 20 18 9 24	This indicates that we should use a 3x3 matrix when decoding the Hill cipher. It also indicates that we should use A=1 as applying that here spells out THE MATRIX.
GFYSGDZXSMETHZQBQD UGCTWMGKQIBF	Using MARPLE as the keyword in a Playfair cipher, this decodes to NEXT KEYWORD ON WHAT BONDS VANISHED.
	In the AC story the Million Dollar Bond Robbery, the bonds vanish onboard the ship Olympia .
IGYFABQTUNWNIUHNIQBK OACV	Using OLYMPIA as the keyword in a Playfair cipher, this decodes to BELGIAN'S NEURONES AND GLIA X
	Neurones and glia are types of brain cell. AC's Poirot often refers to his "little grey cells ".
ULSSEQSORAMRVRUBKF CBLUGESPZKAKJIRFKH	Using a 3x3 matrix with the numbers derived from the letters of GREYCELLS to decode this Hill cipher gives HEAD DOWN TO L NOTE RUNGED TREE AND BENCHTO R

<u>Page 5</u>

- The theme of this page is NG.
- American Gods by NG features a **bank robbery**.

	1
Cecherion of de Wieds Marmad WillLiam HARTSTON	The Sloth by William Hartston. NG co-wrote the comic "Sloth" for the Seven Deadly Sins series.
	The shadow of the moon on the Earth. Shadow Moon is the main character in American Gods, a novel by NG.
	The Ocean at the End of the Lane is a novel by NG.
	Snow, Glass, Apples is a short story by NG.
	Cinnamon is a children's book by NG.
??→	A map of the Wild 2 comet. The arrow and rocket indicates that we are looking for the name of the probe that took the picture of Wild 2. The probe was called Stardust. Stardust is a novel by NG.
Hemenway Baha Majoo Latt toot- Hight toot- Shoemaker Basin	Comets were a theme in the 2017 ATH, so this fits with the theme of past treasure hunts.

	A sand sculpture of the magician Dynamo.
and and	The Sandman is a comic book series by NG
Áth 🕇 ath	This is a representation of a road sign with an arrow pointing to the white space beyond it. Dublin is known in Irish as Ath Cliath and so the sign indicates a road to Dublin.
	The White Road is a non-fiction book by Edmund de Waal in which the author travels from China to Dublin.
	NG wrote a story poem called The White Road.
	ATH is a reference to the Armchair Treasure Hunt. ATH on a road sign with an arrow could be a representation of ATHEXIT (in which case, we have found it!).
	Another clue is that NG's White Road first appeared in an anthology called Ruby Slippers, Golden Tears.

1. T	T (as in ATH)
2. Who committed the first murder, somewhat mysteriously before the universe was created?	Saraquael in Murder Mysteries, a short story by NG.
3. Who had to stay below at the British Museum underground station?	Hunter (bonus hunt reference) in Neverwhere, a novel and TV series by NG.
4. Sin, Kin and Gaol, for example.	American Gods: Sin is a Haida deity, Kin is Mayan, Gaol is Iroqouis
5. Who was accidentally imprisoned for 72 endless years in place of his sister?	Dream in the Sandman, a comic book series by NG.

6. When the predictions were nice, what were good?	Omens . Good Omens, a novel co-written by NG, features the Nice and Accurate Prophecies of Agnes Nutter
7. Who robbed a bank with Moon, and when did they meet?	Wednesday in American Gods, a novel by NG.

- The first letters of each answer gives **TSHADOW**
- Shadow is the name of the main character in American Gods, a novel by NG.

"I can never fear that things will go far wrong." – Thomas Jefferson	The Jefferson quote continues <i>"where common sense has fair play</i> " indicating a Playfair cipher.
	The morse code reads hill house.
	Hill House were a publishing firm and published American Gods.
	The picture is of Hugh Laurie as House.
	Hill house - House = Hill, indicating a Hill cipher.
UTPUQUQTLCNEFHBHTBMW PLGKBKWVBZAFCZ	Using TSHADOW as the keyword in a Playfair cipher, this decodes to MUMMY MAKER WITH HONORIFICS NEXT KEY
	American Gods features Mr Jacquel who runs a funeral parlour and does embalming.
RCMPFPGMOTNPAWOZPWOZ PONU	Using MRIACQUEL (Is and Js being interchangeable) as the keyword in a Playfair cipher, this decodes to MAIN GOD IN STORY TWO X TWO NO Q
	The main God in American Gods is Mr Wednesday aka Odin .
NSEPIROCHKIZSSOSMYUKV WOWUKOFGXSXIKJUGC	Using a 2x2 matrix with the numbers derived from the letters of ODIN, and an alphabet with no Q to decode this Hill cipher gives AFTER A BOGGY FURLONG NOTICE NO NUTS OR SPOONS

<u> Page 6</u>

- The theme of this page is EMcB.
- EMcB is a pseudonyms of Evan **Hunter**. He has also used the name **Hunt** Collins.
- He went to **Hunter** College.
- Let's Hear it for the Deaf Man (all the Deaf Man stories in fact) and Eight Black Horses, by EdMcB, involve **bank robberies.**

	The birds are: Merlin (Great White) Egret Yellowhammer (Bald) Eagle (American) Robin Identifying birds was also a challenge in the 2017 hunt, so this fits with the theme of past hunts . This is also a clue to the film The Birds, which was written by EMcB and is the required keyword below.
2	The first letters of the birds spells out MEYER and the ² indicates Meyer squared i.e. Meyer Meyer, who is a character created by EMcB.
	The band is called the Fuzz. Fuzz is a novel by EMcB.

1, 25 W 1, 25 W 25 3 A 25 25	Eight Black Horses is a novel by EMcB.
	Mischief from a painting called Mischief and Repose by John William Godward. Mischief is novel by EMcB.
	The music is Hark the Herald Angels Sing. The arrow indicates the first word. Hark! is a novel by EMcB.
	A dove and swede. In Eight Black Horses, a novel by EMcB, the character The Deaf Man uses the alias Den Dove, a play on the Swedish word for deaf (döv).
	Bjork's music video for Hunter. Evan Hunter was a pseudonym of EMcB.
	Steve Carell from the film Evan Almighty. Evan Hunter was a pseudonym of EMcB.
Α,	Linked with the previous picture, Steve Carell + A = Steve Carella, a character created by EMcB. Although this clue does not appear within the cipher box, we do actually need to use A=1 when decoding the Hill cipher on this page, so it has a double meaning.

1. Which larger than life house-doctor kept America in Republican control (and kept it)?	Theodore " Teddy " Roosevelt. He was a medical graduate and Republican President of the United States. He also kept the teddy bear that was named after him. Teddy Carella nee Franklin is a character created by EMcB.
2. Who wouldn't compromise with Koch?	Heckler & Koch are a German munitions manufacturer whose motto is "No Compromise". The Heckler is a novel by EMcB.
3. Associates of Almighty Hillman.	References to the film Evan Almighty and the car Hillman Hunter, gives Evan Hunter , a pseudonym of EMcB.
4. Where, in a lull, might you know to find:	 These flowers are: Musk rose Sweet Briar aka Eglantine Oxlips Honeysuckle aka Woodbine Wild Thyme Violet This refers to Act 2 Scene 1 of a Midsummer Night's Dream "I know a bank (bonus reference to bank) where the wild thyme blows Where oxlips and the nodding violet grows Quite overcanopied with luscious woodbine With sweet musk roses and with eglantine There sleeps Titania sometime of the night Lulled in these flowers with dances and delight" In EMcB's Hark!, the Deaf Man taunts Steve Carrella with Shakespeare quotes giving clues about his next crime. This is a similar clue to the theme of banks.
5. Which island was elected to a rocky parliament in duemilatredici?	Albert Isola was elected to the parliament of Gibraltar (a "rocky" parliament) in 2013 (duemilatredici in Italian). Isola is Italian for island. Isola is the name of the fictional city where many EMcB novels are set.

6. How was the Bank of Ireland alternatively known to Knight and Kemp?	 Robbery (with Violins) is a song by folk band Steeleye Span, originally known as the Bank of Ireland. Peter Knight and Rick Kemp were members of the band. The violin is crossed out, indicating that we focus on the robbery, to fit with the theme of bank robberies. Fiddlers is a novel by EMcB with a similar punning title.
7. For whom was dimly heard 27th of the 57 of the 87th?	The Deaf Man . Many of EMcB's novels are set in the 87th Precinct. He wrote 57 books in that series and number 27 is called Let's Hear it for the Deaf Man.
8. Added $C_6H_8O_7$ and removed $C_{11}H_{15}NO_2$. Quoi?	$C_6H_8O_7$ is citric acid. A dish to which citric acid is added would be SOURED.
	$C_{11}H_{15}NO_2$ is MDMA aka E.
	SOURED - E = SOURD .
	Sourd is the French word for deaf. A French person who is deaf will frequently say "quoi?". The Deaf Man in the EMcB stories would often use translations of "deaf" as pseudonyms.
	Writing out chemical formulae like this is known as the Hill System, a reference to the many Hill ciphers in the hunt.

- The first letter of each answer gives THE BIRDS
- EMcB wrote the screenplay for the Birds, the Hitchcock film.



ψ = 3sin2 Θ (r 4– r 2) if r < 1 ψ = 2sin2 Θ (r 2 – r -1) if r > 1 (three dimensional vortex)	An equation relating to Hill 's spherical vortex, suggesting a Hill cipher. EMcB wrote stories for Vortex science fiction magazine.
HEIKRBCMCQHENDKXKSOCPOZL	Using THEBIRDS as the keyword in a Playfair cipher, this decodes to THEMATIC AUTHOR'S PSEUDONYM EMcB's real name was Salvatore Lombino (although he later changed it to Evan Hunter), so Ed McBain was a pseudonym.
MDIGFLEAONPTTIPTSWOTQSENU SNW	Using EDMCBAIN as the keyword in a Playfair cipher, this decodes to DEAF NOVEL FOUR FOUR X FOUR MATRIX The fourth EMcB novel to feature the Deaf Man was Eight Black Horses
RSZIOTTRGXAMBNIWJGQNLOSS GNZSNEZVVTEHNCJPCENCNZOH	Using a 4x4 matrix with the numbers derived from the letters in EIGHTBLACKHORSES to decode this Hill cipher gives TAKE MAIN PATH UP WNW A HUNDRED RODS TO CLEARING WITH A POST

Page 7

- The theme of this page is TF.
- The Thought Gang by TF is about **bank robbery**.

	Tim Hunter directed episodes of Twin Peaks, a series which also incorporated music by the Thought Gang, a band named after a novel by TF. He directed an episode called the One-Armed Man.
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A "one armed bandit" Lyttleton Harbour, New Zealand, just North of Banks Peninsula (indicated with the moneybag to the top right). + US vice president Hubert H Humphrey - Humphrey Lyttelton One-Armed Bandit Lyttelton + Hubert Humphrey - Humphrey Lyttelton = One-Armed Bandit Hubert Hubert is a one-armed bandit in the Thought Gang by TF.
John Cleese in a Monty Python sketch Kilimanjaro Expedition. In the sketch they plan to climb "both peaks" of Kilimanjaro, so this is a reference to Twin Peaks.

1 💽 = 🔊 -	Michelangelo's David - Claude Michel's Poetry & Music = Angelo Badalamenti and David Lynch, who collaborated as Thought Gang = Three of Rodin's Thinkers (a "thought gang") MICHELANGELO & DAVID - MICHEL = ANGELO & DAVID = THOUGHT GANG The Thought Gang is a novel by TF
2. Who thematically lost in 1957 to a future chess champion in Milwaukee?	Bobby "Fischer" beat "Tibor" Weinberger in the 1957 Milwaukee tournament. So they both have a nominal link to TF. Bobby Fischer is also mentioned in Gambit by RS.
3. Under what circumstances shouldn't you read this book?	If You're Stupid - There is a story collection by TF called Don't Read This Book If You're Stupid.
4. At what does the black dog repeatedly run?	The Black Dog Runs at Night is a track on the album Thought Gang, named after a novel by TF.

	The lyrics repeat "the black dog run at night" over and over.
5. Flower chamber hot lobster stew black pepper and melting?	All types of pot .
	The Collector Collector is a novel by TF which is narrated by a Sumerian pot.
	Eddie Murphy +
	Alex Murphy's coffin
	Potatoes aka murphies
	- Alex from the Telegraph comic
	EDDIE MURPHY + ALEX MURPHY'S COFFIN - (both) MURPHIES - ALEX = EDDIE COFFIN
	Eddie Coffin is a character created by TF in the Thought Gang.
7. What subbatrachian location couldn't be worse in Hungarian?	Under the Frog is a novel by TF.
	It takes its name from a Hungarian phrase where being "under the frog" essentially means things cannot get any worse.
	In Hungarian the title is "a béka segge alatt".
8. Who iS it iSpy, fortis et fidus?	iSpy is a song by Kyle.
	Fortis et fidus is the motto of the MacLachlan clan. The similar "Fortius Quo Fidelius" is the motto of Gringotts Bank .
	Kyle MacLachlan appeared in Twin Peaks. Twin Peaks creator David Lynch was part of Thought Gang, named after a novel by TF.
7月 二日 19月 1日 9. perhaps?	Babylonian Cuneiform text for AABRAAM / Abraham.
	Abraham was a Sumerian , like the pot in the Collector Collector by TF.
	Cuneiform text is also Sumerian in origin.

- The first letters of each word gives **TWIN PEAKS**.
- Twin Peaks was directed by David Lynch, who produced music as Thought Gang, named after the novel by TF.

9781138833876	ISBN of a book entitling the Philosophy of Play The painting is called Fair and is by artist "Tibor" Boromisza, so there is a nominal link to TF. Together suggesting a Playfair cipher
Thewale-107-	"Fischer" (link to TF) Hill wine, suggesting a Hill cipher
EVPCQLINPCBZCL ACNPFNPNWNEM	Using the keyword TWINPEAKS in a Playfair cipher, this decodes to AUTHOR WITH PRECEDING INITIAL
OPWCPNKIEWPBE UPGHQLHNCENAI TPSFSRQA	Using the keyword TFISCHER in a Playfair cipher, this decodes to NO Z FOUR X FOUR BOOK AND AUTHOR'S INITIALS
ISLYXKHVTAPPJ WKJVWKMOXNYJ RWSMBTF	Using a 4x4 matrix with the numbers derived from the letters in THETHOUGHTGANGTF and an alphabet with no Z to decode this Hill cipher gives SHARP RIGHT INTO WOOD CONTINUE TO BANK

<u> Page 8</u>

- The theme for this page is AMacL.
- The Satan Bug by AMacL involves a **bank robbery**.



Puppet on a Chain is a novel by AMacL
AMacL wrote a non-fiction book about Lawrence of Arabia
Jamaica Inn, which was once owned by AMacL
The hunting tartan of the "MacLeans" (nominal link to AMacL) of Duart

GUYNRSUM?	Fear is the Key is a novel by AMacL.
	Using the keyword FEAR in the Playfair cipher, this decodes to IS THAT SO?
LSOUNHER	Using the keyword FEAR in this Vigenere cipher, this decodes to GOOD IDEA
	(Vigenere ciphers appear in red throughout the hunt, the exception being the cipher on page 1).
XNLGQGCDLRPQWXOJ!	Using a 2x2 matrix with the numbers derived from FEAR in this Hill cipher, decodes to BRAVO A RED HERRING!

• The solution to the crossword is:



- One Across, Two Down is a novel by RR. These answers in the crossword give **AUTHOR IS THEMATIC**, showing that RR is a theme in the hunt.
- Air Force One is Down is a novel by AMacL, and AIR FORCE is the answer to 1d.
- Two of the answers opaquely and obscured appear in the instructions on page 1.

1. H	H for Hunt (as in ATH)
2. Where are the Antarctic, Hamberg, Alfred and Misery?	They are all mountains on Bear Island , which is the name of a novel by AMacL
3. See crossword, one is swapped.	Air Force One is Down is a novel by AMacL. The answer to 1 down in the crossword is AIR FORCE, swapped this gives One Down is Air Force.
4. Marked by tailors on land, but at sea one fewer do what?	In a church (and in the novel by Dorothy L Sayers, theme of the 2009 hunt) a death is marked when the Nine Tailors (bells) Toll.
	"Eight bells" is a nautical euphemism for a death at sea. When Eight Bells Toll is a novel by AMacL.
5. What takes a single day in Ireland but two decades in the Mediterranean?	The action in James Joyce's Ulysses, set in Ireland, takes place in the course of one day. Homer's Odyssey covers twenty years.
	HMS Ulysses is a novel by AMacL.

6. Hungary or Alaska, where no man has been before, almost.	The Last Frontier is a novel by AMacL set in Hungary. Alaska is known as the last frontier, including in a US TV show. Space is described as the <i>final</i> (so almost last) frontier in Star Trek, where they boldly go where no man has gone before. Space travel was a theme of a previous hunt (2013).
7. Reilly's with a variegated equid is Stuart's.	Ice Station is a novel by Matthew Reilly. Add the variegated equid and you get Ice Station Zebra, which is a novel by AMacL, whose pseudonym is Ian Stuart.
8. In what was the aim to denude the city of life, rather than the entire world as threatened?	The Satan Bug is a novel by AMacL. In the story the villain threatens to release a bug that would infect the whole world, but it is a ruse to empty the City of London so he can commit a bank robbery .
9. Which heroic mountaineer braved the elements on 11 23 18 8 10?	The numbers here are the atomic numbers of Sodium (Na), Vanadium (V), Argon (Ar), Oxygen (O), Neon (Ne), spelling out NAVARONE. Using atomic numbers to spell things out with element abbreviations was a device used in the 2012 hunt, so this fits with the theme of previous hunts . The Guns of Navarone is a novel by AMacL, in which Keith
	Mallory is a heroic former mountaineer.

- The first letters of each answer spells out **HBOTULISM**.
- Botulism in the toxin used in the Satan Bug, a novel by AMacL.

CAPTAIN CANADAY	Captain Calamity is the nickname of a sailor called Stuart Hill, indicating a Hill cipher. Stuart was AMacL's middle name, and he used Ian Stuart as a pseudonym.
	The TS Playfair, indicating a Playfair cipher.

	The man himself Blaise de Vigenere, indicating a Vigenere cipher.
59.08372 -97.96944	The co-ordinates of "MacLean" Hill, indicating a Hill cipher and a nominal reference to AMacL.
WLCFPDPGETSIGPTENDIUHS LDLIUIPNPUOWODQZ	Using the keyword HBOTULISM in a Playfair cipher, this decodes to VIGENERE FOILER OF DIABOLICAL BANK ROBBERY "Diabolical" refers to the Satan Bug, when the heist is foiled by Pierre Cavell.
IPVVVBVHMIPSXAPRJXDOJO	Using the keyword PIERRECAVELL in a Vigenere cipher, this decodes to THREE X THREE HIS LAST BOOK AMacL's final book, published posthumously, is Santorini.
DJYYZMMHVETVJBJFQJWZQ OJZSALELZFXTADSTILNHY	Using a 3x3 matrix with the numbers derived from the letters in SANTORINI to decode this Hill cipher gives FROM TRUNCATED TREE WIDDERSHINS FOR THIRTY YARDS

<u> Page 9</u>

- The theme of page 9 is JS.
- How Mr Hogan **Robbed a Bank** is a short story by JS.

SPP -	Red Pony is a novella by JS.
	Burning magnesium.
	Burning Bright is a novella by JS.
	Cup of Gold is a novel by JS.
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	The actress Pearl White. The Pearl is a novella by JS.
	The Streatham portrait of Lady Jane Grey aka the Nine Day Queen, so she had a short reign Billy Boyd as Pippin in The Lord of the Rings. 4 = IV The Short Reign of Pippin IV is a novel by JS.
Try as I like to find the way, I never can get back	This is a line from the poem the Land of Nod by Robert Louis Stevenson. The Land of Nod is located East of Eden, which is a novel by JS.
журнал красных сельдей	Russian for Red Herring Magazine. This is not a red herring as A Russian Journal is a non-fiction book by JS.
	See below for RR link. <i>Additional explanation:</i> The Grapes of Wrath, which is written in three parts, has been described as "Steinbeck's Major Triad". In this context this could mean three major chords (rather than the more technical meaning of Triad which is three notes comprising a chord).

	Black is white in this set-up (the black and white square are reversed to normal), so the black pieces move first, playing as white. They can move in either direction as they are kings. The board might also be rotated 90 degrees (because the double corner should be on the right) but that makes no difference here.
	 This sequence results in a win for "white" (shown as black): 1. Black moves NW from S to C 2. Red moves SW from E to Z (takes black) 3. Black moves SE from S to E 4. Red moves NE from Z to C 5. Black moves NE from E to H (takes red) and then moves SE from H to S (takes the other red)
PNXCJZGRW IYSPCQCZLGQ	Using the keyword CZECHS in this Vigenere cipher, this decodes to NOT A CHESS GRANDMASTER. This refers to the story in the Newsletter which referred to Grandmaster title being awarded in 1997, which in fact refers to RR being awarded the Mystery Writers of America Grandmaster Award in that year.
	Blaise de Vigenere, indicating a Vigenere cipher.

1. Take a torch if treasure-seeking after 15:24 on Christmas Day (and be Major).	The moon set on christmas day at 15:24. One would need a torch after nightfall if there was no moon. The Moon is Down is a novel by JS.
· D.	"Be major"and the Hunter tankard refer to Major Hunter a character in the Moon is Down.
2. £25 in debt.	A pony is slang for £25. Being in the red means being in debt. Red Pony is a novella by JS.
3. Who was discontented in winter?	The Winter of Our Discontent (taken from a quote in Richard III) is a novel by JS. In the novel, the discontent is Ethan Allen Hawley.
4. Which well-prepared but frequently unsuccessful plots	The Robert Burns poem To A Mouse:

bring nought but grief and pain?	The best-laid schemes o' mice an' men Gang aft agley, An' lea'e us nought but grief an' pain, For promis'd joy! Of Mice and Men in a novella by JS.
5. Despite the 14:19 revelation, the truth marches on.	Revelation 14:19: The angel swung his sickle on the earth, gathered its grapes and threw them into the great winepress of God's wrath. The Battle Hymn of the Republic contains both "his truth is marching on" and "He is trampling out the vintage where the grapes of wrath are stored" The Grapes of Wrath is a novel by JS.
6. Whose acts were published8 years posthumously?	The Acts of King Arthur and His Noble Knights was published 8 years after JS' death.
7. Linus and Marie each had two different ones, but neither was literate.	Linus Pauling and Marie Curie were each awarded two different Nobel Prizes , none of which were for Literature. JS won the Nobel Prize for Literature in 1962.

- The first letters of each answer spells out MRHOGAN.
- How Mr Hogan Robbed a Bank is a short story by JS, which fits with the theme of **bank robberies**.

Mexico 1968 Silver medley relay 2/4	Judy Playfair won a silver medal swimming the 2nd of 4 legs of the 4x100m medley relay at the 1968 Mexico Olympics, indicating a Playfair cipher. Janet May "Steinbeck" was another member of the medley team.
100E77ST	100 East 77 Street in New York is Lenox Hill Hospital, indicating a Hill cipher. JS was treated at Lenox Hill Hospital
DPSOGHQIFHTUQYRYE XIPKCBDCPFACPLA	Using the keyword MRHOGAN in a Playfair cipher, this decodes to AUTHOR'S FIRST TWO WIVES CONCATENATED

SEKZFAQNWCBQXCYF HDUFVHFZHWLX	JS' first two wives were called Carol and Gwyn Using the keyword CAROLGWYN in a Playfair cipher, this decodes to MISTER HOGAN STORY FIVE X FIVE NO Z
MXLSBJDFJEPGSFIRPF NIUVAEXTGBUL	Using a 5x5 matrix, with the numbers derived from the letters in HOW MISTER HOGAN ROBBED A BANK and no Z in the alphabet, this Hill cipher decodes to LOOK FOR A TREE WITH VERY MANY TRUNKS

<u>Page 10</u>

Taking the position each piece moves to from the poster chess puzzle spells out SNL5 ON BLT3 on this board. This is the meaning of the Breaking News comment. It shows the solution if you break the code in the newsletter.
The words on this board read: MOVE FOUR A PAWN UP (BANK POST 3 EXIT E82 OAT 5 S B E 0 ATOM OOZ 1 JINGLE) 9 TO B5 MATE, which suggests we need to find a solution to give checkmate on move 4 by moving a pawn to b5. This solution achieves this requirement: 1.d4 c6 2.Kd2 Qa5+ 3.Kd3 Qa3+ 4.Kc4 b5# Taking the position each piece moves to spells out 5NG3MATE, which suggests that we need to find a solution to give checkmate on move 5 by moving a knight to g3.
This solution achieves this requirement:
1.e3 e6 2.Qg4 Ke7 3.Ne2 Kf6 4.Qxg7+ Kf5 5.Ng3
Taking the position each piece moves to spells out OPEN LOPEZ. This is a reference to the Ruy Lopez opening (Open Variation), which is:
1.e4 e5 2.Nf3 Nc6 3.Bb5 a6 4. Ba4 Nf6 5. 0-0 Nxe4
Taking the position each piece moves to spells STONEBOOTS .

	Emma Stone in Zombieland
-3	The arrow is indicating her boots, signifying STONEBOOTS.
	Silje Vige , Norway's entry for Eurovision in 1993.
	African locust bean, also known as a nere.
	Together these signify a Vigenere cipher
UTSFESGVBXLTQESTHWV	Using the keyword STONEBOOTS, this Vigenere cipher decodes to CAESAR SHIFT ACROSTIC
	This indicates that whereas previously the questions on each page formed an acrostic to spell out the keyword for the ciphers, here the letters have been subject to a caesar shift.
Australian dislikes undiminishing intense criticism as civilian pilot critiques ailing	This contains references to three novels by Kerry Greenwood featuring the detective Phryne Fisher.
Latvian.	In Flying Too High, Phryne Fisher demonstrates her skills as a civilian pilot.
	In Death at Victoria Dock (featuring a bank robbery), she investigates after a Latvian dies in her arms.
	An Australian who dislikes being gored by critics might well say "Ruddy Gore", another book in the Phryne Fisher series.
	Ruddy Gore features the G & S operetta Ruddigore. This appears in the image metadata and is partly set in the town of Rederring, indicating that this is a red herring.
	Kerry Greenwood also wrote Urn Burial, indicated by the urn within the envelope box.
	Kerry Greenwood's husband is David Greagg, a wizard and an Australian, so literally a Wizard of Oz. But, like in the film, finding him does not add anything to what we already have.

	Inspector Endeavour Morse / John Thaw
Huloo hehmor slo ef huo Foyr. Huer er ath an algol.	The blue text is a substitution cipher which can be decoded from basic principles (i.e. educated guess). It decodes to: THREE TITLES ARE IN THE NEWS . This means that there are three titles of our hidden thematic author RR in the newsletter. These are: Going Wrong, The Thief, and The Reason Why.
	The black text is the same substitution cipher which decodes to: THIS IS OUT OF ORDER . The location pictures and instructions on the other pages appear in the correct order, whereas this page is "out of order" as it comes first in the sequence.

1. What is 1/10 of 1m and may have arrived as the dinosaurs left?	The Iridium Anomaly , which was a result of the meteor impact that caused the extinction of the dinosaurs.
2. If Nathalie had in fact owned a cat, what might she have called it?	The French Europe Minister Nathalie Loiseau joked that she had named her cat Brexit. But she didn't own a cat.
3. What could be a violin, banana or camel?	These are all types of spider (as is a Hunter)
4. What ambiguous abbreviation could be out by a factor of 1.852 x 10 ¹² ?	This factor would be used to convert Nautical miles (NM) to nanometres (nm) and <i>vice versa</i> .
5. What (White) Russian bishop is buried under the Vatican?	In chess in Russia, the bishop is replaced with an elephant. The remains of a white elephant named Hanno are buried under the Vatican.
6. What is the volume of a short, hot cylinder of height a and radius z?	To calculate the volume we would calculate the area of the base of the cylinder using πr^2 then multiply by height.

	This would give pi x z x z x a So the short hot cylinder is a pizza.
7. Who killed his mother for conspiring to kill his father for apparently killing his sister but then, according to some, met his sister again?	According to Homer, Orestes killed his mother Clytemnestra, whose lover had previously killed Orestes' father Agamemnon, who had earlier killed his daughter and Orestes' sister Iphigenia. However, according to Euripides, Iphigenia is not killed but rescued from Agamemnon at the last moment. She is later reunited with Orestes in Tauris.
8. Who inspired a Modest opera, a bemusing Trial and an endless orgy?	 Flaubert's novel Salammbo was the basis of an opera by Modest Mussorgsky. He inspired Kafka, who wrote the Trial. He also inspired Mario Varga Llosa, who wrote The Perpetual Orgy about Flaubert's Madame Bovary.

- The first letter of each answer spells IBSNEPOF.
- Applying a Caesar Shift as instructed by the chess code, this decodes to **HARM DONE**. All the letters in the plain text are shifted +1 letter in the alphabet to achieve the cipher text.
- Harm Done is a novel by RR.

	This looks like it might be a hill but it is painting called View above Ascott towards Brailes Hill by Annabel Playfair , signifying a Playfair cipher.
103609	The greek urn before the number signifies we are looking for URN103609, which is the registration number for Hunters Hill college, signifying a Hill cipher.
DRGEQPEGPRR BBQGKXOVIFXB ECVRCEDVTSK	Using the keyword HARMDONE in this Playfair cipher decodes to MAIN PUNISHMENT FIVE X FIVE NO Z DECRYPT IS AIDDE
QRLRRC	This tells us that the decrypt is an aid that will help us, alerting us to the fact that we already have the decrypt rather than the encryption.

	Main punishment refers to the maritime punishment of being flogged over a cannon, called Kissing the Gunner's Daughter , which is a novel by RR.
DJXIABXIURMR QPLYALMOBVO LWCTUAQ	A 5x5 matrix with the numbers derived from the letters of KISSINGTHEGUNNERSDAUGHTER cannot be used to decode this cipher text. This is because the matrix cannot be inverted. The Fatal Inversion is a novel by RR. Instead we use the matrix described and an alphabet with no Z to <i>encode</i> these letters in a Hill cipher. This encodes to give THEMATIC BOOK PLUS AUTHOR'S INITIAL A novel by RR on the theme of bank robberies is Make Death Love Me . The initial R is also needed to give 16 letters for the next key.
RLCIUOHVNQPN	Using a 4x4 matrix with the numbers derived from
RGIKLMNBEITJ	MAKEDEATHLOVEMER, this Hill cipher decodes to START AT MY BLUE PLAQUE HEAD N

<u>Page 11</u>

- The theme of this page is JKR and the Harry Potter (HP) books.
- In HP and the Deathly Hallows, HP and associates **rob a bank** vault.

"Circle inscribed in an equilateral triangle with altitude"	This describes the following shape:	
	This is the symbol of the Deathly Hallows. HP and the Deathly Hallows is the book in which the bank robbery takes place.	
I expect PANS1/2!	"I expect" is "expecto" in Latin.	
	PANS1 and PANS2 are abbreviations for proteins Patronus 1 and Patronus 2.	
	This signifies "expecto patronum", a spell used in the HP books.	

	Guy Fawkes. In the HP books, Albus Dumbledore has a pet phoenix called Fawkes.			
	The Frigate Hermione. Hermione Granger is a character in the HP books.			
	The constellation Draco. Constellations were a theme in the 2017 hunt. Draco Malfoy is a character in the HP books.			
	Hedwig of Denmark. HP's owl is called Hedwig.			
	Henri L'estrange. Bellatrix Lestrange is a character in the HP books. It is her vault that is robbed in HP and the Deathly Hallows.			
For the stronger we our houses do build, The less chance we have of being killed.	This is an excerpt from the Tay Bridge Disaster, a poem by William McGonagall. Minerva McGonagall is a character in the HP books.			
	Terry Butcher the footballer. In the HP books, a Hogwarts student Terry Boot (another TB) is punished for announcing the robbery of Gringotts Bank. Terry Butcher and HP also both suffered head wounds that left them with permanent scars.			

1. Who only nearly qualified for a certain Hunt?	In the HP books, the ghost Nearly Headless Nick just misses out on qualification for the Headless Hunt .
2. Who drove the <i>Knox</i> Bus?	Nox is Latin for "night" so K-nox equates to K-night.

	The Knight Bus first appears in HP and the Prisoner of Azkaban and is driven by Ernie Prang.	
3. Whose fluency in gobbledygook gained him a Ministry job with thematic links?	In the HP books, Dirk Cresswell was fluent in the goblin language of Gobbledegook. He got a job at the Ministry of Magic as the Head of the Goblin Liaison Office. The goblins run Gringotts bank , which is robbed by HP in HP and the Deathly Hallows.	
4. Who took the South Pacific by storm in 1998 and was also big in Eastenders?	Severe Tropical Cyclone Ron struck Tonga in 1998. Big Ron is a character in Eastenders. Ron Weasley is a character from the HP stories.	
5. What service should have been flowery (and possibly snowy)?	The Owl Service by Alan Garner which features a dinner service which had a design that magically changed from flowers to owls.	
	Owls feature in the HP stories. They provide a postal service. Another meaning of "flowery" is "high-flown", which would describe the owl's postal service. HP's own owl Hedwig is a snowy owl.	
6. Who was not allowed to present a paper to the Linnean Society because the associated chromosomes were too similar?	In 1897 Beatrix " Potter " submitted a paper "On the germination of the spores of the Agaricineae" to the Linnean Society. She did not present it herself, which may have been because they did not allow women to present (they did not admit female members at the time); i.e. because her chromosomes were too similar being a female XX rather than a male XY. (However, the Society's own website says that it was common practice for a paper to be presented by someone other than its author, so it may not have been to do with her sex). There is a nominal link to HP.	
7. What can be caused by the sus scrofa papillomavirus?	This is also known as swine papillomavirus which causes swine or "hogs" to develop warts. Hogwarts is the name of the school attended by HP.	
8. 👯	<i>Accio</i> , the summoning spell from the HP books: the cup used to be over on the left and has moved to the right.	
9. Smirk! I scored bad girls this year.	Smirk = grin. Kath Gotts is a composer who wrote the music for Bad Girls the Musical.	

	Gringotts is the bank robbed by HP.
10. Was waren die letzten fünf deutschen Wörter des Films mit unterschiedlichen	This says, in German, "What were the last five German words of the film with different titles in the USA and in GB?"
Titeln in den USA und in Großbritannien?	The film with different US/UK titles was HP and the Philosopher's (UK) / Sorcerer's (US) Stone.
	In German the title of the film was HP Und Der Stein Der Weisen.
11. If Parvati was a Gemini, what was Bane?	Parvati Patil is a character from HP who is a twin so she represents Gemini. Bane is a character from HP who is a centaur so he would represent Sagittarius . Sagittarius is also known as the Hunter .

- The first letter of each answer spells out NECROPHAGUS.
- Necrophagus literally means "death eater" and the Death Eaters appear in the HP stories.

The Cursed Child, a play written by JK Rowling featuring an older HP. And Pensacola Interstate Fair. Together they signify a Playfair cipher.		
In the HP and the Goblet of Fire, a portkey is hidden on Stoatshead Hill. Here we have a stoat , with an arrow indicating its head , followed by a question mark. Then a bottle of Pacheca port , and a car key . The Pacheca is a tawny port, and tawny owls feature in the HP stories. The key is from a Ford Anglia, which features in HP and the Chamber of Secrets. So stoat's head ? port key, means that the ? stands for Hill , signifying a hill cipher. The stoat followed by a question mark could also be a reference to HP's friend Ron Weasley, as while a stoat is not a weasel, it is weasle-y.		

TGSFFSMOBLHMQBETT	Using the keyword NECROPHAGUS with this Playfair cipher decodes to QUIDDITCH BALL FOLLOWED BY ANOTHER
EEHFDXGENLUCO	In the HP stories the quidditch balls are QUAFFLE, BLUDGER, GOLDEN SNITCH, so the next keyword will be some combination of these.
SPXFRGGCESEHAPKR	Using the keyword BLUDGERSNITCH this Playfair cipher decodes to NO Z HILL FIRST NAME OF VAULT OWNER
QHYTDUHKYRRS	The vault at Gringotts Bank that is robbed by HP is Bellatrix Lestrange.
JSPHNYLLKXJIGOEPQ CTHGGDBFQNWCVUUN LTQGVPVCR	Using a 3x3 matrix with the numbers derived from the letters in BELLATRIX, and an alphabet with no Z, this Hill cipher decodes to ONE CHAIN BACK FROM KEYHOLE INSIDE TREE CXCIXLVII

<u>Page 12</u>

- The theme of this page is EG.
- Le Dossier No 113 is a novel by EG which features a **bank robbery**.

Sauvez au moins le droit de chasse pour l'honneur	This is an extract from the poem A Bas la Liberte by Pierre Jean de Beranger. It translates roughly to "Save at least the right to hunt for honour".L'Honneur du nom (the Honour of the Name) is a novel by EG.
	The Virgin and Child in Orcival. Le Crime d'Orcival is a novel by EG,
6	The Thomas Alexandre Dumas Slave Memorial in Paris Les Esclaves de Paris (the Slaves of Paris) is a novel by EG.
	Instructions for how to make a toothpick disappear. Une Disparition (a Disappearance) is a novel by EG.

	Le Blanc, Fra	ance				
	+					
STENDUL	A book by St Rouge et Le				k on the cover. Le	
OTENDHAL -	-					
Vottaire	A book by Vo Blanc et Le N				ite on the cover. Le	
	There is also	a tiny red s	square at th	e end.		
	Le Blanc + L	e Rouge et	Le Noir - Le	e Blanc et Le	Noir = Le Rouge.	
		•	•		are also signifies n in a red box.	
	The red square is 4x4 pixels of various shades of red, with one pixel being grey. This might suggest a 4 x 4 matrix for use in decoding something. The colour of each of the pixels can be defined by RGB values in hexadecimal or decimal numbers (only the 'red' numbers are shown for the decimal numbers, as the G and B are almost always zero):					
	Hexadecimal	RGB				
	ce 00 00	ce 00 00	ce 00 00	ce 00 00		
	ce 00 00	6b 00 00	d8 d8 d8	ce 00 00		
	c0 00 00	6b 00 00	84 00 00	c0 00 00		
	a6 00 00	a6 00 00	a6 00 00	a6 00 00		
	Red only decimal					
	206 20		206			
	206 10		206			
	192 10 166 16		192			
				ble, making t	hem unsuitable for	
				be a red herrir		



Logo of Le Coq Sportif (a company founded by "Emil" Camuset). Monsieur Lecoq is a novel by EG and the character reappears in his other novels.	=	Francisco José de Caldas Caldas is a false identity of Lecoq in Le Dossier No. 113	=	An anagram of M. Verduret, which is another false identity of Lecoq. Incidentally, an army veteran is murdered in this novel.	This translates to "miserable bungler". SH describes Lecoq as such in a Study in Scarlet. These all refer to Lecoq.
Fern aloft	=		=		
An anagram of Fanferlot, a character in Le Dossier No. 113 by EG.		A grey squirrel. Fanferlot is nicknamed the Squirrel.		General Pierre Josef Dubois Joseph Dubois is a false identity of Fanferlot.	These all refer to Fanferlot.
Glad Rose	=	UJ			
An anagram of 'de Lagors'. Raoul de Lagors is the name used by James Spencer impersonating a grown up Raoul Wilson.		The Logo of the Wilson sporting goods company. In Le Dossier No 113 Raoul Wilson (his adopted name) dies as a child, but his identity is later stolen.		A model called James Spencer. A character called James Spencer appears in Le Dossier No 113 and impersonates Raoul Wilson / de Lagors.	These all refer to the same character - his real identity and his stolen identities.

405931 396189	405931, 396189 is an OS map reference for Cock Hill , signifying a Hill cipher.
	Its name is also a reference to the novel and the character Monsieur Lecoq by EG.
	The wine is called Rooster Hill, signifying a Hill cipher.
Rear NO	Its name is also a reference to Lecoq.
A,	The scrabble tile tells us to use A=1 in the Hill cipher.
File# Bank on RdP APB's Year of old tricks Picture of a Clown - an Criminal Code: Jashionable Old lady 24 hours Dressmaker Marriage The Catastrophe	 This tells us to use a 3x3 matrix when decoding the Hill cipher, with the following numbers File# = 113 (The English title of Le Dossier no. 113 is File no. 113) Bank on RdP = 87 (the bank's address is no 87 Rue de Provence) APBs = 39 (no 39 Rue Chaptal is the address of Auguste Proper Bertomy) Year of old tricks = 93 (a character refers to "the old tricks of '93") Picture of a Clown - an old lady = 2 (Lecoq, disguised as a clown, describes "picture no 2" as being of an old lady) Criminal code: 24 hours = 93 (Article 93 of the criminal code requires arrested persons to be examined within 24 hours) Fashionable dressmaker = 81 (the street number of the fashionable dressmaker)

	 Marriage = 15 (the marriage of M Prosper Bertomy and Mlle Fauvel takes place on the 15th) The Catastrophe = 22 (chapter number with this title)
	These details are all found in Le Dossier no. 113.
NZGZQFWDDJGMTZOWXCCVQ KXPEEKWRIZXW	Using a 3x3 matrix with the numbers indicated by the hints above, this Hill cipher decodes to ON WAY BACK PASS BENCH TO BIKE IF THIRSTY

Ruth Rendell

• There are references to RR throughout the ATH.

A STALL	The Crocodile Bird is a novel by RR.
	The Rottweiler is a novel by RR.
	The Fallen Curtain is a novel by RR.
	A birds eye view of Wexford. Inspector Wexford is a character created by RR.
Haydn's autoepitaph	Haydn said his epitaph should be Veni Scripsi Vixi. RR's motto on her coat of arms is Vixi Scripsi.
	An article about a grape vine in Santa Barbara. Barbara Vine is a pen name of RR.

a contraction	Tarzan written by Edgar Pice Burrows
	Tarzan, written by Edgar Rice Burrows.
	The Swaying Dancer, or the Dancer in Green, by Edgar Degas.
	Ragtime, written by E (Edgar) L Doctorow.
Ragtime	RR won three Edgar Awards for her writing.
	An art installation by Martin Beck.
	RR won a Martin Beck Award for Make Death Love Me.
•	The guitar chord is C major.
•	The piano notes are B, D sharp and F sharp which is the B major triad.
	An E Major chord on a ukulele.
	Together these chords make CBE . RR was awarded a CBE in 1996.
	Portobello mushrooms.
	Portobello is a novel by RR.
Mallan	Thirteen Steps Down is a novel by RR.

Location pictures, instructions, and finding the treasure

- Page 1 gives the hint "a boat ride is not needed but water is near". The treasure was found by the Lost Pond in Epping Forest near Loughton.
- Each of the pages 2-12 features a location picture and, once decoded, a snippet of instruction of how to reach the treasure. The pages appeared in the correct order, apart from page 10 (which elsewhere on the page has the coded message "this is out of order"), which is the first instruction.

• We start the trail in Loughton, home of RR. Loughton and Epping Forest feature in RR's **bank robbery** novel Make Death Love Me. This area of Loughton is also called "the **Hills**".

Pg	Picture	Instruction	Comments / our pictures
10		START AT MY BLUE PLAQUE HEAD N(orth)	A blue plaque for RR is on Millsmead Way in Loughton Essex.
2		TAKE SIGNED FOOTPATH WEST	Shortly after the lion, there's a footpath off Sedley Rise heading west towards Epping Forest.

3	FOLLOW PATH TO RIGHT BY FENCE CROSS ROAD	The road that we crossed was Baldwins Hill .
4	HEAD DOWN TO L(eft) NOTE RUNGED TREE AND BENCH TO R(ight)	We enter Epping Forest as indicated. It was very muddy.
5	AFTER A BOGGY FURLONG NOTICE NO NUTS OR SPOONS	A furlong is just over 200m but it seemed much longer because it was extremely boggy. One of our number slipped up and continued the hunt covered in mud. The picture is of Baldwin's Pond, and "no nuts or spoons" relates to the sign with the fishing regulations.

		Fishing is free on this water but please Bishing is free on this water but please Bishing is not allowed during the Bishing is the
		 Spoons, barbed hooks, braided lines or spinners. Only 2 rods may be used simultaneously. No plants or animals are to be introduced into the water or removed. Broken lines must be removed to protect wildlife. PHease take your
6	TAKE MAIN PATH UP WNW A HUNDRED RODS TO CLEARING WITH A POST	100 rods is just over 500m. We followed the main path for this distance until we found the clearing with a post.
7	SHARP RIGHT INTO WOOD CONTINUE TO BANK	We turned right into the woods until we reached the bank of the Lost Pond. The treasure would be hidden on the bank of the pond, which made sense of the bank theme.
8	FROM TRUNCATED TREE WIDDERSHINS FOR THIRTY YARDS	We spotted the truncated tree and headed widdershins (anticlockwise) for the required distance.

9	-61	LOOK FOR A TREE WITH VERY MANY	We found the tree and oriented ourselves with the "keyhole" in the picture.
		TRUNKS	
11		ONE CHAIN BACK FROM KEYHOLE INSIDE TREE CXCIX LVII	A chain is 22 yards. On the walk over we had noticed that some of the trees had metal tags with numbers, so we started looking for tags on the trees back from the direction we had come.
			The code CXCIXLVII is ambiguous as it could be 199 57 or 191 47. We found tree 19957, and the tallest member of the team was tasked with retrieving the box.

		We took token no 11. The message in the treasure box suggested that there may still be things to find, potentially indicating that there is another location to find.
12	ON WAY BACK PASS BENCH TO BIKE IF THIRSTY	We re-traced our steps, but took a slightly less muddy route back to Baldwin's Hill and the Foresters Arms for a well-earned lunch. We found this chap - Tally Ho!

<u>Metadata</u>

- The location pictures in the hunt pdf all contained links that took us to pages with bigger versions of the pictures.
- The new web pages each had a five letter word in the web address, as follows:
 - MORAL
 - REUSE
 - MINER
 - TREAT
 - YEAST
 - FOXES
 - COMMA
 - **AISLE**
 - **S**WORD
 - T1AKE
 - AW9AY
- The indicated letters could be removed, leaving a set of four letter words. The clue to this was the addition of the numbers into the final two words, leaving "TAKE AWAY" as an indication to do likewise in the preceding words. The removed letters spelled the message **MERRY XMAS '19**.
- Two of the pictures had phrases next to them in the hunt document, and longer phrases on their web pages.
 - Hind is readable became <u>Hex</u> I find is readable
 - Now we comply became <u>Now we compl**exif**y</u>
- The significance of these phrases is:
 - Exif is a format for storing metadata on image files. We need to look at the metadata for the pictures.
 - Hex code is going to be involved.
 - Things are about to get a lot more complicated.

• In the metadata of the pictures, there are various sections that appear to be in hexadecimal code, and the ASCII table should be used to decode it into letters, as hinted by the phrases above. These decode as follows:

Location of hex code	Hex code	Plaintext
Picture [2] XP comment	54 68 65 64 61 74 65 68 65 6C 70 73 73 6F 6C 76 65 74 68 65 63 6F 64 65	THE DATE HELPS SOLVES THE CODE
Picture [4] XP comment	49 66 49 77 65 72 65 6E 6F 74 61 6C 69 74 74 6C 65 6D 61 64 61 6E 64 67 65 6E 65 72 61 6C 6C 79 73 69 6C 6C 79	<i>If I were not a little mad and generally silly</i>
Picture [6] XP comment	49 73 68 6F 75 6C 64 67 69 76 65 79 6F 75 6D 79 61 64 76 69 63 65 75 70 6F 6E 74 68 65 73 75 62 6A 65 63 74 2C 77 69 6C 6C 79 6E 69 6C 6C 79 3B	<i>I should give you my advice upon the subject, willy nilly;</i>
Picture [8] XP comment	49 73 68 6F 75 6C 64 73 68 6F 77 79 6F 75 69 6E 61 6D 6F 6D 65 6E 74 68 6F 77 74 6F 67 72 61 70 70 6C 65 77 69 74 68 74 68 65 71 75 65 73 74 69 6F 6E 2C	<i>I should show you in a moment how to grapple with the question,</i>
Picture [9] XP comment	41 6E 64 79 6F 75 27 64 72 65 61 6C 6C 79 62 65 61 73 74 6F 6E 69 73 68 65 64 61 74 74 68 65 66 6F 72 63 65 6F 66 6D 79 73 75 67 67 65 73 74 69 6F 6E 2E	And you'd really be astonished at the force of my suggestion.
Picture [11] XP comment	4F 6E 74 68 65 73 75 62 6A 65 63 74 49 73 68 61 6C 6C 77 72 69 74 65 79 6F 75 61 6D 6F 73 74 76 61 6C 75 61 62 6C 65 6C 65 74 74 65 72 2C	On the subject I shall write you a most valuable letter,

- The lyrics are from the song My Eyes are Fully Open in Ruddigore by Gilbert and Sullivan.
- In the pictures with the metadata containing the lyrics, the information for "Author" is G&S i.e. Gilbert and Sullivan.

- Ruddigore is also known as the Witch's Curse, i.e. a Hex.
- Ruddigore is set in the town of Red(h)erring, so we do not think it will be any more use in solving the puzzles.
- The Loughton Operatic Society has performed Ruddigore several times, most recently in 1972.
- THE DATE HELPS SOLVE THE CODE, means the information in the DATE section of the metadata for each picture is relevant. The date shows the release date for previous ATHs and a device used in that ATH must be applied to decode the information in the XP comment section of the metadata for that picture.

Pic	Date	Relevant previous ATH device	Ciphertext found in XP comment section	Plaintext
[3]	2007 :12:14	Device based on Italo Calvini's Invisible Cities from the 2007 ATH	8,3,1 3,4,1 7,3,1 5,5,7 4,3,2 3,4,5 4,4,4 4,5,1 6,5,5 8,3,2 2,5,2 4,4,1 5,5,3 7,2,6 7,1,2 7,4,1 8,1,1 7,3,5 3,4,2 7,2,4 5,5,6 8,4,3 6,3,5 4,3,3	THE AUTHOR HAS THE COPYRIGHT
[5]	2009 :12:17	Based upon an MD5 encoding, and decodable with https://pablosath.c om/archive/2009/A TH2009/decode.ht m and the password chaharsalfremerge r	sBs0JxYtaTWA/liGBm XkDkInGu3X2C6Qkp4 e9eUhX2VT5Xbs8aOw oRDgZC3E3A	LOOK AT THE ANSWERS THROUGH THE LENS TO FORM A WORD
[7]	2011 :12:15	Putting the ciphertext through an Enigma machine online simulator with the settings described in the 2011 ATH	DEB DE N 2012 = 99 = ATH RJA = PABLO ODEGY UJBKC NOCVZ FMMFP XGDMD XUFZQ YDPXJ HQAVJ XLFJN KHFKE DLVTO QESEG PNVQI PMEZW GOHZF EAVHP XMDCD LMBHD BMNQT CIUX	DEBDEN 2012 NOTE THE CAMERA MAKE AND LOOK FOR THE WORD AT THE FRONT OF IT. IF YOU FIND THE WORD USE THE NEXT ONE OF THE SAME

				LENGTH INSTEAD
[10]	2014 :12:19	Device based on the New Oxford Book of Carols from the 2014 ATH	63 41 43 74 68 47 55 108 111 79 78 86 120 50 54 47 36 62 73 93 127 83 21 30 28 92 6 88 67 31 27 50 48 65	EACH WORD IS A STEP ON A LONG PATH FROM HERE
[12]	2016: 12:14	Device based on cricket cap numbers from the 2016 ATH	E641 E645 E415 E626 E577 E535 S302 S316 S310 S315 S329 S323 W258 W253 W151 N222 N277 N234 N266 s149 s84 s147 W306 s49 N236 W159 s103 W247	STEP IN DATE ORDER OF THE SUBJECTS

- The Enigma code includes Debden as the location from which the message has been sent. Debden is the next town from Loughton.
- The Enigma ciphertext also has references to PABLO and ATH.
- The first instruction is THE AUTHOR HAS THE COPYRIGHT. The AUTHOR section
 of the metadata for the relevant pictures includes a country or something else that will
 lead to an abbreviation that will identify the author(s) of previous ATHs. Information
 from the previous ATHs thus identified must then be used to decode the ciphertext in
 the COPYRIGHT section of the metadata for that picture.
- The second instruction is LOOK AT THE ANSWERS THROUGH THE LENS TO FORM A WORD. This tells us that these ciphers are not ciphers used in the earlier Hunts but rather are new ciphers created from answers to questions (or crossword clues) in the earlier Hunts. In each case, it is necessary to take the first letter of the answer, but tricky cases such as names and double answers (as in the 2014 Hunt) are treated differently depending on the lens indicated by the metadata. Where the lens appears as First, the first letter of the first word of the answer is always used. But where the lens appears as Sig, the first letter of the most significant word of the answer is used, which might include a surname or, say, N in the case of St Nicholas.

Pic	Author and abbreviation	Relevant previous ATH & decode method	Ciphertext found in Copyright Section	Plaintext
[2]	Albania AL (internet domain abbrev.)	Alcoholus Lubricatum set the 2014 ATH. The numbers refer to the question number throughout the 2014 hunt, and	41 27 4 52 5	HEARD

		the initial letter of each answer is taken.		
[3]	Shanghai Rapid Transit SHRT (abbrev.)	Steve Hames and Roger Thetford set the 2016 ATH. The cipher directs you to a page and then a question number. The letter to use is the initial letter of the answer. E.g. 12.1 means page 12, question 1.	12.1 3.3 6.1 10.5 2.4 8.2 7.1	DEPOSIT
[5]	Morocco MA (internet domain abbrev.)	Mark Abbott set the 2002 ATH. The initial letter of the answer to the numbered questions are used.	Q5 9 32 17 52 13 31	MANAGER
[7]	Bulgaria BG (internet domain abbrev.)	Barden Gnomes set the 2009 ATH. The cipher to be applied is references to letters in squares on a crossword grid.	X.4 I.2 I.5 XII.6 1.XIV X.14	LITTLE
[10]	Pitcairn PC (FIPS country code)	Paul Coombs set his final ATH in 2007. The cipher refers to taking the first letters of the answers to the questions indicated by the abbreviations.	Do3 Ta4 Mo3 HH3	WADS
[12]	South Georgia GS (internet domain abbrev.)	Garry Smith set the 2011 Hunt. The three letter reference shows the page, and then the number indicates the question to use:	Ord3,4 Obj5 Ord5 Abe5,1 Sem1,6 Ord1,2 Unb6	INCINERATOR

	take the answer to the question to spell out the keyword.		
--	--	--	--

- Another interpretation of the instruction LOOK AT THE ANSWERS THROUGH THE LENS TO FORM A WORD. The metadata fields that we think are relevant are the LENS MANUFACTURER and the APERTURE VALUE and we apply them to the words that we have found.
- Where the lens is First, we take the first letter of the word. Where the lens is Sig we take the letters identified by the aperture numbers, e.g. Sig 5.7 means take letters 5 and 7.

Pic	Decoded word	Lens	Aperture
[2]	HEARD	First	4
[3]	DEP O SIT	Sig	4
[5]	MANAGER	Sig	5.7
[7]	LITTLE	First	5.7
[10]	WADS	First	4
[12]	INCINERATOR	Sig	9.1

- The remaining letters can be rearranged to give: **READ STEP ID A NAME TITLE ADS IN A CORNER.**
- The removed letters can be rearranged to give: **LOW RIGHT**. We think that this refers to the red box in the low right corner of page 12 of the hunt.
- The next instruction is NOTE THE CAMERA <u>MAKE</u> AND LOOK FOR THE WORD AT THE FRONT OF IT. IF YOU FIND THE WORD USE THE NEXT ONE OF THE SAME LENGTH INSTEAD.
- For all the pages with a non-G&S author the camera make is DLM, except for page 12 which has no camera. Combined with the word "make" this refers to the RR novel **Make D**eath Love **M**e.These pages also have Ch1 as the camera model, referring to chapter 1 of the novel.
- The instruction suggests looking for the words found from decoding the Copyright at the front of "it". This means look for these words in the first chapter, or first few pages, of Make Death Love Me.
- HEARD, DEPOSIT, MANAGER, LITTLE & WADS are all in the first chapter, and the

next words of the same number of letters after them are: MONEY, BALANCE, CASHIER, OFFICE & SAFE.

- These are all **bank** related nouns and are consistent with a theme of the hunt.
- "INCINERATOR" is not present, however, because the instructions say "if you find" this suggests that not all the words are supposed to be there. This is also the word connected with the page that did not have DLM as the camera make.
- The word incinerator refers to the Loughton Incinerator **Thefts** which occurred between 1988 and 1992 from the **Bank** of England incinerator in Debden where they destroy old bank notes. This links into the bank robbery theme of the hunt.
- The final two instructions are: EACH WORD IS A STEP ON A LONG PATH FROM HERE STEP IN DATE ORDER OF THE SUBJECTS
- The penultimate instruction suggests the new words will be of use in a hunt, possibly to find ATHEXIT. However, the final instruction suggests the words are not yet in the correct order.
- PATH may be a reference to Pablo's Armchair Treasure Hunt.
- The final hint on the Pablo's ATH home page "Pablo's ATH unremitting, relentless labour." suggested that a url might be relevant. A path is part of a url, so we could be looking to write a long url consisting of the words we have found.
- The word "here" is expected to indicate where to start it might refer to Pablo's ATH homepage, pablosath.com.
- The text in the XP Title fields are cryptic clues to the *titles* of previous Hunts. The text in the XP Subject fields are cryptic clues to the *themes* of previous Hunts.
- The hunt to which these cryptic clues refer are summarised below:

Pic	Title / subject	
2	XPTitle: Adnate in Tawahi police station mess	
	Adnate means joined together. Tawahi is in Aden.	
	This is a reference to the 2017 Hunt, with the title Another Fine Mess, and cryptically describes the last few minutes of the Laurel and Hardy film of the same name.Laurel and Hardy are joined together within the skin of a wildebeest (possibly from Aden) and are chased by the police from one side of a tunnel to the other, along a railway line. The word "mess" is a more straightforward clue.	

3	XPSubject: Again peaks for the other side		
	This is a reference to the 2016 Hunt, for which lain Banks was a subtheme. It is simply a description of the fact that the land rises on both banks of a river.		
5	XPSubject: A good player should - beaten one		
	This is a reference to the 2005 Hunt, for which foxes were a theme. The word "fox" simply replaces the dash indicating that "a good player should fox (a) beaten one".		
7	XPTitle: Go in disguise - the ladies eat picnic		
	This is a reference to the 2012 Hunt, with the title Stopping by Woods, and refers to the song Teddy Bears Picnic (If you go down to the woods today).		
	The ladies in question are Baroness Ruth Rendell, who had polar bears on her coat of arms that look suspiciously like teddy bears, and Teddy Carella, an Ed McBain character who features prominently in his book Ladies.		
10	XPTitle: My local deeds me the best humous		
	This is a reference to the 2014 Hunt, with the title Life. The odd spelling of humous is a pun on the word "posthumous", where "humous" means ground, but there is also an implication that a person who is not yet post-humous must still be alive.		
	Deeds are used for the sale of land (i.e. ground) and were historically handled by local deeds registries. There is also a whale in H2G2 (a theme of the 2014 Hunt) who spent much of his short life inventing the word "ground".		
12	XPSubject: Maya P has top teller doing his job		
	This is a reference to the 1986 Hunt, for which magic was the theme. Maya P is the entrepreneur Maya Penn, while another Penn helps Teller do his job, namely magic.		

The next step appears to be to reorder the words in the order indicated by the subjects, presumably by using the date referred to, giving INCINERATOR, CASHIER, BALANCE as the three with subjects. The three with "titles" may follow on afterwards, the order not being clear from the instructions. Or alternatively we use the identified date for all the title/subjects to give INCINERATOR, CASHIER, OFFICE, SAFE, BALANCE, MONEY as the preferred order.

Muddy Boots Award

- In the first newsletter we were promised a formal announcement of the Muddy Boots Award on Gordon Banks' birthday, being 30 December. And we did indeed.
- The pictured goalkeeper was both a homage to Banks and he was also called Pablo (Sisniega). There was also a logo for the organisation Sport at the Heart or SATH, so again we had **PABLO'S ATH**.
- The border around the text is taken from the Tarot card inspired 2007 hunt, entitled the Fool on the Hill, so is in keeping with the theme of **past hunts.** In the 2007 hunt there were two locations to find, which seems to be true of this hunt, although we have yet to find the second.
- The quote about the mud was intended to warn and to pre-empt complaints about the muddy route to the Lost Pond.
- The announcement tells us that ATHEXIT is no longer in the first location (i.e. with the Oreos treasure), and we need to look for it elsewhere.
- The first letters of the words in the sentence beginning "Have all possible..." spell out **HAPPY NEW YEAR.**
 - There is also a hint here that checking all paths will be important in the hunt, and relates to the penultimate instruction from the metadata puzzle.