## Pablo's ATH 2022 <br> Alcoholus Lubricatum

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## Themes

As well as the obvious themes of witchcraft, 80 's computing and cats, we have the more hidden themes of Lewis Carroll (along with Oxford) and Jorge Luis Borges. Jorge Luis Borges was fascinated by Lewis Carroll and his short story "The Library of Babel" was in part inspired by a passage in Carroll's "Sylvie and Bruno". Matrices and telegraphy also get a look in. We don't know what the squirrels have to do with anything though...

## Decoded Messages

In case it makes marking easier, here are the main decoded messages that we found:

| Page 12 Quiz | ENJOY XMAS CAKE AND BLOW OUT LOVE DAPHNE HQ EDITORS |
| :---: | :---: |
| Page 5 Brian and Rosa | PUT ARROW MATRIX UNDER WOOD TOY TO MAKE WALK ON LETTER MATRIX AND START MOVES ON DARK BLUE E |
| Page 6 Arrows, Page 7 Block game, Page 14 Grid | EACH POINT ON THE BATTLESHIP MAP IS AN OXFORD COLLEGE |
| Page 7 Battleships moves / Oxford colleges | MAKE OXON SCARVES WITH HUE TABLE |
| Page 14 colours->scarves->college->letter | BLEND MAP AND DATA WITH ROSE ON CHRIST AND JACK ON ST JOHN AND REAPPLY COORDS |
| Overlaying Battleship map with BBC data | BEGINNING AT PATRON SAINT FOLLOW FELINES TO HOSTELRY AND THENCE PASS UPRIVER ALONGSIDE JACK AND LOCK BEYOND TO HOUSE WHERE ROSE LIES TO SEARCH OUT CORNER BENCHMARK |
| Page 13 Crossword | HANOI DESCRIBES WALK ON COLOUR GRID |
| Page 2+14 Hanoi on coloured grid from the yellow $L$ | LOOK INSIDE STONE |
| Page 10 Which is greater->phone message -> BBC decoder | BLOCK OUT LETTER WALKS AND CAT NAMES IN GRIDS AND COMBINE TO MAKE GRILLE |
| Page 14 Grille decode | FROM BM SET BEARING TO TWO SEVEN NINE AND TRAVEL ONE FOUR THREE METRES TO SMALL BRIDGE WHERE YOU WILL FIND PRIMARY CONCEALED TREASURE AMIDST CONCRETE RUBBLE XX |
| Page 8 Quick Reviews | MATHISON MACHINE |
| Punched code tape (various pages) | BY BRIDGE UNDER ASH |
| Page 9 Barnwood Border | TWENTY NINE METRES WITHIN BUCKELLS BOUNDS |


| Page 4 secret message decoder | HOUSE OF GOD |
| :--- | :--- |
| Page 5 CATSCAN | Path from Oxford Instruments / St Frideswide's Church up <br> Binsey Lane to Binsey given by the cats |
| Page 14 Registration | OVERLAY DEAD ENDS ON GOD AND THENCE THEN DEAD <br> LAMPS |
| Overlaying Catastrophe map on <br> BBC data | FOLLOW FELINES SEARCH UPRIVER BRIDGE |
| Page 11 Rosa Tech college code | DATA MATRIX IS THE KEY [before erratum was TME KEY] |
| Page 9 concertina Playfair | TRY SEVERAL DIFFERENT SEMATEXT DECODERS |
| Page 11 Wordsearch data matrix | p40 |
| Page 12 RLE code data matrix | sh1 |
| Page 3 Esoteric code data matrix | wall2 |
| Cistercian numbers data matrix | vl21 |
| DM combination (battleships) | Os2kd |
|  | NOW FOLLOW BOUNDARY NORTH TO BUCKELLS METAL <br> MEMORIAL AND LOCATE BONUS TREASURE IN CREVICE |
| Library of Babel | OF IVY COVERED TREE ON OTHER SIDE OF PATH |
|  | FOLLOW BUCKELLS PERAMBULATION STARTING WITH <br> JING JING STONE AND COUNT SIKS MARKERS DOESIL |
| Page 3 "book code" (Pitt Rivers) | THEN FOLLOW DITCH SOUTH |
| Page 8 Dr Boris | (Preoccupation with) ruin, rural minor road over water |

## Primary Treasure Directions

We ended up with Card 2 for the primary treasure.

## Directions Part 1

We get a mapping of Oxford colleges to letters from the page 12 quiz. This mapping is used in various places in the hunt. In particular the prices in the Brian advert give us the message

PUT ARROW MATRIX UNDER WOOD TOY TO MAKE WALK ON LETTER MATRIX AND START MOVES ON DARK BLUE E.

If we solve this puzzle (see the Fun and Games with grids section) we get the message

Which annoyingly we had already figured out but this is where it falls in the logical sequence of clues.

We now use the sequence of moves with the Battleship grid and the college to letter mapping to get

MAKE OXON SCARVES WITH HUE TABLE

If the colours in the copy protection grid are interpreted as Oxford college scarves, and then decoded using the same mapping of colleges to letters, this gives us

## BLEND MAP AND DATA WITH ROSE ON CHRIST AND JACK ON ST JOHN AND REAPPLY COORDS

If we do this (again see the Fun and Games with Grids section) we get

## BEGINNING AT PATRON SAINT FOLLOW FELINES TO HOSTELRY AND THENCE PASS UPRIVER ALONGSIDE JACK AND LOCK BEYOND TO HOUSE WHERE ROSE LIES TO SEARCH OUT CORNER BENCHMARK

This is the first half of the directions to the primary treasure. Patron Saint refers to St Frideswide's Church (St Frideswide being the patron saint of Oxford), the felines are the cats from CATSCAN which are mostly on Binsey Lane, Jack is Black Jack's Hole, the lock is Godstow Lock and the 'house where Rose lies' is Godstow Abbey where Rosamund Clifford was buried. An Ordnance Survey benchmark is carved into the stone in one corner of the Abbey ruins - this is the starting point for the second half of the directions.

## Directions Part 2

The crossword clues HANOI DESCRIBES WALK ON COLOUR GRID. Applying the moves given by the Tower of Hanoi puzzle on the copy protection grid gives us the message LOOK INSIDE STONE.

The 'Which is Greater...' phone message gives us a sequence of numbers which when put into the BBC secret message decoder gives us:

## BLOCK OUT LETTER WALKS AND CAT NAMES IN GRIDS AND COMBINE TO MAKE GRILLE

There are two "letter walks" on the page 14 colour grid referred to above - one from the sliding block puzzle, mentioned above and one from the Tower of Hanoi puzzle. The cat names in the grids are the names of the cats from "The Naming of Cats" on the grids on Pages 11 and 14.

The remaining squares in the copy protection grid spell the second half of the directions to the treasure:

FROM BM (benchmark) SET BEARING TO TWO SEVEN NINE AND TRAVEL ONE FOUR THREE METRES TO SMALL BRIDGE WHERE YOU WILL FIND PRIMARY CONCEALED TREASURE AMIDST CONCRETE RUBBLE XX

The treasure was indeed inside a stone if you follow these directions. (See Site Visits section.)

RUIN / RURAL MINOR ROAD OVER WATER fits with the abbey, and the path of the old Godstow road to the small bridge over the ditch.

Additional confirmation of the location is provided by the message from the Turing Machine decode of the CEO's name in the news story on page 2 decoded using the instructions in the punched tape, BY BRIDGE UNDER ASH.

## Extra Clues

Godstow Abbey is clued by the solution to the CATastrophe game and there is a box with cards (the Binsey Road Cat cards) in the location specified in the ending.

The BBC Micro decryption program produces the message HOUSE OF GOD when the supplied message from the editors is input - an additional clue to the treasure location near an abbey.

Dr Boris gives us 'Ruin - Rural minor road Over Water'
The Perch is clued by the Kipper answer to the riddle on Page 2.
The border of the Barnwood Electronics advertisement decodes to give the message:
TWENTY NINE METRES WITHIN BUCKELLS BOUNDS
The Pitt Rivers code gives:
FOLLOW BUCKELLS PERAMBULATION STARTING WITH JINGJING STONE AND COUNT SIKS MARKERS DEOSIL THEN FOLLOW DITCH SOUTH.

Both of these messages refer to the 'perambulation' of Robert Buckell, the Mayor of Oxford in 1866 to mark the boundary of Oxford. Six of the boundary stones placed on this perambulation still exist. There is a delightful newspaper describing the perambulation which sounds much mud-besplattered:
http://www.oxfordhistory.org.uk/streets/wayside_stones/boundary/boundary_descriptions/1886.html
The JingJing stone is the marker stone that was nearest to the JingJing oriental food shop on Cowley Road (Buckell's stone no 6). SIKS MARKERS DEOSIL indicates six (represented phonetically) stones further on in a clockwise direction (deosil is a witchcraft term for
clockwise), which thus leads to stone number 12, which is in Godstow near the Abbey. (Not sure if it is extant, but the descriptions place it close to the current Godstow Road.)

The message TWENTY NINE METRES WITHIN BUCKELLS BOUNDS is a confirmation of the main treasure location, at 29m east of a stream forming an approximately north-south part of the boundary defined by Buckell's perambulation of 1886 (see below), or possibly 29 m south of an old boundary stone (not observed).

The Binsey Road Cat Card is hidden in Godstow Abbey a few metres away from the ditch, so even if one does not have the full directions, one is likely to find that if one visits the abbey. (As we did...)

## Bonus Treasure Directions

We ended up with Card 7 for the bonus treasure.
The directions to the bonus treasure are found in the four data matrices concealed within the hunt.

## Borges and The Library of Babel

We have had various clues to Borges and The Library of Babel:

- Quotes from The Library of Babel on the Binsey Road cat card and the treasure card (Clearly, noone expects to discover anything and the formless and chaotic nature of virtually all books).
- The spherical fruits in the maze in CATastrophe
- Several of the names in Quick Reviews (see Quick Reviews for details of those).
- The crimson hexagons in the Barnwood and Rosa adverts: the books of the Crimson Hexagon-books smaller than natural books, books omnipotent, illustrated, and magical."
- The 22 letters in the library are reflected in all the $22 \times 22$ grids in the hunt
- Borge's name appears in the BBC decryption data

Text adventures and interactive fiction (e.g. Black Mirror:Labyrinth) also link to Borges' The Garden of Forking Paths.

In Quick Reviews, the phrase 'Enter the Labyrinth' comes from a different Borges short story The Two Kings and the Two Labyrinths. We have one king and one labyrinth with Rosamund's Bower and we hoped we might find another king with a labyrinth, but failed to.

Borges was fascinated with Lewis Carroll and in "Ficiones", Borges writes 'I am not the first author of the story called The Library of Babel; those curious as to the history and prehistory may consult the appropriate page of Sur No 59 which records the heterogeneous names of Leucippus and Lasswitz, Lewis Carroll and Aristotle.'

The library in the story was in part based on a section of Carroll's Sylvie and Bruno which concludes:
> "'The day must come-if the world lasts long enough-' said Arthur, 'when every possible tune will have been composed-every possible pun perpetrated-' (Lady Muriel wrung her hands, like a tragedy-queen) 'and worse than that, every possible book written! For the number of words is finite.'

We also have a link between Borges and Carroll in Borges' story On Exactitude in Science which elaborates on the concept in Sylvie and Bruno Concluded of a fictional map of a scale of a mile to a mile. Jean Baudrillard cites the Borges story in Simulacra and Simulation and The Matrix films paid homage in some sense to Baudrillard's work. So we have a link in some sense to matrices and the film The Matrix. Plus there's a cat in The Matrix called Dinah to complete a Carrolian cat connection.

Borges wrote a poem called To a Cat but we haven't managed to shoehorn that in anywhere!

## Data Matrices

We have found four data matrices in the hunt - from the 'Word Search' on page 11, from Esoteric Programming on page 3, from the Run Length Encoding on page 12 and from the Cistercian numbers in the page corners. We've also got an encoded message from Rosa Tech saying DATA MATRIX IS THE KEY. The Playfair cipher on Barnwood Electronics with key DATMRIX gives TRY SEVERAL DIFFERENT SEMA TEXT DECODERS. Both the Rosa and Barnwood adverts contain crimson hexagons also cluing The Library of Babel. Data matrices are sometimes known as semacode although we haven't worked out why we need to try different decoders - they all seem to give the same result.


The DM decodes of "wall2", "sh1", "v121" and "p40" give the wall, shelf, volume and page of a book in The Library of Babel site https://libraryofbabel.info/. This is one of several online implementations of Borges' Library of Babel concept, perhaps the earliest and most well known. It uses the same scheme of room / hex (long text), wall, shelf, volume, page that we have uncovered. Moreover, if one wants to encode a message using the search facility, one
almost always gets a hex of length 3254 (https://libraryofbabel.info/referencehex.html), which is the length of the text on the red hexagon on the Rosa Tech advert including the five initial underscores.

The room / hex identifier is made up of the Rosa text with the underscores replaced with "Os2kd". This is extracted from a fifth data matrix which is created by combining sections of the four original data matrices according to hints given in the Battleships game.

(See Page 7 Battleship Down! section for details.)
The page thus obtained from the Library of Babel site contains directions to a second, bonus treasure - NOW FOLLOW BOUNDARY NORTH TO BUCKELLS METAL MEMORIAL AND LOCATE BONUS TREASURE IN CREVICE OF IVY COVERED TREE ON OTHER SIDE OF PATH.

With confirmation from FOLLOW FELINES SEARCH UPRIVER BRIDGE, these directions are to be followed from the original treasure site to arrive at the second treasure location, close to another Buckell boundary stone made of metal. (See Site Visits section.)

## Other Directions

We also have two more sets of directions.

From the Baudot code and Turing machine, we have BY BRIDGE UNDER ASH, and from the overlay of the Catastrophe maze with the dead lamps on the BBC data, we have FOLLOW FELINES SEARCH UPRIVER BRIDGE.

## Defunct theories

One theory is that there is something at the Airman's Bridge in Wolvercote - we think there might be an ash tree there and the 'FOLLOW FELINES SEARCH UPRIVER BRIDGE' would make sense with that. We've also got The Flying Aces in the Quick Reviews and 'Brian' and 'Rosa' anagram to 'Air Barons'. The bridge was formerly known as Toll Bridge so features in the Godstow Witch story.

Another theory is that there is a sister treasure in Cambridge (given the Rosa connection to Cambridge) and that perhaps the 'FROM PATRON SAINT' instructions could actually work somewhere else as well. The Dark Tower could clue Cambridge University Library. We also haven't found all the CATSCAN cats despite trying quite hard, and wonder if they can also be overlaid somewhere else.

There is also the Rose Revived at New Bridge upriver on the Thames, which we think is where the Al Art Rivers photograph was taken. However, the FOLLOW FELINES doesn't work with that. As well as an appropriate name, it does have a nice corner benchmark to mirror the one at the abbey.

## Lewis Carroll

Lots of Lewis Carroll references including:

- CATastrophe ending
- Alice Door at St Frideswide
- Treacle Well at Binsey
- Godstow itself
- References to The Hunting of the Snark and Phantasmagoria on Page 2
- Bandersnatch on page 3
- College Foundation dates
- The Sourpuss and The Raconteur
- Wordplay and anagrams
- Memoria Technica in Christmas Card
- References in The Sourpuss and The Raconteur poem
- Crow as black as tar in CATastrophe

Lewis Carroll created a 'Telegraph Cipher' and a 'Matrix Cipher'. We have failed to use either of these, but they link to other themes of the hunt!

## Micro User magazine

There seems to be various clues to Micro User magazine:

- The list of items in the Brian advert is almost identical to that in the advert in one issue (see Brian for more details)
- The staff list job titles and order is identical to that in many issues.
- On page 15 of the November 1987 issue is a picture of Humpty Dumpty.

We are not quite sure what all this is cluing us to find though! There is a column called 'Alice through the VDU' about text adventures and puzzles and also a 'Mad Hatter' column, which would both link in with the Lewis Carroll theme.

We particularly enjoyed the following articles:

- On page 90 of the July 1985 issue, the Alice Through the VDU column mentions 'the dark tower' and also talks about Turing Machines mentioning Turing's middle name Mathison which is used in the message from the hurricane puzzle.
- On page 68 of the February 1985 issue, the Alice Through the VDU column mentions Sylvie and Bruno, the Hunting of the Snark, the Playfair cipher, a mural room in a text adventure (like the one in CATastrophe), a haunted abbey and puzzles involving a limited number of moves..
- On page 52 of the April 1986 issue, there is a column which mentions the Towers of Hanoi, Enigma, Alice and AI.

Sadly, none of these articles gave us any helpful hints for solving the remaining puzzles (although we did discover we could 'sniff' things in CATastrophe!).

## Godstow Witch Site

We have our suspicions about the website https://thegodstowwitch.com/ :-)
It is the only website containing the story of the witch, was created very recently and some of the quotes don't match where they claim to have come from. It reminds us rather of Bioy's Volume XLVI of the Anglo-American Cyclopaedia in fact.

The quote ascribed to The New Pocket Companion to Oxford does not appear in the actual book, likewise with the quote from Oxford in 1710.

Much of the information does however appear to be accurate: Roy Gascogine's association with Wolvercote Cycle Speedway, the broom in The White Horse pub, Coles Child, the engraving is indeed of the abbey and horse racing did indeed take place on Port Meadow.

The Godstow Nunnery text is from "The Antiquities of England and Wales" by Grose. It mentions both Rosamund's Bower, the labyrinth created at Woodstock by Henry II for Rosamund (a king and a labyrinth), and the secret tunnel from Godstow Abbey to Woodstock.

There are a number of typos in the website text, and we feel that we ought to be able to get something out of these but have failed to! We did wonder if they might clue the Medley Footbridge in Oxford over the Thames just south of Godstow, sometimes known as Subscription Bridge because of the typo on the plaque.

We were also hoping we might get something out of the history of the abbey included 'for the sharp-eyed amongst you to read' but failed to.

## Page by Page

## Page 1

## Cover

Looks like it was drawn by an AI.
15 November 1987 - on page 15 of the November 1987 issue of Micro User is a picture of Humpty Dumpty. Humpty Dumpty appears in the Quick Reviews and has a Lewis Carroll connection so we suspect this is not an accident.

Breaking the Code is a play about Turing's life, clueing the Turing Machine.
"Win fabulous prizes" - ATH reference

## Page 2

## Staff List

The staff titles are identical to those in Micro User magazine (from approx vol 2 No 8 to vol 3 No 8).

The staff names are anagrams of witches: Sophie Hatter, Moll Dyer, Mother Shipton, Catherine Monvoisin, Merga Bien, Malin Matsdotter, Magrat Garlick, Wicked Witch of the

East and Morgan Le Fay. We suspect that these probably just clue the use of anagrams more generally in the hunt and Lewis Carroll was a big fan of anagrams.

Why is a literate child like a smoked fish? We think the answer to this is not 'red herring' but 'kipper', a kipper being a smoked fish and Kipper a character in Biff, Chip and Kipper which some of us have spent far too many hours having read to us by children learning to read. (Oxford Reading Tree for literacy and the Oxford theme). The Kipper is a nickname for the pub the Perch near the treasure location.

Latest - we have the traditional Logica L. The colours used match that of the starting square for the Towers of Hanoi walk on the copy protection grid.

The photo is of towers in Hanoi, so this clues the Towers of Hanoi and hidden in the picture are the numbers 2345 giving us the starting position for the Towers of Hanoi puzzle.

## Velma to go Public

There are various references to Carroll's "The Hunting of the Snark" here - Charles Bellman, Andy Baker, "'The lawyers and the brokers have been beavering away for months", threatening with shares. The Hunting of the Snark features a bellman, baker, barrister, broker and beaver and of course to hunt a snark, one may threaten its life with a railway share.

VI is a text editor, which has cut and paste commands (keys " d " and " "p"), haven't seen any relevance.

## Drama at the Computering Awards

37th Annual... $=37$ th ATH

The picture is of Emile Baudot who invented the International Teleprinter Code (or Baudot Code) used on the punched tapes. The letters under his name are the tape that we feed to the Turing Machine whose instructions are given by those tapes to give the message BY BRIDGE UNDER ASH, the location of the primary treasure.

Half past nine and wine and cigars are a reference to the opening lines of Carroll's Phantasmagoria: One winter night, at half-past nine, Cold, tired, and cross, and muddy, I had come home, too late to dine, And supper, with cigars and wine, Was waiting in the study.

Daphne HQ, Velma and Spectre are obviously Scooby-Doo references.

## Page 3

## Fundraiser

The text and photo are a reference to a fund-raising event held in Wolvercote, near the treasure location, in which the village declared independence and raised $£ 3000$ for charity: more information and the photo can be found at https://www.oxfordmail.co.uk/news/3731930.village-declared-independence/ We do wonder if the comment about mud bespattered and drenched garments could also be a nod to Buckell's perambulation and the crowning of the King of the Scalvonians described wonderfully here:
http://www.oxfordhistory.org.uk/streets/wayside_stones/boundary/boundary descriptions/188 6.htm
"Don't worry, they haven't gone mad as hatters" is a nod to the Mad Hatter - an Alice in Wonderland / Lewis Carroll connection.

## TV Reviews - Bandersnatch

This is a reference to Black Mirror: Bandersnatch, an interactive film in the Black Mirror series, written by Charlie Brooker, a twist on Barley Choker. Obviously Bandersnatch is a Carroll reference in Through the Looking Glass and Hunting of the Snark.

## Esoteric Programming

This gives us the wall data matrix. We convert each character to " 6 -bit Braille" then assemble an image 22 wide by 24 high. The bottom two rows are blank and the remainder gives us a $22 \times 22$ data matrix which decodes as 'wall2'


Al Art
(As advertised on the front cover.)

The painting is Gravel Pit on Shotover Hill by Turner (close to Oxford of course) and we think the photo is on the Thames at NewBridge (https://www.google.com/maps/@51.7100327,-1.4172088,3a,75y,272.92h,79.05t/data=!3m6! 1e1!3m4!1s6vo6N6U239GmCEvH3Q1dYw!2e0!7i16384!8i8192). The two pictures are then a rebus giving us 'Pitt Rivers' cluing that the numbers on the pictures reference the items from the Pitt Rivers Museum in Edith's Ethereal Peripherals. X/Y/Z refers to item X from list, word Y in the item description, letter Z . This gives us the message: FOLLOW BUCKELLS PERAMBULATION STARTING WITH JING JING STONE AND COUNT SIKS MARKERS DOESIL THEN FOLLOW DITCH SOUTH.

See treasure direction section for more on our interpretation of this.
We suspect that text is referring to the use of DALL-E to generate images for the CATastrophe game as referenced in the credits.

We believe that the 'Rivers' photo was taken by The Rose Revived in Newbridge, Oxfordshire.

## Page 4

## Secret Message Decoder

The lower case letters in the data list (copy/pasted from PDF) give us 'We recommend pasting into online emulator at BBBMIC.RO' and 035040090208901 decodes to HOUSE OF GOD which presumably clues the abbey near the treasure location.

The example input in the program listing, 09402, decodes to CAT, corresponding to one of this year's themes.

As well as using the decoder for the voicemail numbers, we use the data list as an overlay twice - once with the Battleships grid to derive the message BEGINNING AT PATRON SAINT FOLLOW FELINES TO HOSTELRY AND THENCE PASS UPRIVER ALONGSIDE JACK AND LOCK BEYOND TO HOUSE WHERE ROSE LIES TO SEARCH OUT CORNER BENCHMARK, and once with the maze from the Catastrophe game to derive the message FOLLOW FELINES SEARCH UPRIVER BRIDGE.

Various thematic words can be seen in the data table - BORGES, HEXAGON and so on but we were unable to find a way to get these to be extracted in a specific message. It is possible they were just red herrings, or that we have failed to find some more input we were supposed to use with the decoder.

## Page 5

## CATSCAN

The background is the map from the Commodore 64 game Starquake.

The cats and arrows can be overlaid on a map of Oxford with the cross on St Frideswide's Church. Some of the photos can be identified on Google Streetview of Binsey Lane. We wonder if any of the cats are some of "grumpy wall cat, far wall cat, new wall cat,..." mentioned in "Amazing Cats" (buy your copy now $\because$ ).

The gatepost, gate and tiles shown in one picture can be found, minus cat, outside a house at the south end of Binsey Lane:


The two signs with the word "CAT" can be found attached to other signs on Binsey Lane just north of the bridge:



The yellow sign with the cat on it is on a gatepost of a farm towards the northern end of Binsey Lane:


The path is used in the encoded message BEGINNING AT PATRON SAINT FOLLOW FELINES TO HOSTELRY with the directions to start at the bottom and work your way up indicating the same direction as that message. We also assume the message FOLLOW FELINES SEARCH UPRIVER BRIDGE refers to these felines.

## Brian's Computer Systems

The prices are founding dates of Oxford colleges. Lewis Carroll used the Memoria Technica cipher to remember college foundation dates. The colleges are:

Kellog, Lincoln, Magdalen, Brasenose, Oriel, Keble, Balliol, Pembroke, Christ Church, Hertford, Hertford, Corpus, Christ Church, Merton, Brasenose, Oriel, Oriel, Kellogg, New College, Templeton, Brasenose, Merton, Oriel, Linacre, Exeter, Christ Church, Lincoln,

Magdalen, Hertford, Oriel, New, Kellogg, Kellogg, Magdalen, Merton, Kellogg, LMH, Merton, Kellogg, Templeton, Brasenose, Keble, Hertford, New, Brasenose, Pembroke, Keble, Kellogg, Lincoln, Pembroke, Hertford, Merton, Merton, Hertford, Oriel, Templeton, Brasenose, Merton, Oriel, Linacre, Exeter, Brasenose, Lincoln, Magdalen, Mansfield, Merton, Brasenose, Oriel, Merton, Templeton, Somerville, Hertford, Mansfield, Kellogg, Lincoln, Magdalen, Brasenose, Oriel, Keble, Balliol, Pembroke, Christ Church, Hertford, Hertford

Using the college-letter mapping given by the quiz questions, this gives us the message:

## PUT ARROW MATRIX UNDER WOOD TOY TO MAKE WALK ON LETTER MATRIX AND START MOVES ON DARK BLUE E

The items, apart from four, listed in the advert all appear in order in an p\&h electronics advert on p104 of Micro User Magazine 025 Vol 3 No 1 March 1985.


The four missing items are Enigma! (clue to Turing for the Turing machine), The Game of Logic (a book by Lewis Carroll), Elixir and Imogen which are both genuine BBC Micro
games. Elixir is about drinking shrinking potion so could clue Alice in Wonderland, while Imogen which is about a wizard who can turn into a cat, which is I guess also thematic.
'Brian' and 'Rosa' together anagram to 'Air Barons' but we can't see any relevance of this.

## Page 6

## Arrow advert

The advert is based on the PDP-8 family advert here:
https://www.computerhistory.org/revolution/minicomputers/11/intro/1910 with the human leg thematically replaced by a feline one, and the computer does indeed appear to be a DEC PDP-8/E. This seems to be hinting at some sort of rotation, but we aren't sure what we use that for. We have an AEC dpd8e machine (Arrow Equipment Corporation Data Processing Device) rather than a DEC pdp8e.

The arrows are used with the wooden slide block puzzle - see that page for info on that.
Is Swindon a Logica reference?

## Page 7

## Battleship Down!

The red dots on the battleship maps are Oxford colleges. The list of moves D11, K3, I9, D12, D16, I4, M3, J3, M8, C3, S7, L2, E9, G6, M8, M5, O9, M2, O3, M6, I1, F3, M2, K6, H5, F7, J20 gives us Templeton, Brasenose, Keble, St Anne's St Hugh's, Jesus, Univ, Lincoln, Mansfield, Nuffield, Catz, Oriel, Somerville, St John's Mansfield, New, Linacre, Merton, Harris Manchester, Christ Church, St Peter's, Merton, Wadham, Balliol, St Cross, Wolfson.

Using the college to letter mapping given by the quiz answers, this gives the message:

## MAKE OXON SCARVES WITH HUE TABLE

This refers to the page 14 colour grid - info on this on Page 14.

Louis, Thomas, Bernard and Tokuhiro refer to Louis Braille, T(homas).S. Eliot, Bernard of Clairvaux and Tokuhiro Tsukiyama (and not the cat artists Louis Wain, Thomas Eakins, Tokuhiro Kawai and Bernard Kliban which would have formed something like a Carrollian syzygy). These correspond to the four data matrices - Louis Braille for the braille one, T.S.Eliot for the The Naming of Cats wordsearch one, Bernard of Clairvaux for the Cistercian numbers (he was one of the founders of the Cistercian order) and Tokuhiro Tsukiyama who was the lead name on the patents for Run Length Encoding.

In order to extract the data matrix required to give the prefix characters for the room / hex, the "search coordinates" for each of the four individuals give a $6 \times 6$ subsection of the relevant data matrix. These four $6 \times 6$ sections are then assembled in the same order - Thomas and Louis along the top, Tokuhiro and Bernard along the bottom - to give the data matrix encoding the hex prefix "0s2kd".


## Actual Reality Games

Arnold Eidus is an anagram of 'Slide Around'. This puzzle, known as 'Dad's Puzzler' or 'Pennant's Puzzle is used with the arrows on page 6 and the colour grid. See Fun and Games with Grids for more info.

## Page 8

## Dr Boris

The numbers (276305003, 257695007, 21481007, 11713004) are codes in the SNOMED-CT structured clinical vocabulary (which presumably contains many opaque medical terms). We get "(Preoccupation with) ruin", "Rural minor road", "Over", "Water" describing the treasure location. (That's following the old path of the Godstow road over the small bridge)

There is 'little' written in white under the 'AM' of 'Game Reviews'. We do not know why Daphne's typesetting intern included this.

The raised o in Bacon gives C in a Baconian cipher but we also do not know what to do with this. A hint at steganography and the white writing perhaps, but we feel it should be something more.

## Quick Reviews

'Raunchier' is an anagram of 'hurricane'. Hurricanes were also clued by Alex Higgins (the snooker player known as "Hurricane") and the names of some other interns in the news, which were also the names given by the Met Office to storms in the UK (Franklin was a storm in 2021, Antoni and Betty were storms in 2022).

The dates refer to storms/hurricanes with A, P and SP referring to Atlantic, Pacific and South Pacific respectively and the number of cats referring to the storm CATegory. When there is ambiguity the century is specified with (21) for 21 st century.

The storms are Michael (2018), Allen (1980), Teddy (2020), Hernan (1990), Isabel (2003), Sarah (1983), Olivia (2018), Norbert (2008), Marie (2020), Allen (1980), Celia (2016), Hilary (2017), Isabel (2003), Niran (2021), Eta (2020).

The initial letters spell out MATHISON MACHINE. Mathison was Turing's middle name so this clues the Turing Machine.

The names of the games all seem to be thematic or linked to the treasure location in some way.

| The Vindications | From The Library of Babel: "At that period there was much talk of The Vindications" |
| :--- | :--- |
| Mamma Mia! | Part of the film Mamma Mia! Was filmed at Godstow |
| Unrelenting Effort | From The Library of Babel: "They were spurred on by the holy zeal to <br> reach-someday, through unrelenting effort - the " |
| The Matrix | We have the data matrix codes and this might be a genuine reference to the film. |
| Spherical Fruits | From The Library of Babel: "Light is provided by certain spherical fruits that bear <br> the name "bulbs." ". The spherical fruit obviously also appear in the CATastrophe <br> game. |
| Humpty Dumpty | Carroll reference, also on p15 of the November 1987 issue of Micro User as hinted <br> by the magazine date. |
| Verbal Nonsense | From The Library of Babel: "leagues of senseless cacophony, verbal nonsense, and <br> incoherency" This could also be a Carroll reference. |
| Crone Wars | A reference to witches and the crone from the Godstow witch site and the <br> one-eyed crone (old woman) in the CATastrophe game. |


| The Saint | The Trout Inn in Godstow appears in the 1987 film version of The Saint. |
| :--- | :--- |$|$| Flying Aces | Possibly a Carrol reference: 'The whole pack rose up into the air and came flying <br> down upon her Alice..'. There is also the Airmen's bridge in Godstow. |
| :--- | :--- |
|  | Possible a reference to Vol 1 No 8 Micro User name with Gone Fishin' on the <br> cover. The BBC Micro game Gone Fishing is described as 'A superb simulation of <br> a day on the riverside'. The treasure is in a riverside location so this feels apt. We <br> also went fishing with our grab pool in CATastrophe. |
| Gone Fishing | This could refer to the tower at Godstow Abbey mentioned on the Godstow Witch <br> site. A 'dark tower' is also mentioned in an article on p90 of 029 - vol 3 No 5 Micro <br> User magazine in the 'Alice through the VDU' series which discusses Turing <br> machines. Alternatively this could refer to CS Lewis' unfinished manuscript The <br> Dark Tower in which the dark tower is a replica of Cambridge University Library - <br> not sure how this would fit in exactly but we have libraries and Oxford... |
| The Dark Tower | This is a Carroll reference to the treacle well in Alice in Wonderland inspired by the <br> treacle well at Binsey near the treasure location. This could also be a reference to <br> the film The Matrix. |
| Treacle Time | This appears in the Borges short story 'The Two Kings and the Two Labyrinths': |
| Enter The Labyrinth | From The Library of Babel: "Mystics claim that their ecstasies reveal to them a <br> circular chamber containing an enormous circular book with a continuous spine that <br> goes completely around the walls". This could also refer to the circle of plants in <br> CATastrophe. |
| The Mystic Circle |  |

## Page 9

## CATastrophe!

There are some clues in here for the game: 'Who cares which continent the cats came from?' refers to the African Cats on the sixth wall of the mural room, 'Do they expect the names of random herbs to just pop into my head?' is a clue to the Welsh Poppy, 'This is a cabbage of a game and a bad one at that' refers to the rotten brassica, 'There are characters, objects, and locations that appear to have been put in there simply to create some thematic colour' refers to the notes being clued by objects for the lock puzzle. We were disappointed that squirrelfrenzygame.co.uk did not exist given the rave review of it.

## Reader's Cats

We think that must be Morse Code with tabby cats representing dashes and spotty cats dots, especially as the cats on the Christmas card decode to give an $X$ if one assumes the final cat there is both tabby and spotty. Interpreting the cats as Morse Code gives OXF, the Chapman code for Oxford; also the IATA code for Oxford Airport and the National Rail code for Oxford station.

Morse would obviously give us an Oxford link too - Morse has been filmed in Godstow.

## Barnwood Electronics

Sir Charles Wheatstone lived at Barnwood Manor House and invented the concertina, the Wheatstone bridge used in telegraphy and the Playfair cipher.

The text on the concertina is encrypted using a Playfair cipher with key DATMRIX (DATAMATRIX with repetitions removed, as clued elsewhere) and decodes to TRY SEVERAL DIFFERENT SEMATEXT DECODERS. Data matrices are sometimes known as semacode so we assume this refers to trying different decoders for them.

Around the edge of the advert the border lines are encoded with Cook and Wheatstone's 5 needle telegraph code. They decode to TWENTYNINEMETRESWITHINBVCKELLSBOVNDS i.e. TWENTY NINE METRES WITHIN BUCKELL'S BOUNDS. (The U and V characters were often conflated in telegraphy).

The concertina is a crimson hexagon, a reference to The Library of Babel: "the books of the Crimson Hexagon-books smaller than natural books, books omnipotent, illustrated, and magical."

## Page 10

## Edith's Ethereal Peripherals

Godstow Abbey was founded by Edith de Launceline and we assume the name Edith refers to her.
'Working within our limits since 1886 ' we think this is more likely to be a reference to Buckell's boundaries, or city limits, of Oxford in 1886. However, the completion of the construction of the Pitt Rivers museum was in 1886 so it could also refer to that.

The items are all in the catalogue of the Pitt Rivers Museum related to cats or witchcraft (or squirrels) with the text in quote in the catalogue description:

|  | 1956.9.7 | Dark grey cat figure with black stripes. Part of a Noah's |
| :--- | :--- | :--- |
| 1. "One dark part" | 0.183 | Ark set. One of a pair |
| 1. "used stuck" | 1917.53. |  |
|  | 777 | Object stuck with pins, used in sympathetic magic. |
| 3. "holed stone" | 1896.76. <br> 3 |  |
|  | Holed stone used as amulet. |  |
| 4. "mass designs" | 1893.18. | Wooden post carved with designs; a 'witch post' or <br> 'Mass post' |


| 5. one other seated" | $\begin{aligned} & \text { 1956.9.7 } \\ & 0.4 \end{aligned}$ | Squirrel or seated cat figure from Noah's Ark set. One of a pair. [see 1956.9.70.5 for other squirrel] [SM (Verve) 26/03/2015] |
| :---: | :---: | :---: |
| 6. "Against York" | $\begin{aligned} & 1893.18 . \\ & 2 \end{aligned}$ | Rowan tree loop used as prophylactics against witches, Castleton, Grosmont, York |
| 7. "stuffed upstairs" | $\begin{aligned} & 1935.36 . \\ & 56 \end{aligned}$ | Stuffed toy figure of a kylin, a mythological lion / dragon [L.Ph 'DCF 2004-2006 What's Upstairs?' 17/3/2005] |
| 8. "cork greybeard" | $\begin{aligned} & \text { 1910.18. } \\ & 1.1 \end{aligned}$ | Frechen stoneware Bartmann (aka 'Bellarmine', 'Greybeard') jug [.1] containing cloth heart stuck with pins [.2] , hair [.3] and a cork stopper [.4] used for magic. [SM 30/01/2008; JC 711 2008; 269 2013] |

These descriptions are used for the AI Art code.

## Which is greater?

The DaphneHQ logo is obviously based on the Nintendo logo (see also similar logo and official seal on poster).

The answers to the question when assigned a 1 or 0 give the number 1111000110 i.e. 966 in decimal. When combined with the preceding numbers we get the phone number 01606 663966. When this is called, there is a voicemail message from DaphneHQ with a set of numbers which we can put into the secret message decoder. The music for 'Ding dong the witch is dead' is also played.

When the numbers are put in the secret message decoder we get the message: BLOCK OUT LETTER WALKS AND CAT NAMES IN GRIDS AND COMBINE TO MAKE GRILLE

|  | Answer 1 | Answer 2 |  | Notes - Answer 1 | Notes - Answer 2 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| 1. The <br> population of <br> London OR The <br> number of hairs <br> on an average <br> domestic cat |  |  |  |  |  |


| 2. The cumulative total number of gold medals won in the summer Olympic Games since 1896 OR The number of raindrops that fall on a football pitch in Loughborough in an average minute | >4500 | 160,000 |  | https://en.wikipedia.org/ wiki/All-time Olympic G ames medal table\#Su mmer_Olympics (1896 \%E2\%80\%932020) | Average yearly rainfall: 400 mm (numbers vary wildly on different sites). Area of football pitch is 7,140 square metres. So volume of rain is 2856 cubic metres, weighs 2856000 kg . Average mass of a raindrop 0.034 grams. So about 84 billion drops in a year? 160,000 in a minute? |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 3. The number of chickens that lived in the 20th Century OR the cumulative number of photographs taken since the invention of photography | 1.8 trillion | 12.4 trillion |  | Approx 50 Billion chickens killed per year or 6 per person. Assume that holds throughout 20th Century. Likely an over-estimate as factory farming only started part-way through the century | According to <br> https://photutorial.com/photos <br> -statistics/\#How many photo <br> s are there in the world |
| 4. The volume of the world's largest oil tanker OR the volume of cups of coffee drunk globally in 2020 | 674 million | 182 billion? |  | Seawise Giant 4,240,865 barrels. 1 barrel is 158.987 litres so around 674 million litres? | In 2020/2021, around 166.63 million 60 kilogram bags of coffee were consumed' For a 1 kg bag of coffee beans you should expect to get around 120-140 cups of coffee. Bags seem to be about 60kg. About 2 billion cups of coffee drunk per day worldwide. Most cups 0.25 litres |
| 5. The number of people believed to have died as a result of what Popeye did on the 11th of August OR the number of footballers in the UK Premier League? | 2000? <br> 1841 <br> according to the book <br> "How Many <br> Hippos", <br> available at <br> all good <br> bookstores <br> :-) | 550, or much more if it's over the history of the Premier League. |  | Robin Williams' first role was Popeye and he committed suicide on 11th August. Suicides in the US rose $10 \%$ as a result. According to this article about 2000 more deaths: <br> https://time.com/513719 4/robin-williams-suiciderate/ | From Jon's Fantasy Football database. |


| 6. The number of people flying during an average second of 2019 OR the population of Reno | 1.2 million | 268851 | 0 | total number of passengers carried on scheduled services rose to 4.5 billion in 2019', Average length of flight is 2.4 hours (very roughly). Multiply for 'person-seconds' then divide by 31,536,000 seconds a year. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 7. The speed in km per hour of the highest speed achieved on land by any vehicle OR the average number of paces walked in a day by an American | 10326 | 3000-4000? | 0 | https://en.wikipedia.org/ wiki/Railway speed rec ord\#Rocket sleds | https://www.mayoclinic.org/he althy-lifestyle/fitness/in-depth/ 10000-steps/art-20317391 |
| 8. The cost of the transistors in an iPhone 13 pro Max if each had been bought at 1960 (inflation adjusted) prices OR the cost to the USA of the war in Afghanistan | 120 billion | 2.313 trillion |  | 15 billion transistors, transistor cost info: https://wccftech.com/ap ple-5nm-3nm-cost-transi stors/ 1 dollar in 1960 about 10 dollars today: https://www.in2013dollar s.com/us/inflation/1960? amount=1 <br> https://spectrum.ieee.or g/how-much-did-early-tr ansistors-cost | https://watson.brown.edu/costs ofwar/figures/2021/human-and -budgetary-costs-date-us-war-afghanistan-2001-2022 |
| 9. The <br> percentage of the UK population who died from Covid-19 in January 2022 OR the percentage of the world's population (at that time) that | 0.01\% | 0.04\% | 1 | 8100 deaths, 65M people | Alex and Hannah news item refers tto this <br> https://en.wikipedia.org/wiki/B <br> attle of Cannae 78000 <br> deaths, $\sim 200 \mathrm{M}$ people |


| died in the bloodiest single-day battle before 1900 (*) |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 10. The number of golf balls you can fit in a recommended-d epth Olympic swimming pool OR the population of the UK in 1862 | 40-45 <br> millionish | 30 milion-ish |  | https://www.quora.com/ How-many-golf-balls-do-l-need-to-fill-a-swimingpool | Population 28,917,900 in 1861 and $31,484,700$ in 1871 from <br> https://www.ons.gov.uk/peopl epopulationandcommunity/po pulationandmigration/populati onestimates/adhocs/004356u kpopulationestimates1851to2 014 |

## Page 11

## Christmas Fun 'Word search'

The word search grid is not a traditional word search, but the same list of names can be found reading left to right and top to bottom, but interspersed with other letters. This contains the names of cats from T.S. Eliot's "The Naming of Cats", from "Old Possum's Book of Practical Cats".

| PiEsTsEeRmAtUqGvUtScTt | PETERAUGUST |
| :--- | :--- |
| UapirSihxqssqnvAeLhvON | USALON |
| ZOJfArMnESyVICTORaJONw | ZOJAMESVICTORJON |
| ATHzAcNgGzEtObRGkzEaBI | ATHANGEORGEBI |
| LiLBAquILyEmYxPLAnmtyT | LLBAILEYPLAT |
| OADMpfElTUdbepgiSEwLEC | OADMETUSELEC |
| TnRzADEvjoMrETnEtRlsto | TRADEMETER |
| MsUNhKkwaUSTiRuAwPQxUA | MUNKUSTRAPQUA |
| XfOCxkOsRttdIxvhCvOPAs | XOCORICOPA |
| TBOMjBALjURINeAcJqEvqL | TBOMBALURINAJEL |
| LcLYcLnOeRUMPEajTERoAz | LLYLORUMPETERA |


| UGUndbSuTUSuzcALmONZOJ | UGUSTUSALONZOJ |
| :--- | :--- |
| AMESxsVIICrTORiJONrAhb | AMESVICTORJONA |
| TkaHANGcdusbhokuEORjGE | THANGEORGE |
| BILLBfAxILEbkYkIPLfnAm | BILLBAILEYPLA |
| TOprnvuADwsdMEuqTUSjoE | TOADMETUSE |
| LEvCTRADyEMExTikEniRMq | LECTRADEMETERM |
| UNjsKUSTkaRotAPQUAXka0 | UNKUSTRAPQUAXO |
| COmutRveICObPAvTvlpBlw | CORICOPATB |
| OMmuxBAiyqatbLwURamINA | OMBALURINA |
| JjvpktuELkLfYmfkzmuLOi | JELLYLO |
| RUMPETERAUGUSTUSALONZ0 | RUMPETERAUGUSTUSALONZO |

If the squares with the names from the cats are blacked out then we get a data matrix which decodes to p40 (i.e. page 40).


We were unable to find any message hidden in the unused letters, but suspect there may be one.

## Rosa's Tech Solutions

The prices refer to the foundation dates of Cambridge colleges. To decode the message we find the sister college in Oxford of each college and then apply the mapping of Oxford colleges to letters from the quiz giving the message DATA MATRIX IS THE KEY

|  |  |
| :--- | :--- |
| Magdalene | Magdalen |
| Gonville and Caius | Brasenose |
| Peterhouse | Merton |
| Gonville and Caius | Brasenose |


| St Edmund's | Templeton |
| :--- | :--- |
| Gonville and Caius | Brasenose |
| Peterhouse | Merton |
| Clare | Oriel |
| Hughes Hall | Linacre |
|  |  |
| Emmanuel | Exeter |
| Hughes Hall | Linacre |
| Trinity Hall | All Souls |
| Peterhouse | Merton |
| Fitzwilliam [or could |  |
| have been Girton] | St Edmund Hall |
| Sidney Sussex | St John's |
| Selwyn | Keble |
| Sidney Sussex | St John's |
| Newnham | LMH |

We also have another crimson hexagon, referencing The Library of Babel.
The letters under the Rosa logo are to be used to determine the room (hex) in the Library of Babel, although they start with five underscores which need to be substituted with the five characters from the combined data matrix.

## Page 12

## Quiz

Our quiz answers and explanations are in the table below. The answers are all the names of different Oxford Colleges and if we take the indicated letter from each answer we get this year's Christmas message

## ENJOY XMAS CAKE AND BLOW OUT LOVE DAPHNE HQ EDITORS

The mapping of colleges to letters given by the answers is used in several places elsewhere.

|  |  | This refers to Meg Shelton buried under a <br> boulder n St Anne's Church who turned <br> herself into a sack of corn at some point <br> https://www.daysofhorror.com/episode/meg- |  |
| :--- | :--- | :--- | :--- |
| Where is a boulder covering someone <br> who was once a sack? | St Anne's | E | shelton-last-of-the-lancashire-witches-1705/ |


|  |  | Roger Bacon was famed for the story of his <br> brazen head and seems to be buried in <br> Greyfriars, which is not Lincoln. <br> https://en.wikipedia.org/wiki/Roger Bacon. |
| :--- | :--- | :--- | :--- |
| https://www.nature.com/articles/093405a0 |  |  |
| The Godstow witch stite claims Brasenose's <br> knocker here too 'carbuncled from a witch <br> burning' (the name Brasenose refers to the <br> knocker) Also <br> https://www.darkoxfordshire.co.uk/explore/th |  |  |
| Where did the city arms become a |  |  |


| Nearest to where a saucy bookseller lit a jinxed candle | Nuffield <br> College [or <br> St Peter's <br> College] | C | The bookseller is Rowland Jenkes https://www.darkoxfordshire.co.uk/explore/c ourtroom-curses-at-the-black-assize/ and looks like the candle was lit at Shire Hall plaque is inside County Hall now. The nearest college is Nuffield. |
| :---: | :---: | :---: | :---: |
| Home of the welfare cat who was a dog | Wadham | A | https://apply.oxfordsu.org/colleges/wadham/ Maggie Mae, the college dog (although technically she is a 'cat') |
| Where Clive shared a room with Paddy | Keble College | K | CS Lewis and Paddy Moore were room-mates at Keble. <br> https://heritage.keble.ox.ac.uk/history-featur es/an-unknown-photograph-of-c-s-lewis/ |
| Where can you make a handkerchief disappear by running round it thrice? | St Peter's College | E | St Peter's College has a Handkerchief Tree in one quad - <br> https://www.facebook.com/spcoxf/photos/a. 4 <br> 842230775832410/5220978781290939/?typ $\mathrm{e}=3$ |
| Where can you find the ant-like first edition of the first book to be primarily about women? | Balliol | B | https://balliollibrary.wordpress.com/2020/11/ <br> 23/ghost-stories-from-the-library/. "The oldest of these was our first printing of the Formicarius....This instructional work in the form of a teacher-pupil dialogue, uses an ant colony as a model of a well-structured Christian society...This is the second book ever printed to discuss witchcraft and the one in which the modern idea of a witch as an uneducated female in thrall to the Devil appeared. In earlier centuries the chief focus of discussions of witchcraft was of an educated male wizard indulging in ornate esoteric ritual." |
| Where might one invoke but not elect the wearer of a martlet? | Pembroke College | L | https://www.pem.cam.ac.uk/kit-smarts-blog/ who-you-gonna-call-pembroke-debating-soci ety -ghost invoked who wore a martlet scarf, and was suggested for election. A few colleges have martlets on their crests (Worcester, Univ, St Benet's Hall). There's a Martlets Society at Univ which CS Lewis belonged to |
| Where hotfoot had a meeting with a maker of fake horoscopes in 1964 | Univ | O | Witchcraft meeting with Sybil Leek and Hotfoot Jackson: <br> https://shop.memorylane.co.uk/mirror/1100to <br> 1199-01199/witchcraft-meeting-university-col <br> lege-21826892.html and <br> https://en.wikipedia.org/wiki/Sybil Leek |
| Where was a dragon turned into a hob? | New | W | This refers to Draco Malfoy being turned into a ferret during the filming of Harry Potter at the college. A male ferret is called a hob. |


| Where a cipher was found describing a Protector who spoke of Piedmont and Poland | Worcester College | 0 | Refers to William Clarke's papers in Worcester College libraryhttps://worcestercollegelibrary.wordpre ss.com/2019/04/30/cyphers-and-the-death-o f-oliver-cromwell-sir-william-clarkes-papers/ |
| :---: | :---: | :---: | :---: |
| In which meadow did the devil talk to a youth who was pretending? | Christ Church | U | Refers to John Deydras https://museumofoxford.org/more-than-meet s-the-eye-christ-church-meadow |
| The workplace of an astronomer and a chaplain accused of treason | Merton | T | "The arrest... [of] an Oxford astronomer named John Stacey, led to his confession under torture that he had "imagined and compassed" the death of the king, and used the black arts to accomplish this. He implicated one Thomas Burdett, and one Thomas Blake, a chaplain at Stacey's college (Merton College, Oxford). All three were tried for treason" - from here |
| Where the owner of a mirror hoped to await the secret arrival of special men | St Cross College | L | Obligatory John Dee reference. John Dee, owner of obsidian 'spirit mirror' "have the more commodious place for the secret arrival of special men to come unto me there at St. Crosses;' |
| Whose first principal might have seen a sombrero in France? | St Hughs College | O | https://en.wikipedia.org/wiki/Moberly\%E2\%8 0\%93Jourdain incident -- The principal visited france and had a paranormal experience including "coming across a man... wearing a cloak and large shady hat" |
| Centaurs were found on the staff of a major son of which lady of clairvoyance? | Somerville | V | Refers to Major Thomas Weir, son of Lady Jean Somerville http://strangeco.blogspot.com/2014/02/the-h ellish-major-weir.html |
| Whose employee may have inspired Macbeth? | St John's | E | "There is also a strong possibility that the witches in Shakespeare's Macbeth take their inspiration from a short performance called Tres Sibyllae, written by Matthew Gwinne and staged at the gates of the College for King James I in 1605. Gwinne, a physician by profession, was also part of the flourishing theatrical culture of Jacobean St John's" Gwinne was a fellow https://en.wikipedia.org/wiki/Matthew_Gwinn e https://www.sjc.ox.ac.uk/study/undergraduat e/subjects/english-and-joint-schools/ |
| Nothing will happen when the king breathes on the inspirational statues here | Magdalen | D | Has a demon cat gargoyle - anything to do with that? |
| Cats? | St <br> Catherines | A | Known as Catz |


| Where Liz hid Jim in 1667, and they both remain? | Corpus Christi | P | Elizabeth Spencer hid James Betts in a wardrobe - <br> https://en.wikipedia.org/wiki/Corpus_Christi_ College,_Cambridge |
| :---: | :---: | :---: | :---: |
| Where did the first sorting ceremony happen? | Harris Manchester College | H | Harry Potter Society sorting ceremony -https://cherwell.org/2012/01/31/harry-potter-sorting-ceremony-to-take-place-in-oxford/ |
| I can see spirits coming up the stairs like bees. Where am I? | Trinity | N | Refers to Thomas Allen https://mathshistory.st-andrews.ac.uk/Biogra phies/Allen/ |
| Who judged Duyvel-Landt a great success? | Wolfson | E | Duyvel-Landt means Devil-Land: https://www.hist.cam.ac.uk/newsletter-2022-02/devil-land The book with that title was awarded the Wolfson History prize in 2022 -https://www.wolfsonhistoryprize.org.uk/past-winners/2022-winners/devil-land/ |
| Whose scholars tied an unfortunate cat to an unfortunate bull? | St Edmund Hall | H | Cat tied to bull by SEH scholars mentioned here - <br> http://www.headington.org.uk/history/misc/to wngown.htm |
| It was about 700 deben. Where was it found? | The Queen's College | Q | Egyptian boundary stone? Cat statue? Mummified cat? The Queen's Pyramids in Giza? The Queen's Chamber in another pyramid?There are small and large deben either $12-14 \mathrm{~g}$ or 27 g <br> https://www.ucl.ac.uk/museums-static/digital egypt/weights/weight.html So About 9.5 kg or 18.9 kg . or 63.7 kg ? <br> https://en.wiktionary.org/wiki/deben That says 91 g so perhaps there are tiny deben, small deben, medium deben, large deben and huge deben :-) Queens has a collection of Egyptian artefacts - <br> https://www.queens.ox.ac.uk/wp-content/upl oads/2022/12/Full-catalogue.pdf |
| Where was the last gas light between? | Hertford | E | On the Bridge of SIghs https://www.oxfordhistory.org.uk/streets/lam p posts/index.html Maybe they mean "Bridge of Sighs" between Hertford and Hertford? I think Herford more likely |
| Where you might find a teabag | St Hildas | D | Teabag is the college cat https://www.facebook.com/the.university.of.o xford/photos/this-is-teabag-who-lives-at-st-hi Idas-college-oxford-teabag-got-her-name-as -she-/10157265755075107/ |
| Where did the ghost in the machine guy leave his books? | Linacre |  | Gilbert Ryle collection: <br> https://www.linacre.ox.ac.uk/facilities/library/ gilbert-ryle-collection |


| He may have ignited a dancing frenzy | St Anthony | T | St Anthony's Fire (=Ergotism) is a proposed <br> cause of dancing manias |
| :--- | :--- | :--- | :--- |
| Elmo the Elephant was beaten by |  |  |  |
| whose furry friend? |  |  |  |

## Black and White numbers

These give us another data matrix using a Run Length Encoding with a white digit corresponding to a number of white pixels and a black digit to a number of black pixels.


This data matrix decodes to sh1 i.e. shelf 1 for The Library of Babel.

## Page 13

## Christmas Crossword

Here is the crossword and solutions. We would probably have saved ourselves lots of time on the crossword if we had realised that one of the setters had written a whole book about cats earlier :-) (and likewise on the 'Which is Greater?' puzzle!)

The highlighted cells give us the message: HANOI DESCRIBES WALK ON COLOUR GRID

Some of the answers are out of alphabetical order but we do not know what to do with these.

|  |  |  |  | R | U | S | T | T | E | M |  | C |  | L | 1 | N | T | 0 | N | N |  |  |  |  |  | M |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | H | H |  |  |  | L |  |  |  |  |  |  |  |  |  |  |  |  | K | A | Z | A | N |  |  |  |
|  |  |  |  |  |  |  | U | U |  |  | V | 0 |  | L | O | H | A | I |  |  |  | P |  |  |  | F |  |  |  |  |  |  |
|  |  |  |  |  |  |  | T | T |  |  |  | W |  |  |  |  |  |  |  | 1 | C | E | L | A | N | D |  |  |  |  |  |  |
|  |  | E |  |  |  |  | M | M |  |  |  | D |  | I | x | 1 | E |  |  |  |  | L |  |  |  | E |  |  |  |  | L |  |
|  |  | M |  | E | L | B | 0 | U | U | R | N | E |  |  |  |  |  |  |  |  |  | U |  |  |  | T |  |  | M |  | E |  |
|  |  | P |  |  |  |  | S | s |  |  |  | R |  |  |  |  |  |  |  |  |  | S |  |  |  |  |  |  | A |  | G |  |
|  | F | E |  | L | 1 | C | E | E | T | T | E |  |  | S | W | E | E | T |  |  | T | 1 | B | S | T | H | E | G | R | E | A | T |
|  |  | R |  |  |  |  |  |  |  |  |  |  |  |  |  | Y |  |  |  |  |  | U |  |  |  |  |  |  | T |  | T |  |
|  | L | O |  | U | 1 | S | x | $x$ | 1 | v |  |  |  |  |  | E |  | C | c |  |  | M |  | S |  |  | P |  | H |  | T |  |
|  |  | R |  |  |  |  |  |  |  |  |  |  |  |  |  | B |  | Y | Y |  |  |  | B | A | T |  | U |  | A |  | A |  |
| C | H | U |  | R | C | H | I | 1 L | L | L |  |  |  |  |  | R |  | G |  |  |  | E |  | T |  |  | S |  | W |  | R |  |
|  |  | D |  |  |  |  |  |  |  |  |  |  |  |  | J | 0 | H | N | N | B | I | L | L | 1 | N | G | S | G | A | T | E |  |
| S | H | A |  | C | K | L | E | E | T | 0 | N |  |  |  |  | w |  | U |  |  |  | B |  | S |  |  | 1 |  | S |  |  |  |
|  |  |  |  | R |  |  |  |  |  |  |  |  |  |  |  | s |  | M |  |  |  | R |  | F |  |  | N |  | H | A | N | K |
|  |  | W |  | I | L | S | 0 | N | N |  |  |  |  |  |  |  |  |  | R |  |  | 0 |  | A |  |  | B |  | 1 |  |  |  |
|  | T |  |  | M |  |  |  |  |  |  | F | R |  | A | N | Z | H |  | E | L | M | 0 | F | C | 0 | L | 0 | G | N | E |  |  |
| B | A | K |  | E | N | 0 | K | k | 0 |  |  | 1 |  |  |  |  |  | G | G |  |  | S |  | T |  |  | 0 |  | G |  |  | K |
|  | S |  |  | A |  |  |  |  |  |  |  | C |  |  |  |  |  | U | U |  |  | H |  | 1 |  |  | T | 1 | T | U | B | A |
|  | H | E |  | N | R | Y | V | v | A | U | G | H |  | A | N |  |  | L | L |  |  | A |  | 0 |  |  | s |  | 0 |  |  | S |
|  | 1 |  |  | T |  |  |  |  |  |  |  | A |  |  |  |  |  | U | U |  |  |  |  | N |  |  |  |  | N |  |  | H |
|  | R |  |  | 0 |  |  |  |  |  |  |  | R |  |  |  |  |  | S | S |  |  |  |  |  |  |  |  |  |  |  |  | A |
|  | 0 |  |  | M |  |  |  |  |  |  |  | D |  |  |  |  |  | P | P |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | J |  |  |  |  | Y |  |  |  |  |  | K |  |  | T | 0 | X | O | 0 | P | L | A | S | M | A | G | 0 | N | D | 1 | 1 |  |
| L | I | V |  | E | R | P | 0 |  | 0 | L |  | E |  |  |  |  |  | W | w |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | M |  |  |  |  | R |  |  |  |  |  | P |  |  |  |  |  |  | E M | M | P | E | R | 0 | R | 1 | C | H | 1 | g | 0 |  |
| T | A | L |  | K | E | E | T |  | N | A |  | H |  |  |  |  |  | R | R |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | S |  |  |  |  |  | A |  |  |  | W | A | S | S | H | 1 | N | G | T | 0 | N | D | C |  |  |  |  |
|  |  |  |  |  |  |  |  |  | y | e | 1 | L |  | - | w |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  | E |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |


|  | only want to raise for 6 years and 364 days? (8) |  |
| :---: | :---: | :---: |
| BAT | What would the Dutch throw instead of a cat, to cause chaos? (3) | https://en.wikipedia.org/wiki/Throw the cat among the pigeons |
| PELUSIUM | In which battle was a defensive line of cats used to defeat the enemy? (8) | https://en.wikipedia.org/wiki/Battle_of_Pelusium |
| CHURCHILL | Which Prime Minister thought that his cat was so brave he named him after an admiral? (9) | https://en.wikipedia.org/wiki/Nelson (cat) |
| CLINTON | Which leader had a cat named after an article of clothing? (7) | https://en.wikipedia.org/wiki/Socks_(cat) |
| CLOWDER | Which creamy word describes a group of cats? (7) | No idea why that might be "creamy" Could be "creamy" because it is derived from "clot"? https://en.wiktionary.org/wiki/clowder |
| CRIMEAN TOM | Which cat found food in the ruins of Sevastopol? $(7,3)$ | https://medium.com/war-is-boring/crimean-tom-rocket-cats-and-t he-felines-of-war-43789d6c9493 |
| CYGNUM REGULUS POWERS | What is the full name of the cat who had the longest tail in the world as of September 2016? $(6,7,6)$ | https://www.quinnessworldrecords.com/news/2017/9/cygnus-and -arcturus-how-the-tallest-cat-and-the-kitty-with-the-longest-tail-liv e-487535 |
| DIXIE | Which cat was said to be smarter than an entire presidential cabinet? (5) | https://www.presidentialpetmuseum.com/pets/abraham-lincoln-ca ts/ |
| EL BROOSHA | What is the name of the vampire cat that has a particular fondness for babies? $(2,7)$ | http://blog.le-miklos.eu/? $\mathrm{p}=2471$ |
| EMPEROR ICHIGO / ICHIJO | Which emperor had suits of clothing made for his cat and her kittens (and got a wet-nurse to look after them) ? $(7,6)$ | https://www.thegreatcat.org/history-of-the-cat-in-the-dark-ages-p art-10/ |
| EYEBROWS | What facial feature would Egyptians | https://www.quora.com/How-did-ancient-Egyptians-mourn-when-a-family-cat-died |


|  | remove upon the death of their cat? (8) |  |
| :---: | :---: | :---: |
| VOLOHAI | Which city was set ablaze by 1,000 flaming cats? (7) | https://www.ft.com/content/7408cc02-7004-11e9-bf5c-6eeb8375 $66 c 5$ |
| FRANZ HELM OF COLOGNE | What was the name of the man who sought to defeat his enemies with rocket-power cats? $(5,4,2,7)$ | https://uniqueatpenn.wordpress.com/2013/02/05/a-rocket-cat-ear \|y-modern-explosives-treatises-at-penn/ |
| YELLOW? | What colour were the original cats pyjamas? <br> (6) | https://idiomation.wordpress.com/2010/04/06/cats-pyjamas/ <br> https://en.wiktionary.org/wiki/cat\%27s_pyjamas https://medium.com/language-lab/the-cats-pajamas-343e09f10bf 5 |
| HENRY VAUGHAN | Who first described meteorological cats? $(5,7)$ | https://www.loc.gov/everyday-mysteries/meteorology-climatology litem/what-is-the-origin-of-the-phrase-its-raining-cats-and-dogs/ |
| ICELAND | Where does a cat stalk the land at Christmas eating people? (7) | https://www.iizcat.com/post/4373/The-Christmas-Cat-of-Iceland-a -giant-terrifying-cat-that-gobbles-up-children-if-they-039-re-bad |
| JOHN BILLINGSGATE | What was the first name of the first person to not have a cat in hell's chance? $(4,12)$ | https://wordhistories.net/2016/12/04/not-a-cat-in-hells-chance/ |
| KASHA | Which cat steals corpses to eat them? (5) | https://www.catster.com/lifestyle/kasha-corpse-eating-cat-nekom ata-ghost-cat |
| KAZAN | Where did a Russian Queen source her cats from? (5) | https://www.telegraph.co.uk/travel/destinations/europe/russia/st-p etersburg/articles/St-Petersburg-the-cats-of-the-Hermitage/ |
| SHACKLETON | Who ordered the killing of the carpenter's cat? (10) | https://en.wikipedia.org/wiki/Mrs Chippy |
| LIVERPOOL | Where did 180,000 cats arrive by ship in 1890? (9) | http://wutheringexpectations.blogspot.com/2009/11/wuthering-ex pectations-investigative.html |
| LOUIS XIV | Which king danced in front of bonfire of cats? $(5,3)$ | https://en.wikipedia.org/wiki/Cat-burning |
| EMPEROR UDA | Who owned a cat that was 5 sun long and 6 sun high? $(7,3)$ | https://imgur.com/gallery/1IP8oGS |
| MAFDET | Which Egyptian god protected the pharaohs | https://en.wikipedia.org/wiki/Mafdet |


|  | against poisonous animals such as snakes and scorpions? (6) |  |
| :---: | :---: | :---: |
| MARTHA WASHINGTON | Who didn't (despite musical claims to the contrary) name a cat after the Secretary of the Treasury? $(6,10)$ | https://www.bostonglobe.com/arts/theater-dance/2016/07/07/gro up-upset-that-hamilton-alleges-martha-washington-named-tomca t-after-him/XSoUG3OaDUtbxxu1plxbyJ/story.htm |
| MELBOURNE | Where did Silky arrive, after an incredible journey? (9) | https://www.columbusdirect.com/content/ten-cats-who-took-solo-t ravel-to-the-next-level/ |
| ? | Where is a prophetic cat (who won a great victory in 2013) now to be found? $(7,4)$ | https://www.sbnation.com/mlb/2013/11/4/5051184/cat-mlb-2013predictions ? or https://en.wikipedia.org/wiki/Orlando_(cat) ? Or a cat that won a victory with the name of a prophet? |
| HANK | Which cat got 7,319 votes in 2012? (4) | https://en.wikipedia.org/wiki/Hank the Cat |
| RICHARD KEPHALE | Who first defined space in terms of a cat? $(7,7)$ | https://www.theidioms.com/no-room-to-swing-a-cat/ |
| RUSTEM | Who was given a cat made from a handful of smoke? (6) | https://shirleytwofeathers.com/The Blog/itsacatastrophe/where-t he-persian-cat-came-from/ |
| SATISFACTION | What would resurrect a cat that lost its life due to its inquisitive nature? (12) | https://en.wikipedia.org/wiki/Curiosity killed the cat |
| LE GATTARE | Who feeds Roman cats? $(2,7)$ | https://www.charmingitaly.com/article/gattare-cat-ladies-in-rome https://italybeyondtheobvious.com/le-gattare-italys-caretakers-of -stray-cats/ |
| SWEET | What can't cats taste? <br> (5) | https://www.npr.org/2005/07/25/4766556/cats-cant-taste-sweetne ss-study-finds |
| TALKEETNA | Where was a cat mayor for 20 years? (9) | https://en.wikipedia.org/wiki/Stubbs_(cat) |
| TASHIROJIMA | Which island has a population of cats that outnumbers people almost 4:1? (11) | https://en.wikipedia.org/wiki/Tashiroima |
| THUTMOSE | Who was Ta-miu buried with? (8) | https://en.wikipedia.org/wiki/Thutmose (prince) |
| TIBS THE GREAT | Which cat kept letters free of mouse attack for 14 years? $(4,3,5)$ | https://www.postalmuseum.org/cats/ |


| TITUBA | Who confessed that a man accompanied by a red and black cat instructed her to hurt children? (6) | https://donnagawell.com/the-redemption-of-mehitabel-braybrook e/abcs-of-crime-and-punishment-in-puritan-new-england/t-is-for-t ituba-americas-most-famous-witch/ |
| :---: | :---: | :---: |
| TOXOPLASMA GONDII | What parasite do you probably share with cats? $(10,6)$ | https://en.wikipedia.org/wiki/Toxoplasma_gondii - but 6 rather than 5 ? |
| FELICETTE | Which cat was the first in space? (9) | https://www.smithsonianmag.com/smart-news/felicette-first-cat-s pace-finally-gets-memorial-180974062/ |
| WASHINGTON DC | Where did a \$20m cat fail in its first mission? $(10,1,1)$ | https://en.wikipedia.org/wiki/Acoustic Kitty |
| WILSON | Which president had a bird-like cat? (6) | https://www.presidentialpetmuseum.com/woodrow-wilsons-puffin s-cat/ |
| PUSS IN BOOTS | Which cat is ATU545B? $(4,2,5)$ | http://surlalunefairytales.blogspot.com/2016/12/puss-in-boots-tal e-type-and-earliest.html |
| YPRES | Where is "Kattenstoet" held? (5) | https://en.wikipedia.org/wiki/Kattenstoet |

## Page 14

## Registration

The answer to the registration questions are:

| 1st White Letter | O |
| :--- | :--- |
| 3rd Nepal Letter | D |
| 1st Yellow Letter | E |
| 6th Very Dark Blue Letter | V |
| 1st Tom Thumb Letter | E |
| 1st Santas Gray Letter | C |
| 2nd Bossa nova Letter | A |

Backwards, this gives the spell ACEVEDO (a seasonal holly busy)
This takes us to a room with a dirty wall. If we make a broom with twigs, twine and the stick we can clean the wall with the broom (use broom with wall)

This gives us a message in the witch's alphabet which decodes to:

## OVERLAY DEAD ENDS ON GOD AND THENCE THEN DEAD LAMPS

If we take the grid that we get from the maze with the spherical fruit and put it on top of an image of the data words from the secret decoder and look at the locations of the spherical fruit (which are lamps in The Library of Babel) then we get the message:

FOLLOW FELINES SEARCH UPRIVER BRIDGE

## Colour Grid Word Search

This grid is used for several different messages.

The grid is also a wordsearch contain all the cats from "The Naming of Cats".

It is used for two walks - that from the Towers of Hanoi moves, and that from the sliding block puzzle / arrow grid.

It is also used for the Oxford scarves code from the colours of the squares.

Finally, it is the source for the letters onto which the grille is overlaid to produce the treasure directions.

## Features of Multiple Pages

## Punched Tape

Once assembled from several pages, when decoded in Baudot Code (ITA2), this gives the instructions for a Turing Machine (clued in various places).

| Start state | Instruction (*) | Shift | End state |
| :--- | :--- | :--- | :--- |
| B | UN | L8 | A |
| C | UI | R10 | A |
| B | OB | R16 | . |
| A | FL | R6 | B |
| B | GA | L10 | A |
| C | ZG | R11 | C |
| B | WD | L(1) | C |
| C | PE | L5 | C |


| C | EG | R4 | C |
| :--- | :--- | :--- | :--- |
| A | LR | R4 | A |
| - | LB | R6 | C |
| C | TR | L9 | A |
| C | JD | L5 | B |
| A | NH | L4 | C |
| A | TS | L14 | B |
| C | VU | L7 | C |
| A | UE | R8 | A |
| A | GY | R12 | B |

(*) Match on first letter, overwrite with second letter.
When used on a tape given by the letters under the Baudot picture, we get the message BY BRIDGE UNDER ASH.

## Cistercian Numbers in Corners

The symbols in the corners of many pages of the hunt document are Cistercian numbers. Each page has two rows of numbers, thus from 11 pages there are 22 rows. Each row gives two 4-digit decimal numbers

The Cistercian numbers on the left hand side have a solid "backward L" at the bottom right, which we take to indicate that the four digits should be taken in a slightly different order, or equivalently that the number should be divided by 10 , since each 4th digit (top right symbol) is a zero.

The two 4-digit numbers on each row are concatenated to give a 7 -digit number (left-hand number has leading zero) which happens to be less than $2^{\wedge} 22=4194304$. When converted to binary to give a 22 -bit sequence of 1 s and 0 s , we can interpret 1 s as black pixels and 0 s as white pixels.

Taken in page order, this gives a data matrix that decodes to vl21 or Volume 21 in The Library of Babel.


## Fun and Games with Grids

## Tower of Hanoi Puzzle

The crossword gave us the message HANOI DESCRIBES WALK ON COLOUR GRID and we had the Towers of Hanoi photo on Page 2. Three of the towers are aligned with the letters N, E and S in the word NEWS, with the N tower holding the initial discs, which are given by the digits on that tower.

By playing the game to solution, a sequence of directions and distances can be deduced from the destination tower for each disc giving the direction, and the number of the disc giving the distance.

If these directions and distances are walked in turn on the copy protection grid, starting at the yellow letter $L$ on a blue background (as the $L$ in the word "LATEST" in the title), this gives the message:

## LOOK INSIDE STONE

The sequence of moves is as follows:

| Tower |  |  | Lett er |
| :---: | :---: | :---: | :---: |
| N | E | S |  |
| 234 5 |  |  | L |
| 345 | 2 |  | 0 |
| 45 | 2 | 3 | 0 |
| 45 |  | 23 | K |
| 5 | 4 | 23 | I |
| 25 | 4 | 3 | N |
| 25 | 34 |  | S |
| 5 | 234 |  | I |
|  | 234 | 5 | D |
|  | 34 | 25 | E |
| 3 | 4 | 25 | S |


| 23 | 4 | 5 |  | T |
| ---: | ---: | ---: | :--- | :--- |
| 23 |  | 45 |  | O |
| 3 | 2 | 45 |  | N |
|  | 2 | 345 | E |  |
|  |  | 234 |  |  |
|  |  | 5 | Y |  |

## Sliding Block Puzzle

PUT ARROW MATRIX UNDER WOOD TOY TO MAKE WALK ON LETTER MATRIX AND START MOVES ON DARK BLUE E

The message above suggests that the 27 moves made to solve the wooden sliding block puzzle should be overlaid on the grid of arrows which are the logo of Arrow Equipment Corporation.

In each case, the gap in the wood block reveals two arrows. Only arrows which were not used on the preceding move are used each time, and the number of lines next to each arrow indicates the number of steps to take. The letter matrix referred to is the copy protection grid on the final page, and the starting point is the yellow letter E on a dark blue background.

## EACH POINT ON THE BATTLESHIP MAP IS AN OXFORD COLLEGE

## College Scarves and Followup

The battleship sequence and Oxford colleges gave us the message MAKE OXON SCARVES WITH HUE TABLE.

This message refers again to the copy protection grid. It can be seen that the colours of the squares, when read from left to right and from top to bottom, are in the same order as the colour bands on various Oxford college scarves. Grey squares are used as separators between scarves. This gives another list of colleges - substituting each with its letter from the cipher previously used gives the message:

## BLEND MAP AND DATA WITH ROSE ON CHRIST AND JACK ON ST JOHN AND REAPPLY COORDS

The "DATA" referred to in this message is the database of words in the BBC Micro decryption code listing, and the "MAP" is the battleship game grid.


If the code listing is overlaid on the battleship grid so that the red dot corresponding to Christ Church college (CHRIST) is aligned with the word "JACK" in the listing, and the red dot corresponding to St John's college (ST JOHN) is aligned with the word "ROSE", the same sequence of co-ordinates which were used to extract the first message from the battleship grid now give a sequence of words in the program database, giving the message:

BEGINNING AT PATRON SAINT FOLLOW FELINES TO HOSTELRY AND THENCE PASS UPRIVER ALONGSIDE JACK AND LOCK BEYOND TO HOUSE WHERE ROSE LIES TO SEARCH OUT CORNER BENCHMARK

## Grilles

From the DaphneHQ voicemail and Secret Decoder we had the message:

The letter walks are the walks from the Towers of Hanoi puzzle and Sliding Blocks puzzle. The cat names are the names from the naming of cats on the grids on pages 11 and 14 (on 14 they are an actual wordsearch, on 11 they are interspersed with other letters).

If this grille is applied to the colour grid we get:
FROM BM SET BEARING TO TWO SEVEN NINE AND TRAVEL ONE FOUR THREE METRES TO SMALL BRIDGE WHERE YOU WILL FIND PRIMARY CONCEALED TREASURE AMIDST CONCRETE RUBBLE XX

## News and Errata

## Teletext Teaser

If we shift the numbers $25,26,5,23,26,25,18,25,26,8$ on the page by 15 and apply the obvious mapping to the alphabet we get the message NOT LONG NOW. It's possible that 15 has additional significance as it is also the date on Computering Magazine.

The screen reference the Bamboozle! Game on Channel 4 Teletext. There was a text adventure game on Bamboozle! based on the Knightmare television programme (Knightmare also being referenced by the wall monster in CATastrophe).

## Poster

Advert for CATastrophe game, with official Daphne HQ seal of quality - as per Nintendo https://www.mariowiki.com/Official_Nintendo_Seal . Also DaphneHQ at bottom of page in Nintendo style as p. 10 of Computering Magazine.

QR codes for catastrophegame.co.uk and pablosath.com

## 15th December

We assume 1862 is a reference to the first use of the term 'cross word puzzle' in that year.

## 17th December

Mentions storms - a hint to the hurricane puzzle? 'The Horror! The horror!' is a reference to The Heart of Darkness but we don't know if there is any significance to that.

Sledding is a clue to one of the Which is Greater answers - highest speed on land was achieved by a rocket sled (unmanned!).

We believe that the poem The Sourpuss and the Raconteur must contain Carroll's Memoria Technica code. The book The The Life and Letters of Lewis Carroll tells us:

The inventor found this "Memoria Technica" very useful in helping him to remember the dates of the different Colleges. He often, of course, had to show his friends the sights of Oxford, and the easy way in which, asked or unasked, he could embellish his descriptions with dates used to surprise those who did not know how the thing was done. The couplet for St. John's College ran as follows .... In his power of remembering anecdotes, and bringing them out just at the right moment, Mr. Dodgson was unsurpassed. A guest brought into Christ Church Common Room was usually handed over to him to be amused. He was not a good man to tell a story to-he had always heard it before; but as a raconteur I never met his equal. And the best of it was that his stories never grew-except in number.

We have the college foundation dates in the Brian puzzle and the poem title mentions 'raconteur' which also comes up here.

However there is ambiguity over which rhyming words to consider, and we don't know what to do with the resulting numbers.

The title of the poem is obviously a reference to Carroll's The Walrus and the Carpenter and the first lines to the first lines of Carroll's The Mock Turtle Song.

The poem talks about stone and we have the boundary stones and the benchmark cut in stone. The lines about the cats leading the way and the feline path we presume refer to the CATSCAN cats, and we assume the damned pub that will be drunk dry is The Trout. And we are sure there must have be a fence somewhere to stand by (see Site Visits).

## 20th December

The battle is a clue to the relevant 'Which is Greater?' question as the battle was before the year 0 .

BBC Micro / magazine refers to the Micro User magazine which has the items for sale and the list of staff.

The small print is to help find the text underneath the Rosa logo.

## 22nd December

The SERE manual is a possible air force reference - this could be a clue to the Airman's Bridge.

Running faster than the slowest member of the part is possibly a reference to the Caucus Race in Alice in Wonderland.

The photo of the squirrel contains location data giving us the longitude and latitude of a location just off Binsey Lane - cluing as to look for the cats on Street View for CATSCAN around there.

## 25th December

The intern name ‘Charlie D’ refers to Charles Dogson.

The cats gives us X in Morse Code using the tabby/spotty for dash/dot provided that the final cat is both tabby and spotty.

If we use Memoria Technica on the poem we get 00302 which if put into the Secret Message Decoder gives us 'Treasure'.

## 26th December

The intern name Alex Higgins is a clue to 'Hurricane' and the hurricane puzzle.
And we are given the final digit for 'Which is greater?' - yay!

## 2nd January

The saint is St Frideswide who died in 727AD. She is the 'patron saint' where we start the feline path. The photo is of the Alice Door in the church.

We have another hint to storms, for those of us unable to get the one in the previous news item, with the intern names Franklin, Antoni and Betty.

The item depicted is a hint to the Edith items - in the Pitt Rivers museum - 1926.6.1 (Glass flask reputed to contain a witch): Glass flask reputed to contain a witch. The glass is bilobed with vertical ribs. It is silvered on the inside. The top is stoppered with a cork and sealed with brown wax.

The errata these time are not real errata we think but a reference to the white 'little' under 'Game Reviews', the typos in the Godstow Witch site and the lowercase letters in the Secret Message Decoder data.

## CATastrophe Game

## Spells

We found the following spells in the game one or two of which could possibly be regarded as portmanteau words:

| HELIUM | For floating down the shaft to the CAVES, <br> cannot go back |
| :--- | :--- |
| SOUTERRAINS | Teleports to CAVES |


| SPELUNKLES | Teleports to COUNTRYSIDE |
| :--- | :--- |
| BUCOLIA | Open door between CLOISTERS and <br> COUNTRYSIDE and teleports to <br> COUNTRYSIDE (by the door) |
| AMAZECAKEZ | Teleports to CLOISTERS (west cloister) |
| SHAREWAREZ | Teleports to Circle of Plants, Final spell - <br> may need when the hunt starts |
| RELIGIOSA | Teleports to CLOISTERS (garderobe), <br> cannot go back to start |
| RAGANA | Teleports to CLOISTERS (courtyard) |
| ARBORETUMS - | Teleports to COPPICE |
| FINALESTIA | Teleports to CABIN |
| INCONCLUSIUM | Teleports to CONCLUSION |
| ACEVEDO | Teleports to hidden room (from registration <br> puzzle in main hunt) |

## Puzzles

The hexagonal room (a nod to The Library of Babel?) north of the start has clues to different makes of CATamaran on the walls: Royal Cape, Antares, Gemini, Atlantic, Nacra, African Cats. These spell out RAGANA, a Latvian goddess of witchcraft.

If you break fourth wall in the hexagonal room, you get to a room with some a honey. You can also grab pool in the starting room to get a fish. If you put the honey and fish in the small hole, then the cat comes and retrieves a vellum scroll with a copy of the Witch's Alphabet on it. The symbols on the walls are in this alphabet and spell out HELIUM. If you empty the hole in the cat's corridor and cast this spell you reach the CAVES.

The answers to the ghost's riddle are 'electricity cable' and 'lift. The piece of paper you get when you have answered the riddle has a stained quote from Malleus Maleficarum, the 'Hammer of Witches', which translates to 'The deeds of witches are such that they cannot be done without the help of Devils;.

The Wall Monster gives us a set of directions to use in the COPPICE: WNNEWEN: Wu Cheng'en wrote Journey to the West, Polaris has Magnitude 1.98, castle.over.puddles is a W3W in North Hinksey, Oxfordshire, Seriapis orientalis is the Eastern Tongue Orchid, Triatoma protracta is theWestern Bloodsucking Conenose, dawn is in the East, and send.serious.couriers is a W3W gives us a place in Northleach. Wall Monsters appeared in Knightmare, linking in with the Teletext teaser. There was a Knightmare-based text adventure as part of Bamboozle.

To get past the stream in CAVES, get the stalactite from the Cave with Rock Formations, and use it with the boulder in the Cave with a Stream.

To open the locked door in the Narthex, you touch the colours to spell out various words using the notes. These words are clued by objects in the cloisters area: FACE (clock face), FEED BAG (basket in the kitchen), BAD CABBAGE (the rotten brassica), DEFACED BAGGAGE (the trunk in the misericord) and AGED BEEF(the steak in the kitchen).

If you climb fireplace in the kitchen in CLOISTERS, you get to a chimney which takes you through to the sacristy.

To make the potion for the circle of plants you need to Greater Stichwort (Stellaria holostea), Welsh Poppy (Meconopsis cambrica), Wood Avens (Geum urbanum) and Yarrow (Achillea millefolium) which match the figure's descriptions. The Espeth referred to by the figure is the witch Elspeth Reoch. You make the potion in the kitchen using the cauldron. You don't seem to need to be wearing the hat for this, although you will be pleased to know that we were suitably garbed.

The witch's puzzle: The following solves the puzzle:

MOVE 5-2
MOVE 3-8-5
MOVE 1-6-3-8
MOVE
7-4-1-6-3
MOVE 2-7-4-1
MOVE 5-2-7
MOVE 8-5

In the coppice, you can find a stick and twigs. You can use these with the twine from the herbalist to make a broomstick. Alas you can't fly this broomstick (even with the HELIUM spell) but you can use it to clean the wall you get to with spell ACEVEDO (a holly bush, festively!) and get a message using the witch's alphabet again.

## Story

You are Alice Liddell in the story (hence liking the snowdrop in your hair, which you can't remove, and the pocket watch which presumably reminds you of the White Rabbit). The disembodied voice etc. are based on the story on the Godstow Witch site, with many references to the story on that site.In particular, the ghostly doctor is Dr William Owen (Henry VIII's physician), the toll bridge (Airman's Bridge in Wolvercote was formerly called Toll Bridge), the old woman is the beggar woman, and a reference to Canditch, and meeting the king secretly (Rosamund and Henry II).

## Message from INCONCLUSIUM

... a tiny bead of blue stone, carved in the shape of a cat... [you] hide the bead in a hollow stone underneath a large fallen tree between the abbey and the river.
Congratulations on finding the location of the Game Prize!

## Other things

If you talk to the hat, there is a reference to Harry Potter. The cat smells feline but we failed to find anything else aromatic, although l'm sure there must be some things at the herbalist.

The old woman spouts CATullus: 'Alios age incitatos, alios age rabidos' meaning 'others drive thou in frenzy, others drive thou to madness', to go with the various cats and CATamarans.

The spherical fruits are a reference to the 'bulbs' or 'lamps' in The Library of Babel. They seem to be dead, alas.

The crow is as 'black as tar' like the crow that flew down in the battle of Tweedledum and Tweedledee.

In the kitchen, 'This lightweight cup has a strange insignia and looks out of place here' - we think this might be a reference to the Starbucks cup in Game of Thrones.

We were pleased to see that the command xyzzy was implemented, but sad that it didn't do anything.

We are not sure what the pizza is doing, but we enjoyed eating it. And we didn't try and kill the cat, honest. That was somebody else's IP address.

## Site Visits

## 24/12/2022 - Binsey Cat card and Catastrophe treasure

At this point, we had TWENTY NINE METRES WITHIN BUCKELLS BOUNDS, FOLLOW BUCKELLS PERAMBULATION STARTING WITH JING JING STONE AND COUNT SIKS MARKERS DOESIL THEN FOLLOW DITCH SOUTH and LOOK INSIDE STONE.

Using the text in these two descriptions of an 1886 perambulation of the Oxford City boundary by Mayor Robert Buckell
[https://www.oxfordhistory.org.uk/streets/wayside_stones/boundary/boundary descriptions/1 886 gilbert.html] [http://www.oxfordhistory.org.uk/streets/wayside_stones/boundary/boundary descriptions/18 86. html], we were able to follow the boundary from the stone by Jing Jing (store on Cowley

Road), past four more boundary stone sites, via Godstow Holt, to a stone marked in red on the following:

(B.S. in red, north of the old Godstow road, approximately on the current Godstow Road.)

The boundary runs north along a small stream, turns right to the boundary stone, then continues north to a footbridge. At the boundary stone, the directions indicate to follow a ditch south. There is indeed a ditch which skirts the Godstow Abbey site. Note that the ditch is approx. 29 metres east of the stream, so is compatible with the decode regarding Buckell's Bounds.

On looking around for hiding places in nearby stone, we came across a container hidden in a slit in the remains of the abbey wall, a few metres to the east of the ditch. Curiously, we found not treasure but a cat! [lt's one of our friends from CATSCAN, from most of the way up Binsey Lane towards Binsey.]


We retrieved a cat card, with a Borges quote on the back, together with a note:
"This is part of a game - if you find it by accident, please replace it. Thank you! Sorry, this isn't treasure. It can be found if you solve enough of the hunt! Please take a Binsey Lane cat - card as a souvenir and do keep hunting!"

We also had directions from the conclusion to the CATastrophe game to look in a hollow stone under a large fallen tree between the abbey and the river. There is such a tree clearly visible on Google maps, so it definitely seemed worth a visit.

Indeed, there was a stone, and it wasn't all it seemed. Inside, we retrieved CATastrophe treasure card no. 4 (now somewhat mud bespattered). Another item was adjacent to the hollow stone - some kind of witch paraphernalia?


The message reads: "This is part of a game - if you find it by accident, please replace it. Thank you! Congratulations! You have found the CATastrophe Game Treasure. Please take a card to record your position and email daphnehq@gmail.com to let us know. Good luck finding the main treasure!"

## 27/12/2022 - Main treasure

By now, we had the following crucial messages concerning a benchmark (BM):
BEGINNING AT PATRON SAINT FOLLOW FELINES TO HOSTELRY AND THENCE PASS UPRIVER ALONGSIDE JACK AND LOCK BEYOND TO HOUSE WHERE ROSE LIES TO SEARCH OUT CORNER BENCHMARK

## FROM BM SET BEARING TO TWO SEVEN NINE AND TRAVEL ONE FOUR THREE METRES TO SMALL BRIDGE WHERE YOU WILL FIND PRIMARY CONCEALED TREASURE AMIDST CONCRETE RUBBLE XX

The corner benchmark is on the SE corner of Gostow Abbey, on the wall of the chapel. We hoped to find the small bridge over the ditch, which is 143 m at 279 from the benchmark.


Indeed, there it was, and amidst the rubble at one corner was another hollow stone. A silver token, number 2!


Perhaps this is our ash tree - BY BRIDGE UNDER ASH. Could the old bridge railing be the fence from the poem? Or another fence back on the boundary by the stream?


Also another Borges quote and a message that suggested we weren't completely done yet: This is part of a game - if you find it by accident, please replace it. Thank you! Congratulations! You have found the Pablosath Main Treasure.
Please take a card to record your position and email daphnehq@gmail.com. But are you sure you've completely finished? (and the first team here, please have a drink on us!).

## 15/1/2023 - Bonus Borges treasure

We finally put the pieces together to create our Data Matrix supplying the missing piece of the Library of Babel hex, and the resulting message:

NOW FOLLOW BOUNDARY NORTH TO BUCKELLS METAL MEMORIAL AND LOCATE BONUS TREASURE IN CREVICE OF IVY COVERED TREE ON OTHER SIDE OF PATH

This made sense starting from the main treasure site. The reports of the 1886 perambulation describe the boundary heading north along a stream to an "ostium" at a footbridge (where it meets the Thames), before heading back SE along the towpath


We had already come across the metal-encased Buckell Boundary stone just upstream of the footbridge on a previous visit (and it is readily locatable online). The decode "FOLLOW FELINES SEARCH UPRIVER BRIDGE" (bridge on/at river, upstream of Binsey) was also in play. All that remained was to retrieve the bonus treasure.

The weather was not as kind as on the previous two visits - with more rain forecast we were just in time in all senses.


Success! We retrieved Borges Bonus token number 7.


