A Journal of the Plague Year

Inspirations

Whilst one of our number had previously <u>set a Hunt</u> way back at the start of the millennium, this recounted experience was insufficient to deter other Apopheniacs who had grown increasingly enthusiastic about setting their own Hunt with each Christmas that passed. We decided that at the least a plausible outline idea was needed before putting our names forward, and after the most excellent <u>2017 Messy Hunt</u> was concluded, we were inspired by the delusion that we could come up with something as good as that.

The inspiration came from some Apopheniacal common interests, which included local history and rambling (specifically around the Capital Ring, as well as late night in pubs). Some of our number live in North London, and Stoke Newington was identified as an area of nearby historical interest boasting both Edgar Allan Poe and Daniel Defoe as past inhabitants, marked by two of a number of plaques along the length of Church St. We noticed that the latter was actually baptised "Daniel Foe" (only adding the 'De' later to sound a bit posher), and so the alignment of Poe and Foe here seemed too neat an opportunity to pass up. The Capital Ring also passes through 'Stokey', winding through the intriguing Abney Park Cemetery - where better for a burial than a cemetery we joshed! The "Capital Ring" suggested the idea of using circles and rings, which also tied in with an idea that we had around using the circular blue plaques.



Photo 1: The Apopheniacs meet on Stoke Newington Church Street for the ATH2020 kick-off

Our outline proposal from January 2018 also identified *Treasure Island* as a potential link, with Robert Louis Stephenson admitting in print that his most famous story was directly inspired by both Defoe's *Robinson Crusoe* and Poe's story of *The Gold Bug*, the latter in particular full of rich treasure hunting material. The use of Islands offered a cosmetic theme for puzzles and the presentational idea of a pirate treasure map. We did have to double check that such an idea had not been used before.

'Lost London' was also a concept of interest. Lost landmarks, rivers¹, buildings and other things fascinated us, partly inspired by the guided walks and books of <u>Paul Talling</u> amongst others. The idea of a treasure map knitted with our interest in historic maps that showed these lost artefacts, and in particular the endlessly fascinating <u>Layers of London</u> website. What3Words would come later.

Having convinced ourselves we had a workable idea, we put ourselves forwards and were lucky enough to get the nod in March 2018. There followed sudden panic – we now had less than 3 years to turn this into a workable hunt.

Precepts

Early doors one of our Apopheniac number had neatly articulated some of the ATH design criteria that we had discussed, and these were henceforth known as *Clarkey's Precepts*. We largely stuck to these aspirations, although the fast "round trip" route to the treasure did end up involving a 'big code', albeit meaningful. We're not sure whether the phrase "Eureka" passed too many lips.

- **SOMETHING NEW** Introduce at least one interesting new topic to hunters (c.f. Italo Calvino, Alan Turing's Silver Bars).
- **LAYERS** Hunters should constantly be finding hidden depths; what you think the theme is on day 1 should definitely not be the theme.
- NOTHING SUPERFLUOUS Everything has a purpose, even if it's a red herring.
- VISIBLE Everything is in front of you and there are no hidden web sites.
- **FAST TRACK** Two ways to find the treasure: one quicker but fiendish, one slower and (slightly less) fiendish.
- **NO BIG CODE** no obvious "big code" with detailed treasure site instructions; the detailed instructions need to be more subtle
- EUREKA When it's solved it should all make perfect sense.
- **MEANINGFUL CRYPTOGRPAHY** Cryptographic methods used should have some significance.
- **HOMAGE** Due homage must be paid to Pablo and to Sean Bean.

As well as the very impressive 2017 Messy Hunt, we had also been hugely impressed by the 2014 <u>DNA Hunt</u> and the 2011 Turing Hunt. These were all multi-layer or multi-component Hunts, the parts fitting together elegantly and in some cases multiple clues elicited in different ways from the same source material. These were things that we aspired to.

¹ Lost Rivers was a particular area of interest early doors inspired by Tom Bolton's books as a source for information and their underground course through London. Initially this had the potential to be a central part of the Hunt, but the idea somewhat fell by the wayside at some point as it proved a difficult theme to incorporate as other ideas evolved. A pity, it was particularly appropriate with the 'lost' Hackney Brook delineating the northern and eastern boundaries of Abney Park and flowed around Watts Island.

Purloined Letters

Lulled into a false sense of security by the amount of time at our disposal, we largely spent the first year or so meeting in pubs and filling the gaps in between with endless chatter on WhatsApp about all manner of ideas, but with little concrete or coherent output to show for our 'creativity'. A few trial puzzles were produced and largely rejected for various reasons, although one or two ideas would usefully resurface later in modified form.



Photo 2: Edgar Allan Poe plaque and bust on site of Rev Bransby's Manor House school (described in the story, <u>William Wilson</u>)

The first set of puzzles to stick were the alphabetic OE crossword of Poe and Foe pseudonyms. The aim behind these was to try and set some original puzzles that at least would involve a little more pencil-and-paper type solving before resorting to Google. They were set around alphabetic themes, many involving word puzzles as well as offering up tangential hints to Stoke Newington, Poe and Foe. Some of these were very pleasing – the homophone island pairs, the Walthamstow aviator's hidden Greek letters, the Joe 90 equations, Thomas More's game of Utopian hangman and Thomas the Rhymer's buried body parts.

The idea early on here with these first puzzles was to hide each behind some basic alphabetic translation or simple decode in a square grid format that offered a relatively easy foothold into the solve. But given the amount of further Hunt material that followed, this may have been an unnecessary and time-consuming extra layer, albeit a relatively easy start.

We thought that once the OE pattern had been spotted, it would help solve some of the harder crossword puzzles. A relatively late addition was the "OE" nonogram provided as a helper, which we wrongly expected would be relatively easy (not many teams solved it).

One huge benefit of team setting was the ability to collectively test ideas and puzzles as we went along. Quite a few of the OE puzzles were reviewed, revised or rejected and reworked or replaced as a consequence. The potential pitfall of too long a setting gestation period was also discovered. The original puzzle for WOE was based around the <u>Where</u> <u>on Earth</u> map WOE IDs, neatly fitting in with our map theme. But when we revisited this in 2020 it had all

but become defunct and the lookups were no longer possible.

The Crossword idea led to the idea of forming a square grid of letters, offering a counterpoint to the circular theme arising from the Capital Ring and giving rise to our alternative treasure journeys via the Square Route and the Round Trip. This grid could be mapped to our square treasure map with its 8x8 grid of latitude and longitude markings, and it also struck us that "X" should of course mark the spot.

Colossi: The Complex Square Route

For the first time in late summer 2019, we were able to draft out what the end to end Square Route might look like with an 8x8 grid of letters formed from 24 OE crossword letters and the remaining 40 letters provided by our "disc" question answers.

We obviously wanted to use this grid of letters to provide some treasure directions. If possible we wanted to try and use the grid of letters in more than one way to provide different outputs. The main idea from an early stage was to use a simple <u>Turning Grille decode</u> applied to the grid of letters as one way. An 8x8 grille with 16 open cells laid over the letter grid reveals 16 of the grid letters. The grille is then turned 90 degrees to reveal 16 further letters each time. If the grille setting is configured in a certain way, these four turns will reveal all 64 letters in the grid, once each.

One limitation was that such a decode provided only a 64 character message, not a great amount to impart the treasure directions which we wanted to take teams from the odd unpaired disc along Church Street and through Abney Park to Watt's Mound. We had a small leeway to manoeuvre the 24 letter crossword solution around the grid, and could select within reason what letters we wanted to fill in the remaining 40 letters. Various spreadsheets were put to work to try to formulate a grid that would yield meaningful but concise directions, but to no avail. A program was devised (Colossus I) to try to process a reasonable subset of combinations, one of which must surely generate something usable. Analysis though indicated that the limitations imposed by the 24 crossword letters were surprisingly restrictive.

At this stage, less persistent setters might have ditched the Turning Grille idea and tried to find another way of using the grid letters. Instead we devised a means of loosening the tight grid limitations by adding an additional decrypt stage: the first 32 letters generated from the Turning Grille were added to the second 32 letters (mod 26) to produce a 32 character decode. This allowed more flexibility as 26 different pairings could be used to give any desired plaintext letter. On the downside though, this reduced the plaintext message output to just 32 characters and also added an extra and not especially intuitive stage to the decode sequence.

To combat the first deficiency, we devised the use of another puzzle to get a second 32 character decode out of the same underlying grid. We alighted on a puzzle that had been suggested earlier but we had not yet used anywhere, essentially a jigsaw fitting a number of <u>Pentomino shapes</u> onto an 8x8 grid leaving just 4 corner squares. With some caveat clues, a unique solution could be specified. At the same time the designer of this puzzle had noted that there were 32 London Boroughs, and this seemed a coincidence too good to miss. By laying out the 32 Boroughs and their index pairs on these Pentomino pieces and overlaying the solution on our 8x8 letter grid, we could again generate a second 32 character decoded message by adding a pair of letters in our grid modulo 26. Colossus II sprung into action, and after much grinding and bellowing of smoke delivered us a number of letter grid formations that yielded usable treasure direction decode messages via the application of both the Turning Grille and the London Borough pairs Pentomino configuration.

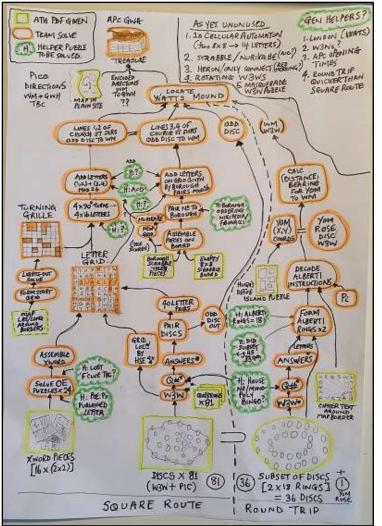


Photo 3: Simples! Early end-to-end design of the ATH2020 solve path

Colossus was an ATH2020 subproject in its own right, one that nearly matched the achievements of Tommy Flowers and Bill Tutte. Initially employed to derive a single Turning Grille message from various crossword grid configurations, Colossus II was developed to attack the complexities of solving the "two messages from one grid" problem. It was only after a great deal of work already done on locating two messages which could be created from the same grid by brute force that we realised that the letter sum (mod 26) of the two messages had to be identical - if they were not the two message could not come from the same grid. A vital mathematical breakthrough! This might appear to be trivial to prove and understand, but eluded us for too long. But it did finally enable us to create two linked messages which when combined took us from the spare disc to Watts Island (as well as shortening the grid war by over a year).

In retrospect, these additional decoding steps made the Square Route a little too long and complex, especially given the amount of work required to get to this stage. A number of teams we were watching managed to pretty much form the letter grid from the crossword puzzles and paired disc answers, and some also to apply the Turning Grille. But the inclusion of the Scrabble board for the Pentomino solution introduced a visible grid on our map and unintentionally caused confusion. Helper instructions that were intended to refer to the 8x8 letter grid to be formed by teams as part of the solve, were taken to refer to the visible Scrabble grid. Also we probably needed to provide clearer instructions about what to do with the London Borough pairs as it was not clear to even those teams who had applied a similar method to get the first half of the decode via the Turning Grille.

On the plus side, the number sequence puzzles presented as sea chart sounding depths on our map to define the Turning Grille configuration were quite satisfying. These were a relatively late addition, with the placeholder grille definition initially being given only by the mythical creatures appearing in corresponding map squares. It was though a little depressing to find that even solutions to such sequence puzzles can be found online via sites like <u>OEIS</u>. Luckily we had devised some of the more imaginative sequences that could not be solved using such tools.

There were other puzzle ideas mooted for different ways to use a grid that ended up on the cutting room floor. One proposal involved manually decrypting the data section of a QR code formed from two 8x8 grids of black or white squares specified via the discs. Other grid re-use ideas included games of Pirate Battleships and Old Logician's Alphabet Sudoku, as well as a fiendish decrypt based on 1-D Cellular Automata. The thematic Nurikabe islands puzzle was tried in various guises before ending up deployed as an additional use of the Scrabble board.

A Tour Thro' the Whole Island of Apophenia

Taking our lead from Defoe's ramblings and his <u>Tour Thro' the Island of Great Britain, divided into</u> <u>Circuits or Journies</u>, we had the idea of somehow mapping out journeys around our own Island of Apophenia that represented London. The idea was to identify a set of interesting historical locations within London, setting a question associated with each location. This would incorporate our thematic ideas around lost locations and blue plaques.

A concern was that central London would provide a rich concentration of such locations with interesting material sparser in the outer reaches of our island. We trialled a random route from central London out along the A2 as far as its intersection with the Capital Ring, and this threw up enough sites with interesting back stories all along the route to give confidence that we could find a reasonable spread of geographical locations across the entire island.

This trial journey identified some 20+ locations with back stories of varying degrees of interest. Of these we ended up using four – Ben Jonson imprisoned at the Marshalsea Prison, the Great Train Robbery sacks of cash left in a Great Dover Street telephone Box, Barnes Wallis' childhood home in New Cross, and the Severndroog folly on Shooters' Hill. Other potential sites ended up not being used, either because they did not provide a usable answer, they were less interesting, or simply because we could not use multiple locations that were too close together on our map.

One of the real pleasures for us as setters was researching all these potential locations, and many more candidate locations were identified than ended up being used, as can be seen on our <u>Apopheniacs Island Disc Googlemap</u>. We dived down many rabbit-holes in the courses of our research, and it was a tough and heart-wrenching decision in many cases to leave out fascinating stories.

For every nugget included like the Hitlers living in suburban Highgate, we had to leave out many others tales such as: the Euston Arch being dumped in an east London river, Samuel Johnson's Mulberry Tree in a Tooting back street, the first murder on a train (the body thrown from the compartment found with 'his foot towards London and his head towards Hackney'), the first fatal motor accident at Harrow, Van Gogh's daily walk to work through South London, stolen Rembrandts in the Rookery at Streatham, Angry Brigade terrorists from Stokey, the skull of a murdered woman David Attenborough found buried in his Richmond pub, Jerry Springer born on Highgate tube platform, Elvis Costello working as a computer operator, the first ever TV broadcast interrupted by prostitutes, the tragic story behind gold coins found buried in a Stokey garden, or the detective work involved in identifying exactly where Arsenal played their first match as Dial Square on the Isle of Dogs in 1886 (next door to the launch site of the Great Eastern ship whose mast can now be found at Anfield).

The idea of pairing disc answers came from our own Apopheniac tendencies in most ATHs past to see non-existent patterns or groupings in the question answers. Every year we do it, convinced there

is some rhyme or reason to these answers and how they can be matched up, all to no avail. Paired answers we thought would act as an additional confirmer for any uncertain answers once the pattern was spotted, and also neatly provide us with the means for a paired coordinate system for identifying where to place the disc answer letter in the 8x8 grid. A game of pairs also offered the means of identifying an odd disc out, a key disc that gave the start location for the Square Route treasure directions.

The paired coordinate system devised to identify the cell location for a disc answer in the 8x8 grid, dubbed HSE (Hugh Standard Encoding), was rather neat we thought. Initially a simple method of defining (X,Y) coordinates was envisaged, perhaps by hiding one of the numerical coordinates in each of the corresponding pair of disc images. But HSE proved far more innovative and made use of the fact that each encoded W3W address circumscribing the disc was composed of 16 letters that in order could be mapped to a 4x4 grid. The selection of two subsets of letters within this sequence of 16 could then be used to precisely locate a single cell in the grid in two stages. Firstly, 4 letters are highlighted to identify the grid quadrant (NW, NE, SW or SE). Secondly, a single letter is highlighted to identify the the chosen cell within the 16 squares making up the indicated quadrant. The images cluing the HSE method in each corner of the map were also quite pleasing on the eye.



Photo 4: Testing a tour thro' the whole Island of Apophenia

Albert: Step Two

The idea for the Alberti Decode as the method for cluing the second route to the treasure came together from a number of disparate strands. Looking for some kind of circular theme to go with the Capital Ring and act as a counterpoint to the Square Grid route, we came across Alberti's Cipher Disks involving two rotating concentric rings of letters. This was an encoding method that as far as

we could see hadn't been used before in ATHs, and was on the face of it relatively straight forward to apply. Indeed it turned out that a couple of paper cipher disks provided quicker decoding than the effort to set up a spreadsheet to do it automatically. We had already noted the clutch of Music Hall stars buried in Abney Park, two of which were Albert Chevalier and Fred Albert. The ATH Gods were smiling on us, delivering us a pair of thematic Alberts on which to hang our cipher disks.



Photo 5: Alberti: The grave stones of Music Hall stars Albert Chevalier and Fred Albert in Abney Park

The idea then was to form the inner and outer Alberti cipher disks using a subset of the location "discs" on our island. Our island coastline, the Capital Ring, obviously must provide the outer rotor. Neatly Alberti even specified this should be formed of upper case letters, so literally a Capital ring in another sense. The restriction was that the outer ring needed to be in alphabetical order going clockwise. Could we find enough interesting locations around the Capital ring that would provide pairable answers that met this criteria? A hugely enjoyable couple of months followed tracing out a virtual journey around the Capital Ring and noting all the interesting candidate locations. Fortunately we were able to select an alphabetic sequence of answers that met our needs, although again this meant leaving out a large number of interesting back stories.

We anticipated that this alphabetic sequence of answers around our island coastline would offer the main way by which teams spotted there was something significant code-wise going on with these discs. However, watching teams during the Hunt, we saw that the tendency was to form a spreadsheet of answers, and in this way the geographical circular pattern around the map was often lost or overlooked.

The inner ring caused more difficulty. The initial idea was to use discs positioned at locations associated with stations on the underground Circle line (providing an inner tube within our disk wheel). However, we quickly realised that this was too central a concentration to fit 18 such discs on our map. Other ideas followed, including selecting from a walled ring of 23 forts built around inner London in 1643 during the Civil Wars (alas, again too central).

The thematic idea of Desert Island Discs had been noted at the outset, and this Music Hall theme now offered a chance to use it. We set about identifying a subset of London locations that each linked to a specific music single or album, these being rotating discs in their own right. These would be our 18 Desert Island Discs. We needed these to form an approximate geographical ring inside the outer Captial Ring, and at the same time each answer must provide a different letter - luckily the order was immaterial.



Photo 6: An early prototype of Alberti's cipher rotors

As this inner ring (that formed the rotating ciphertext disk in Alberti's invention) was less obviously identifiable from the map, we decided to flag this subset of discs by marking each with the speed at which the corresponding record rotated (45, 33 or 78 rpm). What we hadn't anticipated was that the circumpunct symbol we used to separately identify our 'lost' location discs would be seen by some teams as the hole in the middle of a record (even though it wasn't a hole) and this caused some confusion with identifying a musical subset of discs.

This Round Trip was to be the potentially quicker (involving as it did only 36 discs) but much harder route to the treasure. Poe's *Gold Bug* treasure directions involving a bearing and

distance offered the opportunity to get from A to B directly, and Poe's starting point at the "Bishop's hostel" put us in mind of Ye Olde Mitre pub in Holborn which already appeared in our crossword. Extensive testing with a number of online mapping tools gave confidence that we could reliably specify a bearing and distance with enough precision to get teams directly to Watts Mound even allowing for a certain margin of error.

We didn't want to make this route too obvious, but added a couple of additional helper hints: that there were two routes to the treasure (the round trip being quicker than the square route) and the "In the Round" 18 note musical code pointing to Desert Island Discs. However, few teams, it seems, spotted the alphabetical order of disc answers around the island circumference that we envisaged would flag the existence of this code. The Musical Hall poster published as an additional clue highlighted the existence of these two rings and enabled a number of teams to decode the Alberti cipher text around the perimeter of our map.

Three Little Words

As the idea of London located discs and associated questions evolved, the issue arose as to how accurately we could position each disc on our map to enable teams to identify the corresponding London location. If we wanted to ask a question that assumed the locational context was known, we would have to be reasonably precise.



Photo 7: The W3W app showing Watts Mound in Abney Park

Then a couple of Apopopheniacs in discussion on WhatsApp hit upon the idea of What3Words, a global map addressing mechanism that was fast gaining in popularity. This fitted with our map theme, and also enabled identifying a location to the precision of $3m^2$ via a unique three-word address.

The scope for cluing these addresses was wide, and some elaborate encoding ideas were considered before we realised how fundamentally important it was that teams were able to identify the locations early doors. We therefore settled on the simplest encoding method we could think of, the Caesar Shift, and simply wrapped each encoded address around the circumference of the corresponding disc positioned on our map in its approximate London location. This gave us a little flexibility on laying out the discs on the map whilst also providing the ability to specify a very precise geographical location. Also, teams would only have to break the encoding mechanism once to hopefully be able to then identify all the disc location W3W addresses quickly.

Furthermore, we decided to drop what we thought were heavy hints in the pre-ATH poster, using the "Hands, Face Space" Covid three word advertising phrase. Other three word clues were included, along with a Caesar Shift encoded puzzle that resolved to the W3W address ///armchair.treasure.hunt handily located on an island (Alexander Island). Caesar hints were also

dropped nearby. The hope was that most teams would have unearthed a Caesar Shift encoded W3W words before the ATH proper started, and indeed we were comforted when the majority of teams we were watching noted W3W addressing when looking at the poster video.

But when the ATH started, we watched with increasing anxiety as all the teams we were watching failed to decode the What3Words addresses via Caesar Shifts. Perhaps the wealth of other material in the poster video had obfuscated the significance of W3W addresses? For our first Friday helper message on Christmas Day, we repeated the W3W puzzle from the video hoping to emphasise the significance of this method, and identified two island locations (MERRY and CHRISTMAS) via W3W addresses again encoded using a Caesar Shift.

But as the halfway marker and New Year approached, there was still only one team we were watching that had cottoned on to this key aspect of the Hunt. We were very impressed that some teams had nonetheless managed to identify a surprising number of the discs' London locations by

simply overlaying our Apophenia Island treasure map onto a map of London. The Urban Marsupial Orchestra in particular answered a remarkable number of questions via this method before decoding the W3W addresses.

But still, we were panicking a bit by now. For the next Friday helper two weeks in, we dropped an even heavier hint, including one of our discs on the clock-face of the Elizabeth Tower (Big Ben) and a Caesar Shift encoded W3W address corresponding to that London location around the disc circumference. For good measure, we threw in a picture of W3W founder & CEO Chris Sheldrick and also encoded the greeting "Happy New Year" using a Caesar Shift. This helped some teams to pick up on the disc W3W addresses, but still a few teams we were watching remained oblivious to its general application.

Our third Friday helper repeated the cluage, with a disc and W3W address location at 10 Downing Street, as well as a numbered question to hint at the link between street house number and question number (although most teams had picked up on that aspect even without the W3W addresses). The lesson here was really that what may seem obvious to the setter may not turn out to be obvious to solvers.

Googlability

As I'm sure all setters do, we tried to address the challenge of presenting a Hunt that wasn't easily solvable via Google or other online tools. It is not just about setting questions and using images whose answers and identification are not easily Googlable. Websites such as <u>decode.fr</u> and <u>OEIS</u> are now widely used by hunters in an attempt to solve codes and puzzles quickly that would once have been challenges for the little grey cells with the aid only of pencil and paper or an Excel spreadsheet.

We adopted a few approaches in this vain attempt to partly combat Google. The questions were formulated to be fairly cryptic and relied on identification of the associated London location first as the context for the question. We included a few questions as a way in, such as the Dambusters' bouncing theme tune, that we hoped could be answered without any location context and would help confirm the MO. The OE crossword puzzles were intended to involve some level of pencil and paper musing, involving some simple initial decodes and a fair number of word puzzles which were less readily Googlable. The Caesar shifted W3W addresses didn't lend themselves to automated decode since they were short and comprised three random words not readily open to e.g. letter frequency analysis. For the big Alberti Code, we used variable rotor moves governed by the digits of pi rather than regular switches every N letters that the <u>decode.fr</u> site facilitates the automated decode of. We really wanted teams to make their own paper Alberti Cipher Disks.

Image Google-fests are an Apopheniac bugbear, and we tried to avoid giving teams the opportunity to spend weeks googling obscure images. We tried to use images that were either easily identifiable as a little helper for context, or were tested as non-Googlable to act only as a confirmer for an answer once obtained. We were still amazed at the power of the Google image searches, and the ingenuity of some teams to extract the images we had buried deep in our map.

Google or other search engines are unavoidably part of an ATH and have become such a key and necessary tool for solvers. Attempts to combat and avoid easily Googlable answers obviously has the impact of making the Hunt more difficult and less easily accessible early doors to the casual dabbler. And whilst Pablo always maintained that "the ATH should be the hardest thing ever," the aim should

be to strike a balance that provides both provides accessibility & encouragement for new entrants, and an original and challenging puzzle for seasoned hunters.

Burial Site: The Oblong Box

Of all the things we worried about during the development of the Hunt, none taxed us more than burying the Treasure in a cemetery, causing us the most angst and invoking lengthy debate amongst the team.

It began as a semi-jocular suggestion. After all, where could be more apt as a burial site? We wanted a location on the Capital Ring, and Stoke Newington was key with its links to Poe and Foe. Early visits to Abney Park demonstrated it could be a suitable site at least on a practical level. It was atmospheric, historically interesting, not overly crowded and had many obscure nooks and crannies away from graves that were amenable to hiding a box. It was one of the <u>Magnificent Seven</u> London cemeteries, and we even toyed with the idea of using London graveyards as a major theme at one point. Abney Park was certainly somewhere we wanted people to visit and see for themselves.

There were two main concerns. The obvious one was an ethical concern. Hunters may not feel comfortable traipsing around a cemetery looking for treasure amongst graves, and some may indeed take offence. Even though there had not been burials in Abney Park in the last fifty years, this remained the key worry until near the end.



Photo 8: An island in the storm - Watts Mound in Abney Park

The other consideration was a practical one. Abney Park, whilst free to enter, had closure times with the gates opened at 8am and closed at 4pm during the hunting season. That was a slight limitation, but not a deal breaker. Of more concern was that the Park could occasionally be closed at short notice in extreme weather conditions, especially strong winds (given the number of old, tall trees). During the couple of years of ATH development, this had happened maybe half a dozen times and it would be Sod's Law that such a closure would occur during the month of ATH, perhaps early on as the first team desperately planned their visit in the hope of getting Ticket #1.

But as time progressed our ATH links to Abney Park only grew stronger: the perfect island retreat of our Old Logician Isaac Watts, the pair of Alberts, and particularly when we found the grave of another Musical Hall name, G.W. Hunt. What to do? Well, of course, we prevaricated. Watts Mound really was a non-negotiable key part of our Hunt, so we designed a two-stage set of treasure directions. The main puzzle routes would take teams to Watts Mound virtually. There would then be an independent second set of short directions taking teams from Watts Mound to the actual treasure site.

This gave us the option to identify an alternative burial location, a Plan B. We could then switch in an alternative set of final clued directions from Watts Mound without impacting the main body of our Hunt. After much scouring, we identified a likely candidate B-site in a small area of woodland called Horseshoe Thicket, one mile around our Capital Ring coastline next to the River Lee and close to Springfield Park. It even fitted with our OE theme!

We had also considered the idea of moving the treasure either by lost waterways or "over the sea" to the Parkland Walk which formed part of the Capital Ring heading north out of Finsbury Park. Along that stretch, not far from the abandoned platforms of the 'lost' Crouch End station, there is a <u>Spriggan statue</u> half-hidden in the arches. A Spriggan, it was pointed out, guards treasure, so it was a pity that there were no good hiding places nearby.

But as ATH publication deadlines approached, and especially as another major lockdown period was announced for November and into December, it became apparent to us that there would likely be very limited opportunities for physical ATH site visits, with Virtual finds being the only option for most if not all teams. Whilst hugely disappointing on many levels, this realisation did at least allow us to revert to our original Hunt burial site in Abney Park. With little likelihood of teams actually visiting the site, our short-notice closure and ethical concerns were unlikely to come into play.

Video Killed the Regular Poster

We left the poster to the eleventh hour. The "Hands, Face, Space" mantra during the pandemic chimed with our What 3 Words theme, and during a review session outdoors at a pub near Stoke Newington on a cold and rainy October afternoon just before the third lockdown, we hit on the idea of using the Covid poster that had become prevalent at such venues with its scannable QR Code.

The innovative idea for a video came from our own director, "Alan" Parker, and some test shoots in the basement of his Lancastrian pile proved hugely promising. Actor costs were minimised, and the final cut impressively only took a couple of takes, with a YouTube channel created just prior to release.

An initial and more ambitious idea had been to produce an animated Boris Johnson dressed as Captain Pugwash, with a voice-over artiste telling potential hunters about dates, the website and What3Words. As we got close to the deadline we realised we would not be able to produce anything like that to an appropriate standard, so settled on the idea of the 'found footage' with a 'few' hints about What3Words and some diversions to our main herring themes of Pirates and Treasure Island. That was all.

The ideas of adding a homage to Hunts past, some billiard chalks in the shape of our Inner Ring, the clue to Islands, the Samoan poetry etc all came as an avalanche of thoughts, and were implemented within a few days. The video took seconds to conceive, minutes to film and hours edit – we feel a small apology is appropriate for the weeks of combined ATHer time it consumed from there on.



Photo 9: Apophenia Ahoy!

The problem, in hindsight, was that it was difficult to adhere to our Precept of including nothing superfluous when presenting two minutes of moving images. There is too much data and no way for the viewer to know if it is all useful information. As an example, one team saw our sports car (merely a nod to an earlier hunt) and noticed it was part of the Hot Wheels 2020 Super Treasure Hunt – surely important?!? No, we were not aware of this. Another team noted that the original version of the King Crimson disc *Islands* has a hidden track on it – so surely something is hidden on an island? Yes, broadly true, but the link here was pure coincidence for which we can take no credit!

We hope it was fun for a while from the Hunters perspective - it was definitely fun to make and watching the viewing statistic on You Tube was compelling. It is safe to say that the next Apopheniacs Hunt will contain an element of video, but it is likely to be much more tightly constrained.

The Plague Year

ATH2020 was exceptional in one way at least, being affected as it was by the Covid pandemic. We can only hope it remains unique in that regard.

The lockdowns through the spring and autumn of 2020 did not adversely affect our preparation. Fortunately Abney Park was within walking distance for a number Apopheniacs, and so visits to the treasure site were still possible as part of the daily exercise rules. We would certainly have been in trouble if we had chosen a burial site further afield.

Zoom calls were decidedly more focussed than the previous lengthy ATH planning sessions in the pub, although no less alcohol was consumed. Also, since we were all now stuck at home, working or otherwise, we had far more time on our hands! Hours spent daily on lengthy commutes was freed up to devote to our ATH. As December approached and a new lockdown was announced, we felt that an Armchair Treasure Hunt might be a much-needed diversion for the bored populace, and teams might have more time than usual to devote to solving it. Therefore, we should surely make it much bigger and lengthier than usual?!

Armchair Treasure Hunt solving activities are for the most part well suited to lockdown conditions. Most teams were already set up for remote communication and collaborative solving, whether it be via message boards, GoogleDocs or other forums. The traditional pub kick-off meeting might have to be foregone, but many would now be au fait with Zoom, Microsoft Teams et al via work for online meetings.

The main impact would be around limitations on non-local travel, specifically the ability to travel to the treasure burial site would now not be possible for most, if not all, teams. As noted above, this left us free to select the treasure burial location in Abney Park as we expected only Virtual Find Claims to be possible this year. As it happened, two teams recovered physical treasure tickets from the site in January by means of team members or friends who lived near Stoke Newington. Ironically, another unexpected side-effect of the pandemic was that far more people took up the option of local perambulations as a form of exercise with the result that Abney Park became a lot more popular!

We prepared by clarifying our Virtual Find criteria in advance. As with any ATH, it is often tough to precisely locate the treasure virtually, so we deemed that identifying Watts Mound by one means or another and solving the relevant directions to the treasure from there was sufficient. Whilst we received a number of, ahem, optimistic Virtual Find Claims during the Hunt proper, there was also one team we were watching who had the necessary information to successfully meet our Virtual Find Criteria well before the deadline but did not submit a claim as they were not 100% certain about Watts Mound and continued to try and pinpoint the exact treasure location via an online map of Abney Park. In contrast, at least one team who made a successful physical visit to Abney Park during extra time did not have the detailed directions but successfully sought out the grave of G.W. Hunt.

Quoth the Raving: "Nevermore!"

In honour of Pablo, whilst perhaps not "the hardest thing ever", ATH2020 was definitely a difficult Hunt, and this was not completely unintentional.

With the benefit of hindsight, we probably packed in too much on our Apophenia Island map, and our optimism that teams would be prepared and keen to devote far more time and effort to a treasure hunt during lockdown was perhaps misplaced. The fact that it took most of the teams we were watching two weeks or more to discover the W3W address decodes certainly did not help, but we are still scratching our collective heads as to how a basic Caesar Shift encoding proved so elusive.

We blame the ATH Cabal of course. Fancy voting to give a team of seven Apopheniacs nearly three years to produce a Hunt! Quantity was never going to be an issue with 21 man-years of apophenia at

our disposal! The team dynamic of setting was also a novelty. By and large, and the role of consensus and collegiate-led decision making was very effective. Not everybody in the team agreed with everything, but everything was agreed. As well as quantity, we hope that we also delivered on the quality criteria as well. We were extremely happy with the look and feel of the 2020 ATH, the overall Apophenia Island Treasure Map as well as the presentation of the individual puzzles.

The Square Route to the treasure was perhaps a little too long. The additional two-part decode steps required after all the effort to form the letter grid by solving all the OE crossword puzzles, answering all the questions and constructing the Turning Grille and Pentomino grid, was probably a step too far.

We hoped that teams would find some of the London location back stories interesting, and this seems to have been borne out by the feedback received. We tried to include some original puzzles that weren't wholly dependent on Google, probably with mixed success. We still very much like the core idea of the Hunt based around questions that relied on a derived London map location for context, as well as the need to construct the letter grid and the Turning Grille to apply to it.

Until our next Hunt² then, its goodbye from the Apopheniacs.



Photo 10: Ring fences: Entering Abney Park on the Capital Ring

² Only joking 🕲