# THE WRITER AS MAP MAKER 

## VOLUME ONE:

## THE JOURNEYMAN YEARS

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#### Abstract

The Journeyman Years is a postmodern historical conspiracy fiction novel chronicling the life and travels of John Riven, a sixteenth-century apprentice alchemist and mapmaker, on a quest to find a mysterious religious relic which he believes holds the secret to the meaning of life.

The exegesis situates my writing within the context of postmodern literature and demonstrates how the postmodern author might narrate the journey of selfdiscovery through an interweaving of three recurring motifs of both historical conspiracy fiction and the critical field of semiotics: codes, maps and symbols. Through an analysis of the critical and creative works of semiotician and postmodern fiction author Umberto Eco - in particular his novel Foucault's Pendulum - the thesis explores how the interplay of these three motifs serves an examination of question of the limit of interpretation, and how they might combine to offer a framework for responding to this question within a postmodern work of historical conspiracy fiction.


## Declaration

I certify that this work contains no material which has been accepted for the award of any other degree or diploma in my name, in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text. In addition, I certify that no part of this work will, in the future, be used in a submission in my name, for any other degree or diploma in any university or other tertiary institution without the prior approval of the University of Adelaide and where applicable, any partner institution responsible for the joint-award of this degree.

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## Chapter One - The Paradoxical Compass


#### Abstract

Sometimes on a fine night we see a variety of appearances that form in the sky: 'chasms' for instance and 'trenches' and blood-red colours. These, too, have the same cause. For we have seen that the upper air condenses into an inflammable condition and that the combustion sometimes takes on the appearance of a burning flame, sometimes that of moving torches and stars. So it is not surprising that this same air when condensing should assume a variety of colours. For a weak light shining through a dense air, and the air when it acts as a mirror, will cause all kinds of colours to appear.


Aristotle, Meteorologica, Book 1, Part 5

When I first saw the double cross, cut into the night sky, I knew it meant my death.

It was 1562 in the reign of Elizabeth, and I had been bound by the crew to the mast of the Jesus, its twin yardarms groaning above my head, as the vessel rocked on a sea still calming from a storm that had hit us on our way back to London. It was London where, instead of returning with the other sailors to the docks for my next commission, I would be met by the guards to be taken to the Fleet River prison, and sentenced to death.

I had not wanted to die then. All I knew of death was that, for those without forgiveness, it meant eternity in torment, and I was scared. I was young, and knew little of pain. Elizabeth had turned England against Catholics, but that day the guards allowed an ordained man to visit me before I faced the gallows.

He was thin, dressed all in black, with straight blonde hair, and sharp, deep-set eyes that seemed to bore into all they turned upon. His tongue darted in and out of his mouth as he paced the cell, and I felt myself shrink back in response to some ancient, forgotten instinct.
'Will you make a confession?' he asked, in Latin. He must have known I understood him, for when I did not speak, he spoke for me. 'They say you brought a curse down on the ship. When the storm hit, they say you flew on deck like a man possessed, and fought those who were working at dumping the cargo to lighten the load. They say they had to knock you down, tie you to the mast, and you cried out a word that none could recognize, again and again. Anael. Anael. Anael.'

Hearing the word was like ice down my spine. He touched the wall of the cell and rubbed the dust from his fingers, before turning.
'But it wasn't a curse, was it? It was a name. Anael.'
I opened my mouth, unsure what to say, but he continued.
'Yes, a name. A name that none else knew but you. They were fools, just simple sailors. How could they know? But, John Riven, I know that name.'

I sat, stunned, unable to speak.
'Do you believe in coincidence, John Riven? Do you believe that patterns appear in our lives as clues to the greater plan? I too once faced my death in this prison. In this very cell, in fact.'
'What for?' I gasped.
'Astrology,' he answered. 'There are some who do not wish the truth to be revealed.'

I frowned. 'I do not believe in astrology.'
He turned and squinted at me.
'When is your birthday?'
I found my voice. 'The twenty-fourth of May.'

His long thin fingers slipped inside his cloak and retrieved a small book. He flicked it open and, wetting his finger, leafed through the pages.
'And you cannot be older than nineteen. Hmm... yes, under the sign of the twins, of course. You were raised by the Dominicans?'
‘How did you-?'
He raised a hand to silence me, and furrowed his brow in concentration. 'An orphan, then, most likely since birth. The black friars would see you as one of their own, outcast like them since King Henry dissolved their friaries. But they made a mistake with you, didn't they? They fanned the embers of your curiosity with scholarship, rather than smother it with scripture. Greedy for knowledge, you went looking for it outside the pews of Saint Paul's cathedral - to the booksellers. You filled your memory with facts. You probably know German, maybe even a little Dutch - you'd certainly know Greek and Latin. But soon you grew weary of reading about other men's adventures and wanted one of your own. So, before your ordination, you slipped away to the docks and posed as a navigator, older than you look, and joined a ship bound for Muscovy.'

My jaw hung open as the astrologer laid bare my life, wagging his finger, shaking his head. He continued.
'Getting there was easy. You just had to follow the ship ahead of you. Getting back - now, there be dragons. The compass is bewitched so far north, even if you could read the maps. They say you prayed to the powers above to send the storm. And why not? After all, it is better to drown quickly than to starve to death slowly, lost at sea.'

He paused to read my face.
'But they are sailors, and sailors are superstitious fools. And superstitious fools believe that those things which they do not understand are those things which mean to harm them. I mean, if a man could summon such power at will, why not use it to deliver himself home? No... weather, I believe, is happenstance. But something did answer your call. Anael.'

He nodded, baring his teeth in a grin that spread across his face.
'You can read all that from my stars?' I croaked.
He shrugged. 'You can read a lot by looking up once in a while. Tell me, what did you see when you looked into the sky?'

I swallowed, and glanced towards the door. He followed my gaze, sensing my hesitation, and nodded gently as if passing absolution.
'A sign. Drawn in emerald strokes of light upon the heavens.'
He turned his book to show me a symbol. Three lines: two horizontal, parallel, one vertical, crossing them.

I turned away. 'But you are wrong,' I said.
He raised an eyebrow.
'I can read maps.' I hung my head. 'It was the projection that was wrong. The paradoxical compass, they called it; a new projection for finding latitudes on the northern seas - but all it does is turn you back upon yourself. It was the map that was wrong, not me.'

He snapped the book shut. Raising a hand, he made the sign of the cross over me: up, down, left to right. Then, a smile creeping back to his face, he lowered his hand and motioned right to left. A double cross.
'I am supposed to say: may God forgive you. Today I feel I need not.'

The hood was soon placed over my head and I was marched from my cell. I was pushed into a carriage and heard in the darkness the sound of hooves on cobblestones and the clatter of cartwheels. When we stopped my boots crunched over gravel, clacked smartly on slate then, finally, fell silent on a thick and rich rug. I was pulled to a halt, the hood was removed, and I found myself in a large candlelit office.

Surrounded by portraits of grim and austere men, a grim and austere man sat behind an enormous oak desk. It was covered in papers, and he did not look up as the guards snapped their boot-heels together behind me.
‘The prisoner, Lord Cecil,' announced the guard, saluting smartly and closing the doors behind him.

I bowed. Lord William Cecil was Secretary of State, and treasurer to the crown. If I was still alive, it was according to his will.
'A request has been made for your pardon, heretic,' he said, lifting a purse from his desk that jangled as he tested its weight. 'Ordinarily I would give such a request no heed; indeed I have hanged men for less than your crime. But you find me in a time of need, young man.'

I bowed again. 'How can I be of service?'
'What do you know of a Doctor John Dee?'
'Doctor Dee?' I replied. 'Only the rumours. They say he is a magician.'
Cecil snorted. 'A court jester, perhaps. Too curious, too cunning, too clever, but a man, like any other. Well, any other man I could have executed - but unfortunately Her Majesty has taken a liking to him. She had him calculate the date of her coronation, you see. She thinks of him as her Merlin. I think he is a
menace. Yet, she has granted him passage to Brabant come Christmas, to oversee the publication of his own work, so he claims.'

He stood from behind his desk and linked his fingers behind his back.
'I went to school with the good Doctor. He has read every book in England, that I'll wager, but I never saw the man put quill to paper. No. I suspect he has other intentions in Europe. Her Majesty has enemies throughout the Holy Roman Empire. Her secrets are falling to the Dukes of Guise, the Cardinals of France, Spain and Rome. Were their war not with Suleiman on the Ottoman borders, it would be with us.'

He paused, and studied my face. I cleared my throat. 'My Lord, what does this have to do with me?'
'In return for your pardon, I want you to accompany Dee to Brabant, serving as his valet. You will keep him out of trouble, and report his movements back to me.'
'My Lord,' I stammered, 'I am most grateful for your mercy, but if this Doctor Dee is as clever as you suggest, how could he possibly accept me as valet?'
'I thought you understood,' said Cecil in surprise. 'It was Dee who requested you.'

He rang a bell on the desk and stood before me as the guards entered, carrying the hood.
'And this is not mercy, Riven. Only God is merciful. My reach is long, so too my memory. Serve me, you live. Double cross me, you die.'

When the hood was next removed I was standing at the docks. The sun was rising in the east and the first light of dawn crept over the city. A familiar figure, dressed in black, stood silhouetted on the pier watching silently as cargo was loaded on to the deck of a small ship.
'Excuse me,' I said. 'I am looking for John Dee.'
He turned, and I recognized the same sharp eyes from my cell.
'So Cecil released you? How interesting. And without a word of argument.'
'You?' I said. 'You're... John Dee?'
‘Congratulations, Riven. You are free. But I confess, I have no need for a servant - that was merely a strategy to test Lord Cecil's motives. Return to the Jesus. She belongs to a slave trader now, you'll be most welcome.'

He marched away dismissively to berate a sailor who had dropped a bagful of books on the dock. I chased after him, the threat of Lord Cecil echoing in my ears.
'Doctor Dee, you don’t understand, I must repay my debt!'
Dee ignored me as the ropes were untied and the ship readied to set sail.
He stepped on to the deck, checking the last of his cargo, and I watched helplessly from the dock as the sheets were raised.
'Anael was an angel,' I called.
Dee froze. I saw him turn slowly to look at me. Even as the distance between us grew from feet to yards I could see his eyes flash as he studied me from the deck. They were eyes that could not be lied to.
'Hold the ship!' he called to the pilot. There were shouts of confusion from the sailors, and it was clear that they could not turn back. A gust of wind had risen and the ship had begun to pick up speed. I started to run.
'Hurry, boy!' shouted Dee as I ran, my breath burning in my lungs, the ship now drawing from me with every step. My only hope was the last pier on the riverside, higher than the others for the largest ships. As I reached it and turned along its length I could see Dee below pushing the pilot from the wheel to steer the ship closer. When I was upon the end of the pier I leapt with all my strength, and for a moment I felt as light as the air. Dee's ship smashed into the supports beneath me and I fell through a shower of splinters to land heavily upon the deck.
'No, no, no!' shouted the pilot. I pulled myself to my feet to see him pointing not at the damage to the ship, but me. 'That boy is a Jonah! Have you not heard?'

Dee raised a hand to silence the man. 'You mean the Jesus? It was not the boy's fault. It was the paradoxical compass.'

The pilot frowned, and said something that made my cheeks flush red. 'But, Doctor Dee - the paradoxical compass was your own invention.'

Dee smiled as he turned back to the wheel. 'And I was wrong.'
I glanced back at the dock as the ship sailed onward. For the second time in two years I watched London disappear behind me, not knowing it would also be the last.

## Chapter Two - The Parallel Postulate


#### Abstract

  

And that if a straight-line falling across two straight-lines makes internal angles on the same side less than two right-angles, then the two straight-lines, being produced to infinity, meet on that side that is less than two right-angles.


Euclid, Elements of Geometry, Book 1

Dee spoke no more to me of angels on the journey to Antwerp.
Sailors are indeed superstitious, and I had no intention of ending up tied to another mast. Instead, he told me of his plan: to build a library in England to rival that of the ancient one in Alexandria. It wasn't until we arrived in port that I realized he was serious. I had thought London was crowded with printers, but it was nothing compared to Antwerp.

It seemed every second door was a printing house, each one audaciously named the Golden Something. There were no laws limiting the number of presses, unlike in London where the Royal Stationers Company kept a close watch on every page. As I stepped off the boat a boy handed me a printed pamphlet. It was a caricature of a man in the robes of a cardinal, his fingers drawing the strings of a marionette girl wearing the medals of the governess.

In Brabant, amidst the smells of fresh fish and spice, the coloured silks and textiles, it seemed that anything was possible - while at home any books suspected of subversion or heresy were seized and handed over to the reformer, Grindal, Bishop of London.
'And he hands them over to me,' explained Dee as we marched ahead of me down the Kammenstraat, while I struggled to keep pace like an ass weighed down by Dee's many bags.
'Really?' I said, in English.
'From here onward, young Ioannes,' said Dee, in Latin, 'when ears other than our own are present, we speak only in Latin, and respond only to the same. So it pleases the Catholics, so it pleased Erasmus, and, as they say here, the roofs have laths - best to keep a common tongue to ensure we keep our own.'
'And what if we meet someone who speaks no Latin?' I asked, and nearly bumped into Dee as he stopped to stare at me in disgust.
'How would such a creature say anything worth hearing?'
I had a feeling that comment would tell me all I would ever need know about John Dee; though, as it turned out, and as it would so often turn out, he was right.

The first printer we were supposed to visit was the Golden Compasses. It was a large, impressive building with actual glass windows, marred slightly by the boards that had been nailed across them. There were boards across the door too. I squinted through them to see the inside of the building was completely empty. No presses, no furniture, no people.
'Hey! Get away from there!' a voice called from behind. I turned to see a tall man with a broad nose and a moustache that covered most of his mouth pointing a finger at us as he crossed the street. His eyebrows rose and his mouth fell open when Dee turned to face him.
'Professor Dee!' he exclaimed.
'Abe Ortel?' said Dee, and the two men embraced.

Ortel's residence was an office across the street. Downstairs the walls were covered with maps and charts, as were the tables, the chairs and most of the floor.
'Still colouring other men's maps, Abe?' asked Dee as he squinted at them. 'A pity you have to glorify such pitiful work with your dye.'

The man paused in the process of clearing some space to sit, his arms filled with papers. 'I drew these, Dee.'

Dee took another look at the chart before him. 'And fine work they are too - worthy of Gerard Mercator himself.'
'Yes, well, it was Mercator's idea. I would offer you lodging, but I have an artist from Brussels staying. Very talented; you would like his work, Professor.'
'Why are the Compasses empty?' asked Dee as he lifted a chart to sit on a chair. 'Where is Christopher Plantin?'
'He went to Paris over a year ago, to manage his accounts and meet with the Duke of Guise about a commission,' said Ortel.
'And he never came back?' asked Dee.
'He remains there in exile. While he was gone the governess issued charges of heresy. Easier to catch than influenza now that Cardinal Granvelle has her ear. I don't believe a word of it, of course; I saw Plantin each Sunday at church. I suspect it's the doing of that rotten Silvius down on the Kammerpoort bridge. He used Plantin's presses all the time while he was away; if something damaging came from them it was Silvius' doing.'
'Not Bill Silvius?' said Dee. 'I haven't seen him since university.'
'That's him. Royal printer he calls himself now - a title he stole from under Christopher's nose by printing platitudes for the Knights of the Golden Fleece. I saw him rush to inform Plantin's creditors, the swine, when the soldiers arrived at the Compasses.'
‘Coincidence, Riven, do you see?' said Dee as we crossed the street. 'A door is barred shut, another swings open.'
'Doctor Dee,' I said, trying to keep the tone of concern from my voice. 'Don't you think it would be wise to keep away from accusations of heresy? We both know how dangerous it can be.'

Dee glanced around the street, and spoke softly, forcing me to lean in to hear him.
'There are powers at work in this world beyond most men's understanding - but not mine. I see the patterns.'

And that was when I began to notice the patterns myself. Silvius' shop was called the Golden Angel, and I stared at the sign for a moment before following Dee inside.
'He carries fire in one hand and water in the other, that Ortel,' said Silvius as he poured drinks for us all. 'Men like him only go to church because they're worried what will happen if they don't.'
'He says you denounced Plantin to his creditors,' said Dee.
'Denounced?' said Silvius with a laugh. 'I had to tell them: the city guards were seizing his stock for auction. Do I look like I could have afforded to buy back his whole workshop? Hell, most of $m y$ equipment is leased from

Plantin. They only claimed debts to reacquire his presses, matrices, paper; anything they could afford to save.'
'What happened to the books?' I asked.
Silvius laughed. 'Why are you so interested?'
'Well, if Plantin was printing dangerous books, where are they now I wonder?'
'Probably in the Cardinal's library in Brussels,' said Silvius. 'They are hypocrites, the censors, all of them. They believe they alone have the strength to withstand whatever evil they think will leap from the page into the minds of the innocent.'

The printer pulled a volume from a shelf on the wall and tossed it carelessly on the table. On its title page were the words Index Librorum Prohibitorum.
'Why print a list of books they don't want us to know about? Why point out the tree of knowledge if we are not to eat its fruit?'
'Everything is a test, Silvius,' said Dee, inspecting the Index. 'And the printers observe the prohibitions?'
'Or course not,' snorted Silvius. 'Words must be printed. We just take care not to claim credit for them when we print them. Plantin's journeymen must have put his seal on some pamphlet by mistake. It happens.'
'May I borrow this?' asked Dee, still reading the Index.

Silvius offered us lodging for as long as we wished to stay in Antwerp. His rooms were sparse, but comfortable enough, and I was grateful not to have to share with Dee. The morning after our first night I arose to find Dee breakfasting
on fruit from a bowl. I had been lying awake for some time, waiting for the sound of his door, but he must have risen even earlier than me.
'Ah, Riven, you surface at last,' he said, looking up from the Index. 'I have my first task for you. I wish for you to visit Plantin's creditors and seek out any items that appear in this list. You are to convince them to part with as many as you are able to carry.'
'I thought we were here to supervise your publications?' I said as he handed me the book and a small purse of coins.
'Well, since my publisher is exiled, what am I to supervise?'
'You are not worried that Lord Cecil might disapprove of you purchasing these books?' I hazarded. Dee fixed me with a stare that made my eyes itch.
'But I will not purchase them,' he said, and bit into an apple. 'You will.'

So I made my way about the city, seeking the men who had bought Plantin's stock. I met the brothers Bomberghen, two large Venetians, who collected Hebrew bibles and manuals of the Kabbalah, and delighted in confusing me by speaking in anagrams. Then there was Louis Somere, a small, nervous man with an interest in books about alchemy and astrology who insisted I drink too much wine with him.

On a Sunday morning I met the last of the creditors, Jerome Cock. He was the owner of the Four Winds, a printing house not far from where we were staying.
'A pity about Plantin,' said Cock as he wiped ink from his fingers. 'He was once my journeyman and we have long remained friends.'
'You must miss him after a year,' I said.
'I have seen him once or twice since his family left. He passed through on his way to Germany the night his office was raided, and he stayed the night here. He and Ortel had had some disagreement. He delivered my maps just before summer on his way back from Germany to Paris.'

He showed me the map that was hanging on his wall. It was unlike any map I had seen before. In my youth maps had been colourful tapestries hung in the seminary; symmetrical pictures of a world split by the Mediterranean, watched over by biblical figures while heaven watched over from above. Even Ortel's maps were mere sketches compared to the one I saw at the Four Winds. This was a Europe spread over fifteen sheets in rich and intimate detail. Every coast, town and river was marked with precision and care. The name of its creator, marked in perfect italics, was Gerard Mercator.

As I was staring at it a young woman burst in through the door, bumping into me. For a moment our eyes met, as she gathered her breath, and I found myself smiling at her red and flustered features.
'Ah, Mayken, you are just in time. I have finished copying Pieter's painting. You may take it to Mr Jonghelinck's house now.'

Cock pointed her to a table at the far side of the room where a large parcel was resting besides a pile of sketches. It was obviously too large for the girl to carry, but Cock did not seem to notice. As she hurried out the door beneath its weight I found myself picking up my bags to follow her.

## Chapter Three - The Tower of Babel


#### Abstract

And they said, Go to, let us build us a city, and a tower, whose top may reach unto heaven; and let us make us a name, lest we be scattered abroad upon the face of the whole earth. And the Lord came down to see the city and the tower, which the children of men builded. And the Lord said, Behold, the people is one, and they have all one language; and this they begin to do: and now nothing will be restrained from them, which they have imagined to do.


Genesis 11:4-6
'May I help you with that?'
She looked at me as though I'd offered to take her child for a walk in the woods.
'I'm fine, thank you.'
Mayken's eyes were small and brown, half hidden by her fringe that had crept loose of her bonnet and now flopped over them. Every few steps she pursed her lips and blew upwards to flick it out of the way and it would flop straight back down again. She looked about seventeen. I walked beside her, taking care to give her the good side of the street.
'My name is Riven,' I said.
'How nice for you,' she replied.
'I really feel I should carry that for you,' I said.
'Walk with me if you must,' she said, 'but I have arms and legs of my
own.'

I continued to walk beside her, pointlessly, the entire way to a mansion on the hill overlooking the river. A servant let us in by the back gate and I followed her through to the studio that opened on to the gardens.
'You're late!' barked a voice from the doorway.
A tall man in rich black furs and heavy boots marched over to Mayken and snatched the parcel from her. He tore away the paper and held the frame in his meaty hands, admiring the painting at arm's length.
'Wonderful, wonderful,' he said, nodding. 'So many colours. Wait until the Cardinal sees this - my collection is beginning to rival his, I believe.'

He stared at it for a moment longer. 'What is it?'
Mayken closed her eyes, so I moved around to look. The painting was of a great stone structure, bigger than the mind could imagine, soaring into the sky. It wound upwards like a spiral, above even the clouds, and was being built higher still upon scaffolding at its tip. In the foreground the workers bowed before a king who looked on benevolently.
'It is the Tower of Babel,' I said, and Mayken's expression changed for the first time. 'Where the men of the earth united in one language against God. The friars used to tell us that story at the seminary.'
'You are a Catholic?' asked the man, raising his eyebrow.
'I was raised by the Dominicans,' I said cautiously.
He grinned and held out his hand. 'Nicholas Jonghelinck: taxation and exports official for the regent, Margaret de Parma.'

I shook it, relieved. 'John Riven... um... envoy of Her Majesty the Queen of England.'
'Ah, Elizabeth the Protestant,' he said nodding. 'Tell me, do they hold the mass in Latin any more in your England? It seems, like Babel, that the Church of Rome united men too well with her common tongue; now God sees fit to faction and confuse his servants on earth once again.'

I stared at the crumbling archways of the Tower and sensed a thought, unshaped, growing in the dark corners of my mind. Mayken coughed, her hand outstretched in expectation. Jonghelinck made a signal and from nowhere a servant arrived with a handful of coins.
'Since you were late I am deducting ten percent,' said the tax collector as he picked out four coins like a fowl picking grain.
'Mr Jonghelinck...' began Mayken in protest.
'It was my fault,' I interrupted. 'I was at the Four Winds and I detained the young lady in a business matter. I'm afraid I am easily distracted by things of great beauty.'

Mayken's expression changed and I realised what I had said.
'I mean the painting, of course,' I said, my cheeks burning.
Jonghelinck laughed heartily again, and flicked another coin to Mayken.
'So you are a Catholic?' asked Mayken suspiciously as we left.
'When it suits me,' I quipped, but the look on Mayken's face told me I had made an error. 'I am joking, of course. There are still some Catholics left in England, you know.'

We walked in silence for a moment.
'Why did you help me back there?' she asked at last.
'I don't know,' I said. 'You seem like a good person.'
'You know nothing about me,' she said. 'You don't even know what I do. I am an artist, too, you know. Even though it seems my services as delivery girl are in greater demand. Tell me, what did you think of that painting back there?'
'Plain and dull. I'm sure it is nothing compared to your work,' I said, smiling.
'Then you are an even greater fool than I thought,' she said, smiling back. 'Will you be joining us for mass?'

I had been quite unaware of where we had been walking, and only then realised we had come to the church. The last of the parishioners were trickling inside, and before I could answer Mayken had taken the arm of an elderly peasant man with a wispy white beard and a balding head.
'Come, Pieter, let us find a seat for you.'
It had been some time since I had attended a mass. We sat towards the back, and as the deep voice of the priest echoed around the stone walls I fought to keep my eyes from closing. On one occasion I looked across to see Mayken reading from a small booklet. It had a blue cover, and was unlike the prayer books the other parishioners were holding. Slowly my resolve weakened and I found my head nodding as though a great weight were attached to it. I must have fallen asleep before the Eucharist, and when I awoke the church was empty. On the bench beside me was Mayken's book.
'The Mirror of Righteousness. A mirror book,' said Silvius when I returned to the Golden Angel that evening. He was it holding up in the lamplight to inspect the type. 'There are many of its kind, each claiming to contain all the wisdom of the world: Bacon's Mirror of Alchemy, Albert the Great's Mirror of Astronomy. They are named for Prester John's magical mirror that could see every corner of his kingdom.'
'Whose magic mirror?' I asked, trying to snatch the book back unsuccessfully.
'Did the Dominicans teach you nothing? Prester John, the great mystical king. A descendant of one of the Magi, they say he ruled the entire East with a magical mirror and... something else, what was it...?'
'An emerald staff,' said Dee, suddenly appearing in the doorway. He motioned to Silvius to throw the book to him before I could stop them. 'I've seen these before, in England. There was a sect that used to carry them, until they were banished by Lord Cecil.'
'Now that you mention it I'm sure I saw Plantin with one of those, once, at church,' said Silvius, pointing excitedly. 'Do you think Riven's girl might be one of them?'
'Perhaps we should find out,' said Dee, inspecting the back of the book. ‘There is a map scrawled on the back page marking a place in the forest outside the city walls, and a time: compline, twelve days to calends.'
'That's this evening!' I said. 'And she is not my girl, by the way.'
'Well you should at least return her book to her,' said Dee as he threw it to me. Silvius clapped his hands and went to retrieve his coat.

I hesitated. 'Are you sure? I would not wish to dishonour Lord Cecil...'
Dee laughed. 'Lord Cecil? Is he your master or am I?'
I did not answer.
'Let me tell you about Billy Cecil,' said Dee as he fastened his cape around his shoulders. 'I was at Cambridge with the old fool, we both read Greek there when Sir John Cheke was still a professor.'
'The politician?'
‘Cheke? He was so much more than a politician. Without that man's influence you'd not have heard a single phrase of Greek in England. And he knew how to recognise talent. Cecil has had a bone to pick ever since Cheke made me under-reader instead of him. What did he expect? He was fucking Cheke's sister, for God's sake, and everybody knew it before his father pulled him out of school. But Cecil, he's the calculating sort. He bided his time, and when Mary became Queen he turned like a snake on all his old friends - especially Cheke. They threw him in the Tower of London.'
‘For how long?' I asked.
'A year at first,' said Dee, handing me my cloak. 'I was able to petition his release that time. But a year later they locked him away until he rotted for good and there was nothing I could do for him.'
'Why not?'
'Because they locked me up too that time,' he said as the church bells rang for compline. Silvius reappeared with his coat and ushered us all outside. Dee slapped me on the back with a grin. 'Besides, he was out of my jurisdiction. They'd got him right here in Antwerp.'

## Chapter Four - The Family of Love

They cry, all no doubt loud enough, "Here, here is Christ;" "There, there is Christ." The one boasts of belief, the other of works. The one says, "We are saved now." The other, "It is hereafter."

Henry Niclaes, The Prophecy

I was shivering by the time we reached the forest outside the city, but not because of the cold.

We made our way through the trees as the sun went down until we saw a clearing ahead of us filled with hooded figures. Pulling our own hoods on, we stood near the back of the group and watched as a man stood upon a rock to address the crowd. As he lifted his hood to reveal a face mostly hidden by his moustache I realised it was Ortel.
'Here is a brother of God,' he announced to the group.
The hooded figures repeated the greeting to one another, embracing as they did so. Ortel proceeded to read scripture from a bible he carried under his cloak. The crowd sang hymns I did not recognise, and held one another's hands at times. When the formalities ended Ortel went down on one knee. The crowd followed, and so did we.
'Brothers and sisters, our prophet, the High Priest of the Throne of the Majesty of God, Henry Niclaes,' he announced with his hands raised. Another man stood upon the rock and held out his hands as though blessing the crowd. There were gasps of delight, and he smiled a cold and empty smile at us.
'Welcome,' said Niclaes. 'As you know nearly a year ago a casket of jewels worth over four hundred écus was bequeathed to the Family by a gentleman in Paris. A Priest of the Pleasure Garden of the Lord was entrusted
with the care of these jewels, with instructions to deliver them to me in Kampen. The jewels never arrived.'

There was a rumble of disapproval throughout the group.
'What I did receive, however, was a story: whilst in Paris our priest met a Hungarian nobleman in possession of a most mystical manuscript which he had found in the archives of Vienna; a work for which no price could persuade him to part. Instead our jewels were offered as collateral until such time as the manuscript might be returned.'

From beneath his robes Niclaes drew a leather-bound manuscript.
'The Steganographia of the Abbot Trithemius.'
I felt Dee's hand grip my shoulder tightly at the mention of the book's name.
'Like Trithemius himself and my master, the great David Joris, I have been blessed with the power of the divine. Now, into my hands he has delivered this work - instructions for speaking to his heavenly messengers.'

He opened the book and raised his eyes to the sky.
'Speak to me God, show me your holy vision!'
Niclaes stared at the pages before him and began to chant in a slow, toneless voice. The words were names I did not know, but it appeared to be having an effect upon the crowd.
'I see! I see!' cried Niclaes, 'I see the figure of God; I see a shaft of light pouring forth from his side!'

The crowd was moving around us now, and I found myself separated from Dee and Silvius. Hands grabbed at me, and I was pulled through the throng of bodies.
'I see a woman in the sky! From her mouth pours forth the truth!'
Now I began to see the people in the crowd were pulling their clothes from their bodies. Those that were already undressed were wrapped in embraces. Amidst the writhing flesh I caught glimpses of faces I had seen at the church that day.
'Love, love, love thy neighbour!'
I stepped backwards, trying to extricate myself from the throng, and found myself falling over the old balding man with the wispy beard.
'Riven!' he said, his face wrinkling in recognition.
A woman stared at me unsettlingly. She was entirely naked.
'Who is this, Pieter?' she said, pushing her hair from her face.
'He was with your daughter at church this morning,' he replied, accusingly.
'You are Mayken's father?' I said, my mouth hanging open.
'Of course not!' he replied with a chuckle. 'I am her husband.'
Before I could comprehend this turn of events there was a scream from the edge of the clearing. A woman came running, holding her skirt in one hand and pointing towards the forest with the other.
'The guards are coming! The guards are coming!'

The crowd erupted in panic. I leapt to my feet, scanning the terrified faces for Dee or Silvius. In the commotion I caught sight of Niclaes clutching the book to his chest, running towards the trees. A shadow separated from the one closest to him and tackled him to the ground. Niclaes rolled several feet, dropping the book, which the figure snatched up. It turned and began to run straight towards me.

I was too scared to move. As I stood frozen the face of the figure sprinting towards me caught the light - it was Dee.
'Run!' he shouted as he ran past me. I turned and followed him as fast as I could.

With my memories of the strange events of the previous night melting away, I awoke in my room at the Golden Angel to the noise of the presses downstairs. Silvius' staff had been working since dawn preparing a pamphlet to be delivered about town, and the printer himself had left early.
'The Duke of Guise has been murdered,' I read aloud from a page drying in the window.
'Fascinating, just fascinating,' said Dee. I turned to see him reading a manuscript at a table in the corner. It was the book he had stolen from Niclaes, and he appeared utterly transfixed by it. Memories began to re-form themselves in my mind.
'Have you been awake all night?' I asked, rubbing my eyes and sniffing the steaming black contents of a cup by Dee's side. It smelt strong and earthy, and its vapours alone seemed to push the fog from my mind.
'Chaube,' said Dee, sipping it as he watched my reaction. 'A kind of Turkish black magic.'
'And what kind of magic was that last night?' I asked as more details returned to me.
'Smoke and mirrors, if my assessment of Niclaes is correct,' replied Dee. He held up the book and tapped its leather cover with a grin. 'But this, young Riven, is the real thing. A work of extraordinary value. Imagine the possibilities
if such knowledge was wielded by a real leader, instead of a charlatan like Niclaes? Lord Cecil will be most pleased to learn it is in English hands, I've no doubt.'

I rubbed my eyes again. 'You mean to inform Lord Cecil?'
'I have done so already,' said Dee returning to his reading. 'The Duke's assassin was a Huguenot, but Cecil has sent many an Englishman to do the job in the past. He will consider it unwise for us to remain. I wrote this morning requesting more time.'
'More time for what?'
Dee motioned for me to sit with him at the table.
'You and I were brought together for a reason.'
'Yes,' I said. 'Because of a storm.'
'No! Because of a vision. The winds of change are blowing, carrying men to the farthest edges of the map. The Portuguese, Spanish and French, the Muscovite Tsar, the Turkish Sultan, Rome itself: everywhere men and women claim to rule by the will of God. They cannot all be right! Soon a new empire will rise. I intend to know God's will this time.'

Dee pulled a second book from the bag at his feet.
'Trithemius believed that one of seven forces - angels, he called them ruled the universe at any time, in correlation with the seven planets. The names of these forces appear in the Steganographia, with instructions as to how to communicate with them.'

He turned the book to show me.
'The first chapter deals with the minor forces of the earth, the second with those of the stars - but the third deals with the seven planetary forces.'

As I looked down the list of names I felt a sense of inevitability. There it was.
'Anael,' said Dee. 'Angel of Venus, second governor of the world, from the Fall to the Flood. Now do you see? A change is coming. You and I are yoked to the same carriage. We have been called to the same journey. When I saw you in your cell I thought you deserved to die. You looked like a boy gripped with guilt and self-pity, desperate to save his worthless skin. Now I see the truth. Trithemius hid this manuscript for fear that wicked men would use it. How often have your prayers gone unanswered? How often have you been ignored by the Almighty? God speaks to all men, but what if he had selected a man to speak back?'

He held out his hand and fixed me with a look.
'Always I am surrounded by scoundrels and false friends. They credit me with powers I do not have, and deny those I do. You are the only one I know who can understand this. Do you believe?'

I looked at the man offering this gesture of solidarity, trying to distinguish truth from lie. Perhaps Cecil was wrong about Dee. He was an astrologer, and a man of great wisdom; was I afraid of what he might have foreseen?
'Yes,' I said, and shook his hand.
At that moment there was a heavy thumping at the door. Dee motioned for me to open it. Standing in the street was a retinue of five soldiers in Spanish uniform.
'By order of the Cardinal you are to accompany us to Brussels,' said the captain.

Behind me Dee began to gather his things.
‘By what authority can the Cardinal have us arrested?' I demanded.
'Arrested?' said the captain, unflinching. 'Who is being arrested? The Cardinal has requested the audience of the Englishman residing at this address.'

I attempted to close the door, but the captain's arm shot out and held it open.
'Firmly requested,' he clarified. At his command two soldiers pushed past me and proceeded to search the room, gathering books and papers. Dee fastened his collar and watched them bemusedly. I glanced outside and saw a barred carriage parked in the street.
'Which Englishman, then?' I asked. 'There are two of us.'
'Oh, we have room for two,' promised the captain as his men handed him the Steganographia.

He motioned to the other two soldiers and they marched forward. One grabbed my arm and pinned it behind my back, forcing me outside. Dee shoved a pile of books into the other's outstretched arms before the man could touch him, and followed us leisurely to the carriage like a king on parade. The cage was bolted with the two of us inside.

Dee calmly folded his cape behind his head as a cushion and shut his eyes, shifting in his seat like a cat finding comfort.
'You intend to sleep?' I said, my voice rising in panic as the carriage began moving. He opened his eyes and looked from me to the window behind my shoulder. Turning to look I saw Mayken and Pieter standing with the bishop at the side of the street. Mayken crossed herself as she watched us pass, and turned to look at her husband. She was jealous of his talent, and covetous of his lust. Pieter's face was drained of colour.
'A Catholic informant,' said Dee. 'You see, Riven? That's how the meek intend to inherit the earth.'

He closed his eyes again, and was dozing before we left Antwerp.

## Chapter Five - The Mirror of Righteousness

## Hominem unius libri timeo. <br> I fear the man of a single book.

Thomas Aquinas

If Dee was concerned by our capture he did not show it.
Even as the carriage pulled on to the Rue des Sols he gazed through the bars with a look of happy nostalgia on his face. We entered the palace by a side gate, to a garden courtyard beneath a balcony bordered by pillars topped with arches. As the door was opened and we stepped from the carriage, I saw a single word emblazoned above the balcony doors; the legacy of the Church: endurance.

We were marched past the stables and held in the palace barracks under the eye of the soldiers. Dee sat at one of several long benches, where the men presumably ate, and I stared at the enormous metal cooking cauldron that hung from a giant hook above a pyre.
'The great Doctor Dee!' said the Cardinal when he entered, his scarlet cassock flapping around him. I recognised his high brow and long nose from the caricatures, and had I not been gripped by fear, I might have smiled at the accuracy of his detractors. 'How good of you to come. If only my father were alive; he was a great admirer of your work.'
'Antoine Perrenot de Granvelle,' said Dee with a bow as the soldiers dumped his books unceremoniously at the Cardinal's feet. 'I see your family's respect for the printed word is undiminished.'

Granvelle stooped to leaf through the pages. 'How far we have both come. The last time you were in Brussels you were learning the stars with the great

Mercator. I heard your lectures in Paris were a great success; I was sorry to miss them but I was fighting Protestants with Emperor Charles the Fifth.'
'Fighting? I thought you were fleeing,' said Dee, stroking his beard as though lost deep in memory. He waved a hand. 'No matter, the lectures concerned the mathematics of Euclid; there was little to appeal to the advisor of a Holy Roman Emperor.'
'You do a disservice to the Habsburgs,' said Granvelle, standing with a book in his hands. 'Charles spoke often of a work that his father owned which demanded knowledge of mathematics and astronomy greater than any man possessed.'

He opened the book to its title page and held it before us, as though presenting a dagger still wet with a dead man's blood. 'The Steganographia. Dedicated to the Holy Roman Emperor. Did you think I was not aware of everything that happens in the Low Countries, Dee? Did you think I did not know of everything that leaves the ports?

For the first time Granvelle looked at me.
'Are you aware of your master's reputation? He makes money casting horoscopes for the rich and gullible, pretending to know what cannot be known. Correct me, Dee, but at the Council of Trent did we not forbid the faithful from reading books that dare claim certitude of the future?'
'Of course,' said Dee, grinning at me. 'The future is the property of the Church. But I believe the Council also planned to let governors choose their state religions without the influence of Cardinals, did it not?'
'And what kind of world would it be if all were free to believe whatever they chose?' asked Granvelle. 'Already insurrection tears France apart. In

Hungary God's children bow to a Muslim sultan. The Roman Empire will be next if the cracks of independence are allowed to spread. King Philip has already threatened to send the Duke of Alba if the nobles persist in their disunity.'

At the mention of the Duke of Alba the soldiers stiffened visibly. Even Dee's grin flickered for a moment, like a candle in an unexpected draught. I wondered who this man could be whose name alone inspired such fear. The Cardinal held the book out to Dee.
'Matthew ten thirty-four: I came not to bring peace, but a sword. We have here a key to the voice of God's sentinels. I know you know it's true. Conduct the Abbot's rite for me, here in the palace. If it is what it purports to be it must be taken to Rome.'

Dee took the book. A thought occurred to him. 'And if it is not?'
Granvelle walked to the cauldron. It was huge, nearly six feet wide, and more than an inch thick. It could have held food for a hundred men. He ran his fingers around its rim as he circled it proudly.
'Do you know how the great eastern king, Genghis the Khan, would punish his enemies?' he said. 'He would throw them in water up to their necks, bound like a hock of lamb, and bring them slowly to the boil. You see, a man on the stake might suffocate before the flames reach his knees. Draw and quarter him wrongly and he'll bleed to death before he sees his innards. But boil a man... boil a man and he will know God's vengeance.'

I looked at Dee. Dee looked at the book.
'We shall need access to the library,' he said.

The Cardinal's librarian was unhelpful. His predecessor had fled to Basel to become a Huguenot preacher, leaving the current incumbent with no clue to the order of the archives. The court sculptor proved to be more useful. He was a hunchback named Jacques, and his toad-like face had a curious familiarity.

The Cardinal had ordered Dee remain in the barracks, so he had sent me with a list of books of astronomy and mathematics, as well as anything I could find about Genghis the Khan. As Jacques shuffled ahead of me through the shelves of manuscripts he read the names on the list.
'Why does he need all these mirrors?' he asked.
'Those are mirror books, like Prester John's, or the Mirror of Righteousness,' I said as I squinted at the spines lining the shelves. I bumped into Jacques as he stopped short in front of me.
'You know of the Mirror of Righteousness?' he said quietly. As he turned to look at me I realised I had seen eyes like his before. They had belonged to the tax collector, Jonghelinck - this man had to be a relative.
'It belonged to a... friend of mine,' I said cautiously. 'An artist.'
'Pieter!' whispered Jacques. 'You are a friend of Pieter!'
I did not know how to answer, so I simply said, 'Here is a brother in God.'
'Here is a brother in God,' replied Jacques, his voice so low I had to lean close to hear him. The guards were nearby, so we continued to pull books from the shelves as he spoke. 'The Cardinal spoke of the power to summon the angels. Henry Niclaes' master had such powers. They say he could speak to angels and demons, animals and birds. They say he possessed the Key of David, with which a man could discover all the knowledge of the universe. They say he could not die.'

This made me stop. 'Could not die? What do you mean?'
But the guards moved us onward, and the sculptor refused to say anything more.

Along with a work by Albert the Great, it was the letters of Paracelsus that caused great excitement in Dee. I tried to read them when I returned from the library, but exhaustion soon overwhelmed me and I drifted into sleep. Dee was arguing with the Cardinal when I awoke.
'The Holy Roman Emperor Maximilian's debts were legendary,' said Granvelle angrily. 'You expect me to believe this Abbot had the philosopher's stone yet never thought to conjure some gold?'
'Not all alchemy is turning lead into gold,' Dee replied calmly.
'Paracelsus explains that it is the metals of the earth that are the link to the planetary angels. As above, so below. Gold, essence of the Sun, silver the Moon, tin, copper, lead and iron of Jupiter, Venus, Saturn and Mars. Have your sculptor provide us with generous samples of each. Also the three primes: quicksilver the essence of Mercury - sulphur, and salt, perhaps stonesalt, we should have both to be sure. We shall also need water, lifewater and the ash of willow or maple wood. Trithemius writes that hollow sculptures of wax must be moulded, have your sculptor cast these too.'

The Cardinal was reluctant, but when Dee showed him Paracelsus' letters he relented and ordered Jacques to bring us his wares. Dee further requested crucibles, flasks, pots, alembics, mortars and scales, and a meal of meat and wine for the two of us.

Alchemy was slower and more boring than I had expected.
Sulphur and stonesalt we burnt in steam to form an oil of vitriol. To some we added more stonesalt and distilled it until it became strongwater, which we poured equally into three pots. In one we dissolved silver, another quicksilver, to both adding lifewater. These we halved and to one of each half added copper, powdered in the mortar. The last of the vitriol was heated with salt to make royalwater, to which we added gold and a white powder leached from wood ash in water; the spirit of salt so formed was mixed with the last of the strongwater. Finally the remaining sulphur, stonesalt and charcoal were combined in various ratios.

The soldiers summoned the Cardinal as we funnelled each mixture into the wax effigies and placed them around the room. Dee drew symbols on the floor in chalk and made some final calculations. The soldiers, the Cardinal, Jacques and I watched as he closed his eyes and began to chant the names of the angels. It was exactly like Niclaes had done in the forest, and as the ritual went on I felt the same strange emptiness as nothing happened. When he finally stopped, there was a long silence.

He opened his eyes and stared at me.
The Cardinal laughed. 'Matthew twenty-seven forty-six, Dee.'
My God, my God, why have you forsaken me?

The water was already warm when they lowered us into the cauldron. We were still clothed, except for our feet, which just touched the bottom if we kept our chins up. Dee bobbed in the water, his face a foot from mine, and still the man showed no fear.

The Cardinal's soldiers had remained to watch the execution.
'Riven,' called the Cardinal from below where he stood beside the blazing pyre. 'This is your chance. Repent now and I shall spare you from the fate that awaits your master. You have wisdom yet; repent and you may live in my service.'

I could feel my feet beginning to grow hot. Never before had I appreciated the temptation of the martyrs. Dee was watching me.
'You have a choice,' he said. 'You never believed in the Abbot's ritual. I saw it in your face. But would you live with them, or die with me?'

Some of the soldiers had begun to gather more wood from around the hall to fuel the fire. The rest watched with a look of fascination, no more sorry than children watching flies drown in a puddle.
‘The Steganographia is a code. Do you think this Cardinal, who bends God's words to his own purpose, can understand the voice of angels? The key belongs to $u s$, Riven.'

Now I had to bounce from foot to foot to stop my soles from burning. Still, somehow, the look on Dee's face was more troubling.
'This is your final judgement, Riven,' shouted the Cardinal.
Dee shouted back, 'Matthew thirteen forty-one!'
The Son of Man will send forth his angels to cast the sinners to the fire.
He was right. It was my final judgement. For Anael.
The soldiers now gathered our books to throw them on to the pyre. Sweat poured down my face, mixed with my tears. But Dee was grinning like a madman.
'Deuteronomy seven twenty-five,' he cried.

The images of their gods are to burn in the fire.
I saw the soldiers take the wax effigies and bring them towards the flames.
'Matthew three eleven,' whispered Dee, and taking a deep breath he dipped beneath the water.

## I baptise you with water unto repentance.

He will baptise you with the Holy Ghost... and fire.
For a moment my ears filled with the rush of the water, and then I felt an enormous force beneath me. My whole body shook and I felt like I was flying. My vision turned from all blackness to all whiteness and I could hear nothing but the sound of an angelic choir holding a single, long, piercingly high note. Pain coursed through my legs, arms, back and head. I don't know how long it was before I felt hands shaking my shoulders violently. My eyes opened to see Dee, dripping wet, moving his mouth noiselessly in front of my face.

He dragged me to my feet and I found I was on the ground, several feet from the upturned cauldron that had saved us from the blast. Flaming splinters adorned every wall. Soldiers were scattered, bleeding, stumbling, blinded, some unconscious on the floor - some dead. The ringing in my ears faded to the sound of moaning and screaming; and Dee shouting at me to run. He was snatching up those books that had been thrown clear by the blast, and I helped him, stuffing my jacket as fast as I could.

The horses were spooked in the stables across the courtyard, but Dee grabbed the reins of a giant destrier, still saddled, and hauled himself up onto her. Pulling her around he held out his hand to me, wordlessly, and I pulled myself on behind him. Dee dug his heels hard, and like two Templar knights we rode on one horse out of the palace gates and into the night as fast as she could carry us.

## Chapter Six - The Danse Macabre

And do not let up, nor let go, until all things are restored to perfection, visibly renewed and changed. In particular, from the flesh into the spirit, from death into life, from earthly into heavenly, from the old into the new, from metal into gold, from the letter into the perfect way.

David Joris, The Glorious and Godlike Order of God's Wondrous Work

We did not stop until we reached Bastogne.
Dee sold the horse to a blacksmith in return for shoes, some bread and a bed for the night, and by dawn we were back on the Spanish Road winding south towards Lorraine - the crossroads of the Empire. We travelled with other groups whenever possible; priests walking slowly south towards Rome, printers moving west to France, scholars fleeing east into Germany. It seemed that only soldiers marched north towards the Low Countries, or perhaps I was merely more aware of them.

Nevertheless, my fear at our ordeal subsided as I listened to the stories our travelling companions shared. Each one had a tale of a miraculous escape from death, owed to God or the angels, and I started to feel like one of Chaucer's pilgrims on my way to Canterbury Cathedral.

Only one man seemed unimpressed by each story. He was an elderly Dutchman with a bald head and round, inquisitive eyes. His name was Weyer, and I found myself walking with him more than Dee as we made our way south.
'But Dee brought down fire and brimstone - how do you explain that?'
'Folk are too ready to blame a witch or a demon for their misfortunes, or praise an angel or God for taking their side,' he grumbled.
'You do not believe in angels and demons?' I asked.
'Oh, I most certainly do,' he said solemnly. 'But it is my opinion that nearly all claims of witchcraft or demonism are caused simply by an illness of the mind. Consider: if God is all-powerful, even the most horrific or demonic occurrence is in accordance to his will. Likewise, not all prayers can be answered, therefore God must pick and choose who he listens to.'

Something about Weyer's logic troubled me. 'But if it is an illness of the mind that makes people think they are experiencing the divine or the occult, how does one ever know a true revelation?'
'Question everything,' said the old man, pointing his aged finger at me. 'One must compare everything to all things, for there is order to all things, and things that do not yet fit the order must be placed somewhere on the map if they are to be thought real.'
'Then how do you explain our escape?' I insisted.
'Explosives,' said Weyer. 'My old master, Paracelsus, could do the same. Alchemy is not magic, you understand. The chemical wedding of different metals and salts has been known to wise men for centuries.'

Dee was suddenly between us.
'Paracelsus? You were a student of Paracelsus? Perhaps you can help us.'
When we reached the city of Basel, Mr Weyer invited us to join him at the home of his printer, a man named Oporin.
'A fine physician was Paracelsus, first and foremost,' said Oporin as he peered at the letters Dee had taken from the Cardinal's library. He wore a bushy beard that wrapped around his neck like a scarf, and his thick eyebrows curved into a thoughtful frown. 'For Paracelsus, alchemy was the physician's domain.

The angels rule the planets, the planets rule the metals, the metals rule the body. The body may transform as all things may. As above, so below.'

Weyer was inspecting the Steganographia as he sipped a cup of wine. 'This is dangerous magic you are dabbling with, Dee,' he said. 'Paracelsus was obsessed with immortality - he sought the philosopher's stone his whole life. But the language of the angels is not one that may be spoken lightly. What makes you think they would listen to you, anyway?'

I could see that Dee enjoyed the notoriety he earned wherever he went. He shrugged, 'Perhaps they would not listen to me. But Riven here, they have answered to him.'

Weyer and Oporin looked at me with interest. I felt my cheeks burning.
'I do not know,' I said. 'As Mr Weyer suggests, perhaps it was an illness of the mind that took over.'
'That I would believe, had not the other sailors all witnessed the apparition,' said Dee. 'A glowing double cross in the sky.'

Oporin clasped his hands behind his head and looked at the ceiling thoughtfully. 'The last man I remember claiming to converse with angels was that red-headed Joris.'

The name stirred a memory. 'Henry Niclaes' master? The sculptor in Brussels told me about him. He said he possessed something that gave him his powers. He called it the Key of David.'

Weyer glanced at Oporin. The two men stood suddenly and moved into the next room, leaving Dee and me looking at each other in surprise. When they returned, Weyer was carrying a book.
'I have spent my life carrying on the research of Agrippa. When he was fighting in Italy for the Emperor Maximilian, my master discovered an ancient text: a key belonging to the great King Solomon. It concerned the order of the demons of Hell, and the details of how they might be summoned. It is the work I have come here to publish as a warning to all innocent people. But Agrippa learned also of another, greater key: the Key of King David. With it a man could summon the angels of Heaven, greater in power than all the demons of Hell, greater even than the power of Death. Agrippa went mad searching for it.'
'Do you suppose this Joris found it?' I asked.
Oporin shook his head. 'If he did it did not serve him long. There were stories: they say the man could change shape, communicate with animals, that sort of thing. They declared him a heretic, and he disappeared for many years until it turned out he had been living right here in Basel under the name John of Bruges. When the authorities came to arrest him they found he had been dead and buried at St Leonard's for some time. So they dug up his corpse and burnt the flesh in the square, right in front of us. They cut off his red beard as proof. Then they buried him again, back in the Dominican cemetery. Although...'

We all leaned forward, waiting for Oporin to continue. He glanced at us and cleared his throat. 'It is nothing. Just... there was a rumour that the body they burned was not Joris's. I mean, the town physician was Joris's neighbour, and it was Joris's barber who showed us the beard - the man must have plenty of red hair lying around. And there are stories of men who return from the dead...'
'Utter nonsense,' declared Weyer, and refilled his cup. 'No man but Jesus Christ has ever defied death.'
'Most assuredly,' agreed Dee. 'And besides, how would one know, in any case?'
'Well, there is one way,' I said. The three men looked at me.

The moon was full and high when we arrived at the church, each carrying a shovel over our shoulder. The building was long and rounded at the end that faced the street, like the keel of a great upturned galleon. Most of the stained windows had been shattered more than thirty years previously by Lutherans, furious at the iconography they considered to be sacrilege.

We saw and heard nobody else as we neared the churchyard gates. Then we were forced to hide in the shadows against the walls as a group of hooded men emerged from the gate. At first I thought they were friars, but Oporin tapped me on the shoulder and pointed to where three of the men were hauling large sacks behind them.
'Students,' he said, 'from the medical college.'
I couldn't imagine there was anything left worth stealing from the derelict church, then my stomach turned as I realised the young men had been in the graveyard for reasons not dissimilar to our own.

When they were gone we made our way cautiously through the gates.
'Where is Joris? Or John of Bruges?' whispered Dee. We separated and began to search in the moonlight amongst the small and worn headstones. As I was searching near the corner of the yard I happened to look up at the wall, and found myself staring at a grinning skeleton. I caught a shout in my throat and realised I was looking at part of a great mural that covered the entire length of the wall. It depicted men and women of all status and style, dancing in a great long
parade with the figure of Death accompanying each one. Somehow it had escaped the fury of the Protestants.
'The Danse Macabre,' said Weyer, appearing over my shoulder. 'Death recognises no crown, no office or title, no great deed or bent knee. All must dance with him in the end.'
'It is useless,' said Oporin behind us. 'There is no grave here that could belong to Joris.'

Dee was leaning on his shovel. 'Perhaps he was buried elsewhere.'
I was still staring at the mural. One figure appeared strangely familiar. It was a man dressed in the robes of an Abbot. In his hand he held a long, green, budding staff. He faced in the opposite direction to the rest of the parade. His face was different to the others, too. Theirs were all twisted into grimaces of fear and anguish. The Abbot was smiling. I followed the line of the emerald staff to a patch of ground beneath the wall, separate from the other graves.

Taking my shovel, I thrust it into the hard, dry dirt, a feeling of certainty driving me. Dee watched me for a moment in bemusement; then he saw the image on the wall. He joined me, and Weyer and Oporin did as well. We dug in silence for some time, the noise of our shovels forming a rhythm that drifted into the still night air.

Oporin gave up first, then Weyer, then finally Dee, but still I kept digging, even when I disappeared below the ground in a hole that was deeper than my own height. Finally I too felt weariness and disappointment take over, and I was ready to give up when my shovel struck wood. My energy returned, and I dropped to my knees in the darkness and used my hands to scrabble at the remaining dirt. The moon crept overhead, illuminating the lid of a coffin.

The wood was covered in scrawls, and when Oporin peered down he gasped in excitement. 'It is the alphabet of the Magi. Paracelsus discovered it when I was still his apprentice.'
‘Can you read it?’ asked Dee.
Oporin squinted. 'A little. It is prayers, psalms, invocations. But the larger symbols, there at the top, they spell his name. David Joris.'

When I had cleared enough dirt I took my shovel and wedged it under the lid. It took all my weight to lever it loose, then the rest of my strength to haul it free from its nails. A stink of stale, ancient rot assaulted my nostrils and I choked for a moment, my eyes watering. As they cleared I was able to look into the coffin.

The corpse was little more than dust and blackened bones wrapped in the charred rags of a funerary shroud. But the bones seemed wrong. The jaw was long, and narrow, and the teeth were sharp and pointed.
'What animal are these from?' I said, passing them up to the three men who were peering down above me.
'It looks nothing like the skull in Vesalius' engravings,' said Oporin, handing them to Weyer. 'You were a physician, Weyer, what do you think?'
'A dog,' he said. 'And a big one, at that.'
'So they buried a wolf in place of Joris?' said Dee.
I was confused. 'Surely not! How could you mistake a wolf for a man?'
'The body may transform, as all things transform,' said Oporin. His voice was now soft, and afraid, and I felt a chill run through my body.

There was a hesitant silence from above. Dee said, 'Thomas Aquinas wrote that angels may transmutate the human form.'
'Zeus transformed King Lycaon into a wolf,' said Oporin, 'as a punishment for stealing immortality from the gods...'

I did not answer. I had been distracted by something I had seen on the underside of the coffin lid. It appeared to be letters, scrawled in German in a faded dark ink. No, not ink, I realised. Blood.
'What does that say?' Weyer called down from above.
'It is Germanic,' said Oporin. 'The Key of David lies...'
'...with the Venusberg,' finished Dee.
'Lies?' I said, staring at the writing. 'What does that mean?'
'It is liogan,' said Dee. 'It means the key rests at the Venusberg.'
'No, it is liegen,' said Oporin. 'It means the key is false. Like the myth of the Venusberg.'

I stared again at the blood. The inscriptions on top of the lid were neat and exact, obviously carved in the light. But this message was scrawled and desperate, almost as though it had been written... from within. The moonlight began to fade as a cloud passed overhead.
'Help me out,' I said quietly. There was no answer. I looked up and saw no one. Digging into the dirt, I pulled myself up, mud and bones slipping over me, until I could see over the edge of the hole. Dee, Oporin and Weyer had vanished. At the far end of the graveyard three soldiers were standing, torches in their hands. In the darkness they had not seen me, but they began to walk through the tombstones, searching left and right.

I waited until they were turned away from my direction and wriggled out of the hole. Flat on my belly, like a snake, I crept across the wall inch by inch towards the gates, not daring to raise my head.

When I had almost reached the gates I saw a pair of boots ahead of me, and my heart froze in my chest. There was another soldier, whom I had not seen. I looked up and saw his young face staring at me, open mouthed, eyes wide, mute with terror. I realised he must have watched me the entire time, a filthy, bedraggled figure crawling from an open grave beneath the Danse Macabre. I stood slowly, bones clinging to my clothes, and held my finger to my lips. He nodded, terrified, and I ran.

## Chapter Seven - The Key of David


#### Abstract

The wearyed Ox treads hard, whereas no man, to the judgement of the wise, can be truly learned, who is sworn to the rudiments of one only faculty; But you hath God gifted with a large, and sublime wit, not that you should imitate Oxen, but birds; neither think it sufficient that you stay about particulars, but bend your minde confidently to universals; for by so much the more learned any one is thought, by how much fewer things he is ignorant of. Moreover your wit is fully apt to all things, and to be rationally employed, not in a few, or low things, but many, and sublimer. Yet this one rule I advise you to observe, that you communicate vulgar secrets to vulgar friends, but higher and secret to higher, and secret friends only. Give Hay to an Ox, Sugar to a Parrot only; understand my meaning, least you be trod under the Oxens feet, as oftentimes it fals out.


John Trithemius, Letter to Henry Cornelius Agrippa, $8^{\text {th }}$ April 1510

When I returned, breathless, to Oporin's printing house the three men were arguing.

Weyer was pacing angrily. 'It is a myth! Spread by sorcerers and magicians, to take advantage of the innocent.'

Oporin was staring at a map that was spread across the table. I had seen one like it in the Four Winds - it was Mercator's Europe.
'It does not appear on the map,' said the printer, his voice uncertain.
'Not anymore,' said Dee. He was sitting in a chair by the fire, deep in thought.
'I'm perfectly safe,' I said as I struggled to remove my muddy shoes in the doorway of the office, 'thank you so much for your concern.'
'Agrippa wrote of a Venusberg,' said Oporin, searching through his files. Weyer watched him cautiously as he retrieved a book and handed it to me, opened
at a page, before sitting back at the table. I was angry at being left in the graveyard, but my own curiosity was burning.
'For there are real beings who live in all four elements,' I read, 'and who in former times of nature were often considered and worshipped as gods . . . it is not less true that the Venusberg in Italy was peopled by these, for Venus was herself a nymph, and the Venusberg has been compared to her kingdom or paradise. But she has now perished and her kingdom has passed away with her and ceased to exist. For when have we heard anything more of them since those old days when Tannhäuser and others were there? And that is no fable about him ... but a true story.'

Weyer was nodding slowly, frowning at the memory of his former master. 'Agrippa believed that the Pagan gods and heroes of the ancient civilisations were real, living beings. Why else should it be that, though the names change, the stories remain the same from Babylon through the legends of Egypt, Greece and Rome?'
'Men become heroes, heroes become legend, legend becomes religion,' said Dee. 'We find this Venusberg, we find the Key; we find the Key, we may unlock the Steganographia.'
'There is a man who may be able to help you,' said Oporin. 'A professor at the University of Zurich; a great collector of knowledge, be it mountains, language or my editions of Vesalius' anatomies. His aid may not be easy to enlist, however. His name now appears on the Index Librorum Prohibitorum. Such an honour tends to stiffen the tongue when strangers call with questions about angels and Pagan legends.'
'Well,' said Dee, crossing his legs with a flourish, 'we magicians and sorcerers have ways to charm the innocents.'

It was nearing the calends of May when we arrived in Zurich.
Weyer and Oporin had bid us farewell, refusing to join any further in our journey. I had begun to notice that Dee could charm any who met him, but not for very long. He carried with him a sense of adventure that swept others up like a whirlwind, but like a force of nature he was fickle and dangerous. For now I was happy to be carried far from England.

The man we had come to meet was named Gesner. We had been told to find him at the College of Medicine, where he served as both chief physician and public professor. When we arrived it was clear that the great man was far too busy to see us.
'Doctor Gesner is in great demand,' explained the secretary of the College, a small woman with a look of immovability in her face. 'He leaves for the mountains tomorrow. I am afraid he has little time for guests.'
'We are not guests,' said Dee abruptly, and pointed at me. 'The boy is of the highest noble family in England, but I fear he has been taken by an affliction of the mind. Look at the way his mouth hangs open like a dog's, poor wretch.'

I was stunned, and offended. 'But... I... but...'
'See how he stammers like an imbecile?' said Dee, shaking his head sadly.
The young lady's face softened as she looked at me and nodded gravely. 'Yes, I see. We have many such cases in the hospital here. Please, wait here; I will see if Doctor Gesner might make a moment for you.'

She disappeared down a corridor before I could protest. Dee grinned proudly.

We were shown to an office lined with bookshelves at the far end of the building. On the way we passed halls and halls of bolted cells, from within which I heard all manner of noises. Moaning, wailing, sobbing, singing; these were the cages of fractured minds.

Dr Gesner was a fidgety, drawn-looking man with a limp on one leg. From the moment I saw him he seemed possessed by the need to straighten and align everything he could get his hands on. He sat me in a chair by the window between an assortment of mirrors that served to shine the sunlight into my face, forcing me to squint.
'Do you experience moments of panic or anxiety?' he asked, pulling my eyelids open with his fingertips.
'More so recently,' I replied, glancing at Dee.
'Any irrational notions that you are in danger; that someone is trying to kill you?'
'I wouldn't say irrational, but...'
'Headaches? Ringing in the ears?'
'Only after an explosion in Brussels, but that may have been angels.'
Gesner looked at Dee, his face solemn.
'If I might have a word with you outside?'
The two men left the room, and I was alone in the office. The walls were lined with books, and where there were not books there were detailed illustrations of plants, animals, mountains, gemstones, anything from the natural world. Everything was neatly ordered. I wandered around the room, examining the
oddities that Gesner had collected. On his tabletop I noticed a letter, the ink still drying. It was addressed to a man in Padua named Melchior Guilandinus, and beside it was an illustration of a budding plant that looked like a royal sceptre, its bulb a crowned orb. Curious, I glanced at the letter.
'As I have begged you in the past,' it read, 'cease cursing your predecessor's lack of rigour - he may well have done you a favour. The plant you wish to identify is known as the sleep-bringer. It is rare, originally from Byzantium, although there are signs that it once flourished throughout Europe, even in the lakes here in Switzerland. It has the power to destroy fear and pain, to quell the demons of hysteria, and to take control of men's minds. I believe its tears are the secret of Paracelsus' Stones of Immortality...'

The door handle creaked and I turned quickly to engross myself innocently with a shelf lined with identical stones. Dee and Gesner entered the room.
'Riven, Doctor Gesner has invited us to dine with him this evening.'

Gesner's house was like his office, filled from floor to ceiling with specimens of every kind. There were skeletons of tiny creatures encased in rock, plants growing in pots, trays of insects. The rear of the house opened to a large garden, where more plants and trees grew in labelled rows. There were even several ponds with live fish, frogs, newts and snails.

Despite the cold it appeared that a table had been set for dinner outside. 'Barbara, this is Doctor Dee and Master Riven, important Englishmen,' said Gesner to his wife, a sickly woman who looked used to her husband bringing unusual specimens home. He whispered to her and I noticed her glance in my direction, before breaking into a fit of coughing.
'Have you taken your medicine?' asked Gesner, limping to a trolley to pour her a cup of water. She flapped a veined hand dismissively until the coughing subsided.
'Medicine,' she spat, 'you mean poison. It's the Devil that makes me ill; if God sees fit he will make me well. You worry about looking after yourself. I thought you were resting today.'

Gesner's wife sat while her husband fetched and served the food. His voice carried from within the house. 'It is only the dose that makes the poison, Barbara. That's what Paracelsus said.'

Dee shot a look in my direction.
'He needs his rest, and here you are bothering him,' said Barbara, scratching her leg.

Dinner was bread, a little salted meat and some watery wine. I had not realised until I watched Gesner carefully measure out the portions that, other than the collections, there were few furnishings or decorations in the house.
'My apologies,' said Gesner to Dee as he sat, 'we are a little under-stocked this year.'
'This year, last year,' grumbled Barbara. 'The city does not appreciate you Conrad.'
'The city is stretched for resources,' said Gesner patiently.
'It is his lists. What time he does not spend with his patients he spends making his lists, endless lists! Lists of birds, lists of plants, lists of insects, endless lists!’ Barbara worked herself into a coughing fit again, and staggered away from the table, leaving us in an uncomfortable silence.
'A fine woman, your wife,' I said, attempting to make conversation.
'My God,' said Gesner, 'the boy's mind is worse than I had suspected.'
'Do you believe such things are the work of the Devil, as your wife does?' said Dee.
'The Devil?' said Gesner in surprise. 'Do not tell me you believe in the Devil, Doctor Dee? If there was a being with the power to contest God's will, would not the whole divine plan be rendered meaningless?'
'You do not believe in the Devil?' asked Dee.
'Perhaps the Devil is real, perhaps he is not,' said Gesner. 'Perhaps there are dragons and unicorns, or visions in the sky, for these too men claim to have seen. But the more of nature I experience, the more it seems that other men's accounts must be balanced by my eyes and ears and reason. Let me show you.'

Gesner took us into his library.
'Nature is a machine, a great Nuremberg clock,' he said as he pulled down books and opened them on a large table in the centre of the room. 'Perhaps God coiled the spring at the dawning of Creation, but ever since the helix has unwound under its own momentum. Why else should God's creations live lives fighting fear and pain with no relief but death? Why else should the essence of creatures be guided not by prayers, but by the essence of their parents or their surroundings? Why else should creatures flourish where they are naturally found, and perish where they are transported?'

As he spoke I looked at the illustrations in the books Gesner was piling upon the table. Patterns formed before me: the skeletons of men and beasts so similar, the beaks of birds so suited to the fruits of their homelands, plants that transmutated in form through their offspring...

A voice screeched from the next room. 'It is time for bed, Conrad!'

Gesner's eyes remained fixed on his books. I imagined he might do this every single night, staring in the flickering lamplight as he waited for an answer that never materialised a riddle that only he saw in his endless lists. It was like waiting for the voice of God to speak.

With a bang Barbara threw open the door and hobbled around us, her face stern.
'Gentlemen,' she spat as she began to usher us towards the front door. 'If you are quite finished, it is late and my husband needs his rest. He leaves for the mountains tomorrow.'
'But we have more questions,' protested Dee, trying to duck her spindly arms as she herded us like hens out of her house and on to the street.
'I'm afraid your questions shall have to wait,' she said, and slammed the door.

Her shrewish scolding faded into the house and I looked at Dee.
'Now what?' I said.
He scanned the street and pointed at an inn several doors down towards the river. I followed him as he walked towards it.
'We rest. It appears we too shall be leaving for the mountains tomorrow if we are to receive any wisdom from this Gesner.'
'Perhaps the mountain air will aid my poor afflicted mind,' I said.
'Perhaps,' said Dee, nodding, and I believe he did not see the joke.

## Chapter Eight - The Devil's Bridge


#### Abstract

If thou couldst ascend directly into Heaven, yet would I fling thee down into Hell again, for thou art mine, walking my path toward Hell even in thy many questions about Hell. Sweet Fauste, desist. Inquire of other matters. Believe me, my account will bring thee into such remorse, despondency, pensiveness, and anxiety that thou wilt wish thou hadst never posed this question. My judgement and advice remains: desist from this purpose.


Anonymous, Historia \& Tale of Doctor Johannes Faustus

The next morning we followed Gesner from a distance out of Zurich and towards the mountains.

For a limping man he moved deceptively fast, and by the time we had passed beyond Altdorf we had nearly lost sight of him. I walked some way ahead of Dee to keep Gesner in view. The Alps loomed, looking like the fists of Titans punching their way up from Tartarus. Why any man would venture into them was a mystery to me.

As the Spanish road curved into a valley that marked the entrance to the ranges proper I met Gesner resting on a log by a stream. He was reading a manuscript, and singing softly to himself.
'Well, this is a coincidence!' I called as he looked up to see me.
'There are no such things,' he replied. 'I come to the mountains for solitude and clarity and yet even here the madness follows me.'

I took a draught from the stream and washed my face before joining Gesner on the log. The manuscript looked old. The pages were lined with rows of curled script and decorated with colourful pictures of knights and maidens.
‘That looks more like a book of love poems than a scholarly text,' I said.
'Love songs,' he said, to my surprise. 'What? Does a man not need instruction in the ways of love, like anything else?'

There was no sadness in his eyes, just tiredness. There in the mountains, with the sound of the birds whistling and the stream trickling by, sadness would have been irrelevant.
'I have met your wife,' I said, 'I suppose if love will not be found in marriage it might as well be found in a book.'
'I love my wife,' he said sternly.
'But does she love you?' I asked.
'Ah,' he said, nodding. 'Perhaps you are not as mad as your master suspects.'

He turned the pages of the book, looking thoughtfully at each one.
'We married too young, I believe. We thought that love was like it was in the songs. Kings, dukes, knights and paupers; love makes no exceptions for any of us. Have you ever been in love, boy?'

The question took me by surprise. My expression must have changed, for Gesner nodded and said, 'Yes, you have, haven't you?'
'There was a girl in Muscovy,' I said, feeling my cheeks flush. 'At a brothel in the fishing port. I did not want to go, but the sailors made a game of forcing me to join them. She was Persian. Nothing like the girls in London.'
‘What was her name?’ asked Gesner.
I did not answer. I was staring in surprise at another name that had caught my attention, one that I remembered from Agrippa's writings. Gesner looked at the page he had turned to.
'Tannhäuser,' he said. 'The Teutonic Crusader. You know the song?'
'No,' I said, staring at the image of the blonde, curly-haired knight.
Gesner seemed pleased by the opportunity to play storyteller.
'A famed romantic, he was on his way to sing for the king when he was visited by the Goddess of Love. She lured him into her cavern beneath a mountain, and there Tannhäuser remained for many years indulging in an unChristian life of lustful debauchery. As time passed the knight's pleasure waned and he found himself longing for the innocence and purity he had once known. One day he escaped from the goddess' cavern, and making at once for the nearest church he sought to confess - but no priest would absolve the knight of his terrible sins. Tannhäuser went from church to church until he finally arrived before Pope Urban the Fourth. When Urban heard of his sins he declared, in jest, that God would sooner make the papal staff grow green and put forth buds than forgive the knight his sin. Stricken with grief, there was nothing left on Earth for Tannhäuser but to return to the cavern of the goddess forever.'

As I listened to Gesner's story I stared at the knight's face in the picture. I imagined my own face when I had sat in my cell in the Fleet prison. I had known the weight of a guilt that could never be erased.
'If the Devil is not real,' I said, 'then why do you believe God created us with desires that drive us into sin?'

Gesner leaned towards me as though to tell me a great secret.
'That I do not know. But I will tell you how the story of the knight ends. You see, three days after he sent Tannhäuser away, Pope Urban awoke to find the holy staff had indeed turned green and begun to blossom. With haste he sent his messengers after the knight, to tell him of the sign he had received - but it was too late. Tannhäuser was never seen again.'
'Is the story true?' I asked.
Before he could answer a shrill whistle startled us, and we turned to see Dee rounding the corner.
'Gentlemen!' he cried, his hands held out wide. 'What a coincidence!'
'There are no coincidences,' whispered Gesner once more, and he stood to continue walking.

The journey through the mountains became more difficult as we went on.
Dee spoke at length with Gesner, and I would often find myself walking ahead alone. It slowly began to make sense to me why Gesner chose to climb mountains simply for the sake of climbing them. From below they had seemed insurmountable, but by putting one foot ahead of the other we slowly rose higher and higher. At times I would look back and be surprised by how little ground we had covered in so long a time; then later I would find myself bewildered by how tiny and distant the roads behind us had become. I stood on an outcrop and stared at the valleys below. From above I could see so much that was hidden on the ground.
'We must make lists,' Gesner was saying when the two men reached me. 'There are more books being printed every single day. Knowledge flows from the presses like water from springs; it must be contained or we will drown!'
'But what if your lists become too long?' asked Dee with a smile.
'Then we make lists of our lists,' said Gesner, as though it made perfect sense. 'It is only lists that are important, connecting all things, because all things are like all other things. The sea and the sky are bound in colour; a coin and the sun are joined in shape; a man bears the essence of his tribe as the staff does the
tree from which it was cut. There are ways to transform a thing's essence simply by looking at it the right way. Observe.'

From his pockets he retrieved two round crystal discs, one concave and the other convex. He handed one to me and one to Dee.
'Burning glasses,' said Dee didactically. 'For bending the heat of the sun, like water through a funnel. But we have no need for a fire, and there are clouds, besides.'

Gesner snatched the concave glass and held it to the ground. He beckoned for me to look into it. As I did, I saw an image leap from the ground into the glass where it floated. Tiny insects that were barely visible on the ground were suddenly as large as my fingers, crawling through the glass like magic. I was amazed. I held it against my sleeves. The threads of the fabric grew inside the disc so that I could see every weave, looping over and under.

It was when I held one disc in front of the other that I was astounded. By moving them closer and farther apart I saw strange visions, blurred and fleeting.
'I see soldiers, in Spanish colours,' I said, dumbstruck.
Dee shielded his eyes and peered into the distance.
'There is a retinue on the road. They are coming this way.'
'And why should Spanish soldiers cause such noble men to panic?' said Gesner, closing the book. 'You were never here to seek treatment, were you? The boy is not mad.'
'No madder than you or I,' said Dee. From his satchel he drew the Steganographia. 'We came to finish what Paracelsus began.'
'Paracelsus was learned, but he was not wise,' said Gesner. 'He burned the old books when he went to Basel. Trithemius was the first to make the lists -
it is by his example I made my lists of every book ever known. The architect's plans for the Tower of Babel. The map of wisdom.'
'Then this was his compass,' said Dee. 'We believe its key lies with the Venusberg. Do you know where it is?'
'I have climbed every mountain of legend,' said Gesner, 'and all I have learned is that experience is quite different to what is real. Follow the road south. Beyond these ranges is the Duchy of Milan. The heir of the Abbot's patron is there - he may know more of his book.'

We quickened our pace and forged onwards, around the winding, twisting roads until we reached the Gotthard Pass. The snowmelt had turned the river into a raging torrent, but the wooden bridge had long since rotted and collapsed. A little further up the road was a new bridge, made of bricks. Its falsework timber frame still stood.

The bridgemaker and his wife were still camped nearby, where a cartload of bricks was hitched to a small donkey.
'Is the bridge safe?' I called out. The man scratched his head.
'Depends what you mean by safe,' he said.
'The bridge is cursed,' said the woman, pulling her shawl around herself tighter.
'The base was done in winter when the river was frozen,' said her husband. 'The first builder froze to death laying the last stones. The next one they sent to build the falsework, only the rope he used to tether himself slipped around his neck and he hanged to death. So they sent me up to put the keystones in. Only when we get here we find someone's already put them in.'

Dee looked at the bridge with his hands on his hips.
'Then it is finished,' he said.
'Well,' said the builder, rubbing his chin. 'I suppose.'
'It is cursed,' said his wife. 'The first one to set foot on that bridge is making a journey from this world to the next.'
'Why don't you test it?' I said to the builder.
‘Why don't you test it?' replied his wife.
I looked down into the gorge, and I could understand her fear. Bridges were everywhere, weren't they? The Romans even knew how to build them. Yet I had never been the first to cross a bridge in my life. There was no way to know if a bridge would hold without stepping out on to it. I had also seen Roman ruins. Bricks did not stay atop each other forever.
'Why not send that over?' I said, pointing. The donkey flicked its ears nervously.

The builder led it down the path and we listened to the roaring of the water beneath us. At the edge of the bridge the creature hesitated. The builder's wife took a turnip from the camp and waved it before the animal's nose until it was ready to bite, then tossed it out onto the bridge.

It paused for a moment, and then it trod slowly forward. As it clipclopped hoof over hoof we could hear the bricks grinding and the timber groaning gently beneath it. When it was almost close enough to bite the turnip the wheels of the cart caught in a gap between two bricks. It strained forward, then bucked. The bridge shuddered. We all held our breath, but the bridge held fast.

The animal casually chomped at the turnip, and when it was finished it flicked its ears again and continued calmly to the other side of the river.

Dee grinned and stepped out on to the bridge. He stamped his feet heavily on the bricks. Then he jumped up and down.
'You see! Where is your curse? Solid as the rock of Saint Peter.'
He clapped his hands, and the echo resounded around us. A low, deep, rumbling growl began to rise in the valley. From a ledge high on the southern side of the gorge rubble began to drop and an enormous boulder began to move. In an instant it was falling. It landed with a force that shook the earth, gravel hailing from the mountainside, and a cloud of dust filled the valley.

When it finally settled I saw Dee standing on the bridge, still intact. He was staring open-mouthed, like the builder and his wife.

There was no donkey. Just the boulder, a single cartwheel jutting from beneath it.

# Chapter Nine - The Acts of Saint Peter 


#### Abstract

And behold when he was lifted up on high, and all beheld him raised up above all Rome and the temples thereof and the mountains, the faithful looked toward Peter. And Peter seeing the strangeness of the sight cried unto the Lord Jesus Christ: If thou suffer this man to accomplish that which he hath set about, now will all they that have believed on thee be offended, and the signs and wonders which thou hast given them through me will not be believed: hasten thy grace, O Lord, and let him fall from the height and be disabled; and let him not die but be brought to nought, and break his leg in three places. And he fell from the height and broke his leg in three places. Then every man cast stones at him and went away home, and thenceforth believed Peter.


The Acts of Saint Peter, Ch. 22

The rest of the journey to Milan was spent in solemn reflection.
There are no coincidences. That was what Gesner had said. I remembered the night The Jesus left London; lightning had struck the roof of Saint Paul's Cathedral, destroying the steeple and starting a fire that faded behind us as we had sailed up the Thames. In Milan, the city at the heart of the Duchy, everything seemed designed to fill the mind with thoughts of divine judgment and retribution. Shields adorned the brickwork everywhere, bearing the image of a screaming man being devoured by a giant serpent.

Men were in the process of hanging flags bearing the double-headed eagle of the House of Habsburg. Criers were announcing the visit of the King of the Romans, Maximilian the Second - heir to the Holy Roman Emperor Maximilian.
'How are we to gain an audience with a Habsburg King?' I asked Dee, breaking the silence that had followed us from the mountains. 'Nobody knows you here.'
'I do know a teacher here, at the Palatine school,' he said. 'Cardan, a friend of Professor Cheke. All the crowns of Europe have sought his skills as physician; but he is also a gifted astrologer. He taught me the secrets of horoscopy long ago, in London.'
'And that is how you made your money then?' I asked. 'Casting horoscopes?'

Dee looked back and forth between my eyes, as he often did. 'Prediction takes time and great skill. Neither is cheap, you understand.'
'I have never understood. How do the planets and the stars change a man's fortune?'
'As above, so below,' said Dee. 'The planets and the stars move, as the waves move upon the ocean, as the wings move on a bird, as men and women move across the earth. Everything is connected; to read one is to read them all. The lights in the sky move slowly enough to measure - if I know where they rest at midnight tonight I may predict where they will rest at midnight tomorrow. Cardan is an expert in such matters.'

When we reached the school it appeared that this Cardan no longer taught there. In fact, the mere mention of his name caused a stir amongst the teachers. Apparently this man was accused of publishing a mathematical solution belonging to another teacher, and had since moved to Bologna. Dee, who had introduced himself as Cardan's good friend, was viewed with some scorn.

As Dee argued with the teachers I stood on the street outside the arched façade, watching a parade of men. They were hauling huge chunks of masonry on $\log$ rollers down the street leading away from the towering cathedral. There were sculptures of stern looking figures, now tipped on their sides, rolling headfirst as
the sweating men strained against their ropes. Amidst them I could see also long marble sarcophagi, bearing austere-sounding names like Visconti and Sforza.

I followed the procession back to its start in the square of the enormous Duomo. There each street converged like the threads of a spider web before the epic mass of stone; as big as St Paul's, if not bigger. It was a monster, like three cathedrals stacked on top of each other. On the roof I could see canvas billowing on frames that covered scaffolds - clearly there were plans to make it even bigger.

In the bustle of activity I found myself darting out in and out of the way of the workers. A maddened crowd had vandalised the artwork of St Paul's when I was a boy. This was different. Men were removing monuments from the church with the reluctant pace of labour, not passion. Orders were being barked by a harassed, hook-nosed man in the garb of an archbishop. I stumbled over a broom, and as I picked it up to move it aside I was spotted.
'You there, boy! What are you doing? Get inside at once! The King is on his way!'

There were guards at the doors of the cathedral. Broom in hand, I was ushered inside. I began to sweep, a long forgotten habit returning quickly, and gazed around the inside of the inner chamber. It had been no Protestant scourging of icons - the work removed was the monuments of laymen; the rulers of Milan, I guessed, before the Habsburgs. Biblical art remained. I stared transfixed at a statue of Bartholomew standing proudly, skinless, his muscles and bones peeled bare.

Trumpets began to sound, and a procession began to fill the cathedral. Dee was nowhere to be seen. I swept my way towards the altar and slipped behind a pillar as the crowd took their seats, before rising almost immediately to
another blast from the heralds. The archbishop paced reverently on to the altar and raised his hands.
'King of Bohemia, of the Romans, and of Germany, Archduke of Austria, Duke of Burgundy and Brabant, Prince of Habsburg, Maximilian the Second.'

There were cries of exultation as the great man entered. He wore a fine embroidered vest under a short cape, and a gold chain hung around his neck. His black hair and beard were trimmed short.
'My Lords, and Ladies,' he said when he had ascended the altar. 'Without Milan, there would be no church today. It was here in Mediolanum that the great Roman Emperor, Constantine, declared his famous edict: that the followers of Christ throughout Europe should be allowed to practice their faith freely. I stand today as heir to the Holy Roman Empire to declare forever the protection of the faithful, as Constantine did, under the sign of the cross that led him to victory against Maxentius.'

When the address was over the crowd spilled through the back door, mutters of dissent rippling amongst them. I was ignored, or forgotten, and soon alone in the cavernous cathedral with Maximilian and the archbishop.
'My words do not please them, Borromeo,' said the king.
'They know you make promises to the Protestants, also,' said the archbishop. 'And they know that far from taking back Constantinople, you are losing the East to Suleiman.'
'Careful, Borromeo,' said the king. 'You are only nephew to the Pope, not the man himself.'

The bishop raised his hands impassively. 'And he tires of financing your failure.'
'Tell my cousin Philip. It is he who drives his own people into Suleiman's lands with his placards and persecutions. How am I expected to take back Constantinople when our enemy unites our own people better than the King of Spain? I don't have Constantine's fortune.'

Borromeo raised a finger. 'But what if you did?'
The king frowned. 'What do you mean?'
'Suleiman claims to have taken the treasures of Constantinople - but there is one item he does not have. Constantine's spear. It is said by the mystics to contain the power over life and death itself. With it, no king may be defeated.'
'You try to scare me with tales of sorcery,' scoffed the king. Then, quietly, he asked, 'Where is this spear?'

Before Borromeo could answer, a voice cried from the door.
'Excellency!' A soldier stood saluting. 'Word from our men in the land of Schwyz - two sorcerers have come to Milan. They called at the Palatine school for the soothsayer, Cardan. They are here for the king.'

The king's face fell. I buried my face against the pillar, trying to disappear.
'Fear not, Majesty, you are in the house of the Lord. Bolt the doors, guard.'

I heard the heavy doors shut with a clang that echoed around the bare walls.
'You see?' said the archbishop. 'It has been the duty of the Church to control fear since the first Pope cast Simon Magus, the sorcerer, out of Rome. The will of God is itself a fearful mystery...'
'Did you hear something?' said the king, suddenly.

I held my breath in my throat. Had I made a noise? I could not say.
'There, behind the pillar,' he said.
Soft footsteps sounded in my direction, and I darted out from my hiding place, throwing the broom as I ran down the aisle.
‘Stop, devil!’ shouted Borromeo. Over my shoulder I saw him running after me, his robes flapping about him. The huge doors that led outside, I knew, were barred. Instead I made for a smaller doorway that revealed a narrow winding staircase. I sprang up it, two steps at a time, as I heard the pounding of the archbishop's shoes below me.

Round and around and around the staircase went, until I could no longer imagine how high I had climbed. Once or twice I stopped to catch my breath, only to be spurred onward by the clatter of footsteps rising towards me.

At last I reached a door at the top. I threw it open, and a wave of dizziness kept my head spiralling as the whole of Milan sprawled into view a hundred feet below. As I forced my feet to move I felt like I was being rocked from side to side, though there was barely a breeze. The roof was unfinished in many places, and where there were no bricks there were wooden planks that creaked beneath my boots. The sheets that covered the larger holes were flapping in their frames, catching the breeze like sails as I held my arms out to balance.
'Hold, little Faustus,' shouted Borromeo as he emerged on the rooftop, his face red and breath heavy. 'You have nowhere left to run.'

Below, in the square, I could see tiny figures of people staring up and pointing.
'My uncle will be most pleased to learn I have captured a sorcerer.'
'I am no sorcerer,' I said, turning to face him as I raised my palms towards him. I backed away slowly, my feet feeling for the planks. A fall from such a height would mean death. 'We came only for the counsel of the king. There is a book, once owned by his family, a doorway to the messengers of God. All we need is the key. I heard what you said - the will of God is a fearful mystery. But what if you could know his will?'
'My son,' said the archbishop in a voice full of pity, 'the Church is the only doorway to the messengers of God.'

He held out his hand and stepped towards me. I felt myself stepping back, desperate to avoid the grasp of this man. The bricks behind me were lower than I had expected, and I stumbled, a few steps at first, then my foot caught a plank and I was tumbling. I crashed through the frames of the canvases, becoming entangled for a moment, and I flailed, my hands grabbing at whatever they touched.

I fell.
A memory filled my mind. It was from a long time before, when as I boy I knelt in silent meditation at the seminary. Mysticism was part of our curriculum, and we would spend entire days focusing upon incantations spoken only in our minds. The goal was to achieve a perfect union with the mind of God. We were told stories of mystics in the past who had succeeded - to begin bleeding from the hands and feet, or to burst into flames at the moment of contact, or to float in the air like a feather on a breeze.

As I dropped from the roof of the Duomo I found myself floating. Wind roared past my ears, and time seemed to slow for a moment. My arms were raised above me, the feeling drained from them, my fingers locked tight around each side
of a frame. The canvas billowed out like the mainsail of The Jesus catching the wind...

Then all at once the ground rushed to meet me and I felt an explosion of pain rush through my leg. I tried to scream but all that left my lips was a gurgle, as the frame splintered around me and the canvas danced across the square in the wind.

I was aware of a crowd of people screaming and running, a horse and carriage nearby, and Dee once more peering into my face as the sky faded into darkness, and so did everything else.

# Chapter Ten - The Stones of Immortality 


#### Abstract

But Celsus, wishing to assimilate the miracles of Jesus to the works of human sorcery, says in express terms as follows: "O light and truth! he distinctly declares, with his own voice, as ye yourselves have recorded, that there will come to you even others, employing miracles of a similar kind, who are wicked men, and sorcerers; and he calls him who makes use of such devices, one Satan. So that Jesus himself does not deny that these works at least are not at all divine, but are the acts of wicked men; and being compelled by the force of truth, he at the same time not only laid open the doings of others, but convicted himself of the same acts. Is it not, then, a miserable inference, to conclude from the same works that the one is God and the other sorcerers? Why ought the others, because of these acts, to be accounted wicked rather than this man, seeing they have him as their witness against himself? For he has himself acknowledged that these are not the works of a divine nature; but the inventions of certain deceivers, and of thoroughly wicked men.


Origen, Contra Celsum, Volume 2

Pain, I knew in fleeting moments of light, was the cause of all fear.
Writhing in a carriage with Dee at the reins I awoke to feel pain searing in my leg like flames, at other times throbbing like the surface of a stew. I would moan and loll on the bench and when the pain became too much the blackness would sink over me once more. The sun and the stars wheeled overhead, oblivious, it seemed, and I swam through dark forgotten dreams to a soft bed in a small, dim room.

My leg felt sore, the pain muted beneath reddened bandages. My head was heavy.
'You are lucky,' said Dee. His back was to me as he inspected the contents of a cabinet at the side of the room. 'The roads to Padua were far crueller last I was here. Two days might have ended you back then.'
'Where are we?' I said. My voice was small in my throat, and my mouth was dry.
'The university,' said Dee. 'A student set your leg, but only for the practice. They gave you herb to help you sleep, but they shall give you no more. Does it hurt?'

I nodded. He unscrewed a small bottle and was disappointed to find it empty.
'What did you learn from the King?' asked Dee
'Only that the church is trying to scare him into subservience,' I said. 'The archbishop was tempting him with stories of magic - of a spear, with the power over life and death, that belonged to the first Christian Emperor, Constantine.'
'Really?' Dee stroked his beard. 'Did he say where it was?'
'Not in Constantinople. Somewhere in Europe. I learned no more - he believed us to be sorcerers.'
'Yes, I know. And he will be certain of it, now, after seeing you fly from the rooftop like that. Ingenious, using canvas like a sail to catch the air as you fell. Icarus incarnate. You will limp like Gesner for a time, I imagine. Rest for now. We will be safe for a few days, but Milan is closed to us. When you are mended we will make for Venice.'

Dee left me with the books for company. I opened each of Trithemius’ works, but under the haze of the herbs the letters melted and refused to be read. I turned to the title pages. They were finely engraved with coloured illustrations, like the kinds I had seen hanging in The Four Winds.

Each depicted a man kneeling before an emperor. He had a tonsured scalp and wore the robes of an Abbot, and in each engraving he offered a manuscript to the emperor. It appeared to be the Steganographia. Its covers were bound by a single padlock, and behind the Abbot a curly-haired and bearded man was offering two keys. Each image featured crests - the Habsburg double-headed eagle, and one I did not recognise: a pair of crossed budding green staves. Below the images the Abbot appeared again, sprawled in bacchanalian leisure, his arm crooked around a budding green staff.

My coat was hanging on a chair near the bed. With some difficulty I pulled it to me and felt inside the pockets. There were shards of broken glass in one but in the other, somehow having miraculously survived the fall, one of Gesner's lenses had survived.

The lines of the engravings warped and curled inside the disc. The emperor's chin jutted forward on his jaw, just like King Maximilian's. As I moved the lens I saw something I had not noticed without it. A fourth man appeared in each image. He was all but obscured, hiding behind a pillar, watching over the others. In his hand he carried a bishop's crosier.

Puzzles swirled in my mind, lies colliding with truth, and I slept restlessly.

As soon as I could I began to walk with the aid of a crutch. I hobbled the lanes of the university, watching the students and lecturers as they walked between their classes. It was the library I was interested in. The books there were mostly about medicine, and as much as I tried to remain focused on anything related to the Steganographia I found my attention drifting from subject to subject.

A book by Mirandola explained that the perspective of the angels was arrived at not through prayer or incantation, but through endless study and philosophy. Another by Fracastoro explained how a great crab once tore open the sky and let loose countless tiny seeds, too small for the eye to see, that floated on the air and bedded themselves in clothes and linen causing sickness and disease. When I read of an illness I began to believe I must have it, until I read of the next and its symptoms were even more familiar.

The pain in my leg would rise at times until it was unbearable, and I could not read or rest or even sleep. I could not decide whether it increased the pain more to move or to remain still, and I alternated between the two to no avail. Soon I caught myself staring at the same line without even reading it. Mutinous for lack of attention, my other senses commandeered my mind. The sound of muffled laughter drew me outside the library, grateful for distraction.
'Must you gather here?' I called to a group of young men as I shielded my eyes from the sunlight with my free hand. 'I am trying to study.'
'Then it seems we have rescued you from a terrible burden, for which you are welcome,' said the tallest of them. He smiled easily, and I found myself smiling back. 'I am Mazzoni, and judging by the limp you are Vulcan, god of the flames. And it is tradition, I believe, that the gods repay heroes for freeing them something bacchanalian... wine, perhaps?'

Without much resistance I was soon parting with coins to an innkeeper who was friendly to students. Mazzoni drank in great draughts, dropping his cup to the table with a bang each time. Like his friends he had just commenced philosophy, and though his memory for verse seemed limitless he was greatly opposed to anything that smelled of study.
'Poetry,' he said grandly, the word drawing nods from his entourage who had started their drinking earlier, 'is the only truth. Look to Dante - Lord of Poets. He discovered four directions that approach a poem to converge at the truth: the literal meaning of the letters themselves, the allegorical, looking to the past, the moral, that interprets the present, and the anagogical, which foretells the future.'
'Like four points of a compass, meeting at the needle,' I said, the wine helping to make sense of nonsense. 'It is a kind of madness.'
'Everybody who studies here is mad,' said Mazzoni with a grin. 'Pomponazzi, he dared to stir Aristotle awake long after Aquinas claimed his corpse for Rome. Mirandola charged headfirst onto Vatican Hill armed with his nine hundred theses. And forget not Copernicus, the fool who flung Man from the centre of the cosmos and tried to mount Apollo on his mantle. Imagine!'

I reached back to my memories of Zurich, searching for a name. 'What about Guilandinus? Did a man of that name study here?'

The other men erupted in laughter, and then suddenly rose to relieve themselves in the alley outside - an endeavour made possible only in congregation, apparently. Mazzoni raised his eyes to the ceiling as they left us.
'Melchior Guilandinus? You mean Cerberus, the hellish guard-dog of the botanical garden here. Woe unto the medical students who are forced to enter that hortus conclusus - it is fortified stronger than a castle, yet it houses only plants!'

The pain in my leg was severe, greater even than the wine could numb. 'It might house more than that,' I said. There is a flower there, the sleep-bringer - its tears grant power over pain, and fear, and the minds of men. Imagine that.'

Mazzoni looked surprised, and with my caution quelled by wine I felt pleased I had known something he had not. 'The Stones of Immortality, that's what Paracelsus called them.'

There were gates at four points around the high garden wall, each bolted with a heavy lock. At the northernmost entrance Mazzoni took his cape pin and fiddled with the lock, a task that seemed a habit to him, and it fell open. We slipped inside, and I was washed with the perfume of a hundred different herbs and flowers. With every turn of the head another dominated the nostrils.

We crept around the spiralling lanes of the garden beds, searching amidst the plots. There were petals of every colour, leaves of every shape, thistles and spines, berries, bulbs and seedpods. After much searching, at the centre of the garden, I saw the crowned bulb atop the emerald stalk. With a knife he drew from his belt, Mazzoni cut several of the bulbs and dropped them into his pockets. The sound of footsteps approaching from the southern gate spooked us like squirrels, and we weaved our way out through the footpaths and back towards the university.

Back in my quarters Mazzoni leafed through the books with interest as I examined the bulbs. They were hard and globular, and where one had been split by the knife I saw teardrops of sap weeping from the wound. It was bitter to taste, and Mazzoni and I blanched as we bit into the flesh of the plant and sucked its resin.

We waited a moment, watching each other, and I was disappointed when nothing happened. My tongue felt dry, and I licked the air. Slowly, then, I realised that the pain in my leg had evaporated. Sweat was beading on my brow,
and my heart began to beat warm and fast in my breast. Even though I was indoors, ahead of me I sensed the truth appearing, but it was beyond a prickly thicket. A thickly pricket. A tickling prickle of prickling thickets. A thickprickled tickle of prick-tickling thickness.

Mazzoni was laughing, and I felt my mouth bending into the grin of a fool.

Had my leg still been filled with pain it would not have mattered, for that night I drifted out into the town with my feet dangling just a few inches above the cobblestones. Now I saw the world as poets saw it, and even the smallest and flattest and roundest and hairiest of the world's creations were beautiful through the lens of the sleep-bringer's tears.

Mazzoni and I solved all the world's puzzles that night.
I never awoke, but rather, found myself in a dream. I was in a great room, with tiers of benches surrounding it. At the centre I saw my own body, skinless, laid bare on a slab. It was ghastly - the shape of a man, his surface was muscle and sinew, the organs spilled from him. My head tilted down and I discovered myself. The body on the slab was a corpse. A real corpse.

I was in the medical building, an anatomy theatre. All at once my body filled with weight and I stumbled away from the cadaver in revulsion. Pain coursed through me, rushing from my belly and into my leg, still broken, the agony now unbearable. I wanted to scream but again my throat was dry, my skin itchy and wet.

Clenched in my hand was a page stained with sweat. Where had it come from? What had I done? Mazzoni... the Steganographia... the keys... the lies... the truth... Dante...
'Ashes, or dry earth, would be at one with the colour of his robe, and he drew two keys out from under it. One was of gold, and the other of silver: he did that to the gate that satisfied me, first with the white, and then the yellow. He said: 'Whenever one of these keys fails, so that it does not turn in the lock correctly, the way is not open. The one is more precious, but the other needs great skill and intellect, before it works, since it is the once that unties the knot. I hold them, for Peter, and he told me to err by opening it, rather than keeping it locked, if people humbled themselves at my feet. '

A hand slapped my face, hard, and I stared up at Dee.
'Awake, are you?' he said. He was turning a sleep-bringer bulb in his fingers. 'Near enough, anyhow. We leave for Venice. You can reveal to me what truths your journey brought when we get there.'

## Chapter Eleven - The Venetian School

They become so insolent that they want to correct and set the norm for the world without knowing the cause of anything, however insignificant. They consider themselves not only equals but superior to the first in industry and knowledge. There is nothing in this or other genres of music about which they do not claim with the greatest weightiness and reputation in the world to tell you their opinion, scorning and vilifying everything that is alien to them. We may with reason compare them to the miller's mouse that the moralist Aesop tells about in his fables. Having inadvertently covered its tail with flour, it fancies itself the master of the mill and becomes so conceited that it dares not only to want to manage everything its way but to tell the miller to make other arrangements because it does not want him in the house any longer.

Vincenzo Galilei, Fronimo Dialogo

I had heard stories of the city that floated on a lagoon.
Now, as I watched it grow from the deck of a ferry I thought I was still in the clutch of the sleep-bringer. Once the capital of an empire, the printing hub of Europe, Venice had crumbled slowly after Constantinople was lost to the Ottomans across the sea.

For the first time in months I considered my deal with Lord Cecil. I had begun to believe that so far into Europe I was beyond the claws of England. As I watched Dee, buried in his books, I did not see an enemy of the Crown. He had saved my life, endangered it also, but it was a quest for knowledge that gripped him. It gripped me too. Dee believed an angel had revealed itself to me. I wondered if I should tell him the truth.

When the ferry docked a man was waiting.
'Welcome to Venice, gentlemen!' he said, his arms spread wide in greeting.
'Riven, meet the philologer of Ravenna, Tommaso Gianotti,' said Dee, jumping down to the jetty and shaking his hand.
'Tommaso Rangone,' corrected the man, smiling between red cheeks.
Dee raised his eyebrows at him.
'Oh? My pardon. A Rangone now, are you? How fortunate to find oneself in the kinship of the Venetian patricians.'

In Venice the air was thick. Amidst the odour of fish and dirty water was a tension that choked the lungs, like it did in Antwerp and Brussels, and the fear of letting the mind float freely on perilous waters. Here, in the crumbling city, everything was free to float away. As I hobbled along the canals behind Dee and Rangone, I felt the eyes of the sculpted lion heads on every corner watching me. Their mouths were open, forming holes, in which Venetians could post anonymous accusations of heresy against their fellow man.

It was a short walk to St Mark's Square, where music and loud Italian voices filled the air. The school there reminded me of Granvelle's palace, great rows of white columns stacked atop one another. Inside, its halls were lined with paintings and sculptures of biblical scenes, and the more I looked the more I swore I could see Rangone's face in the figures.
'When a man dies, what is left in this world?' he said as he admired his own likeness, immortalised in paint and stone. 'Only his legacy. But a man has so little time to achieve a legacy. Beyond his youth, thirty years. Maybe forty. In the old times, before the great flood, men like Noah lived for many hundreds, even thousands of years. There are records, recent ones, here in the town archives of men living healthily to their hundred and twentieth year. Why no more?'
'In a way,' said Dee as Rangone ushered us past the school guardians, 'that is what we are here to learn. Men once defied death, living as they did amongst gods and angels. Why no more, indeed?'
'It is the cemeteries,' said Rangone. 'Burying the dead so close to the living, letting their fumes hang over the city. Why you must read the books to know these things I do not understand. Look to the world around you if you wish to know how it works!'

Once more I found myself drifting between islands of knowledge, searching for clues. St Mark's was filled with countless codices written in tiny ancient scripts, collected from different languages, different nations, different eras.

Yet for all their differences, there were similarities between the stories. In Genesis the Tower of Babel was built after the flood by Nimrod the hunter, with men united in language to praise God. But a Sumerian myth told of a ziggurat at Eridu, built by Enmer the hunter to unite men in one language to praise Enki. Then there was the flood itself. The Hebrew scrolls and Islamic Qu'rans recounted the great flood, sent from on high to destroy the Nephilim, a race of evil giants sired by fallen angels. The Greek histories also told of a deluge, sent by Zeus to destroy the rampant sons of King Lycaon. In each story there was a survivor. For the Jews it was Noah, descendant of Adam, warned by the angel Uriel. In the Greek legend it was Deucalion, son of Prometheus the Titan, who was told to build a wooden vessel in which to survive the flood. An Assyrian version named him Utnapishtim, warned by Enki of a flood sent by Anu; an even older Akkadian story called him Atrahasis.

Stories of floods began to turn my stomach. I found myself suffocating, and limped out to escape the library for the open air, forgetting that the square overlooked the water. In my mind the stories were competing with each other, all fighting to be heard at once, like a band of minstrels each playing a different melody.

Slowly I noticed that I could hear a number of melodies each playing over one another. Across from the school was the church, and as I wandered towards its steps I found a group of lutenists were sitting and arguing with each other as they played.
'Maestro di Cappella Zarlino,' cried the most animated of the group, 'it is noise, just noise! There are rules that separate the noise from the music, that determine which notes are appropriate for unison with which.'
'Maestro Galilei,' said the stern cappella, 'all and every note will harmonise with its brethren for the ear that is ready to hear it. It is like training the palate to taste the subtleties of flavour - the child will spit what the grown man savours. In the East their music is spiced so differently to our own, an exotic chaos of form and tempo, yet they live and thrive upon it. Just so, dissonance that was in the past considered irresolvable is, these days, quite pleasing to the learned ear.'
'All very well for the learned ear,' complained Galilei, 'but we play for the common man, here in Venice, and the common Venetian prefers order to chaos. There are rules that order the leap from note to note, just as in addition and subtraction. Yes, it is mathematical! Did not Euclid, Lord of Numbers, devote an entire work to the wonder of music?'

By this time I had drifted too close to the argument and, as always, was dragged into it when the cappella spotted me.
'You there,' he called out. 'Common man. Bend an ear, pray.'
He raised his lute to his lap and began to play a melody. The notes danced ahead of each other pleasantly, simple enough to catch the ear, and as I followed each note forward I forgot where I had come from.
'Now,' he said, nodding to another player. The other man began to play another tune, different notes, a different pace, and the beauty of the music vanished. Though I could hear the first melody, it was buried under notes that contradicted and contorted it. My feelings must have been written on my face, for Galilei laughed and pointed at me.
'There, see? He chokes on your foreign food, for he is not familiar with it.'

He raised a hand to silence the second player and gestured for Zarlino to carry on with his melody. Galilei then began to play, a look of concentration pulling his face into a frown. Every note he played was different, every detail altered, but the essence of the tune remained. It was as though the idea of Zarlino's tune echoed in Galilei's, and the effect was a sound that was pleasant, beautiful, truthful. A third lutenist joined in, and again the music swelled. Three different notes played as one, the tune twirling like butterflies playing about each other, and as more instruments joined somehow the essence of the tune grew stronger and stronger.
'Harmony,' said Galilei proudly, when the song came to an end. 'The magic of music - many different voices each talking at once, each a different language, but all telling the same story.'
'Riven!' called Dee's familiar voice from across the square. The magic had ended, but at least the music had driven all fear of floods from me. 'There you are. Surrendered, as I have, to the hopelessness of our endeavour.'

It was the first time Dee had looked frustrated.
'It makes no sense,' he said. 'There is no consistency between any stories, and only one mention of Anael in any of them.'
'Where?' I asked, intrigued.
'An ancient Greek record of an Egyptian myth. Isis once summoned Anael under a mystical planetary alignment, to demand the philosopher's stone. Anael was not powerful enough to do so but, enamoured with the goddess, the angel agreed to send a higher force that would reveal itself as a bowl filled with moonlight. The following day the bowl appeared, and did indeed reveal the philosopher's stone to Isis, on the condition that she share it with no one but her lover and her son. Osiris, and Horus, I presume.'

Dee rubbed his eyes, rolling his head from side to side to stretch his neck.
'A Greek account of an Egyptian myth with a Hebrew angel. What good is that?'

I looked back at the lutenists, who were still arguing on the steps of the church. As each instrument played atop the others the essence of the melody grew and grew.
'The people of Moses fled Egypt, didn't they?' I said. 'The gods of Greece were inherited by the Romans. What if all these myths are branches of the same tree? What if every story tells an older story, transforming over time, until they are like different melodies in the same harmony? Men would become heroes, heroes become giants, giants become angels, and angels become gods.'

Dee stared at me. 'Those bulbs have burned your brain, I fear.'
'Listen,' I insisted, the idea growing. 'The story you found - it tells of a planetary alignment that precipitates the appearance of an angel. The Steganographia does also. The Egyptians were master mathematicians and astrologers, they kept extraordinary calendars, far older than that of Caesar's. What if the Steganographia is pointing us to a power as old as the world itself? What if it is simply the dates that we are getting wrong?'

Dee's eyes grew wide. 'You mean to say, we redraw the calendar? It would take an extraordinary mathematician to trace the dates from Egypt, through Greece and Rome to the present. An astrologer of even greater skill than I, I fear.'
'What about your friend, Cardan?' I said. 'How far is it to Bologna?'
Dee's face was stone for a moment, then slowly his mouth curled into his wicked grin.
'Not far,' he said. 'Not far at all.'

## Chapter Twelve - The Golden Rule


#### Abstract

On The Golden Rule: This rule will cover a goodly share of those things which actually happen. First, having stated your problem in terms of an unknown and having perfected the operation, look for the closest solution you can find. Do it thus: Look for the whole numbers, greater and less, which most nearly satisfy the equation. These will not be difficult to discover. We will call the smaller of these the first approximation and the greater the second approximation, and the difference between what they produce we will call the great difference, the difference between that which the first produces and the constant of the equation we will call the first difference, and the difference between that which the second produces and the constant of the equation will be the second difference. Next divide the first difference by the great difference, and add the quotient to the first approximation. This gives us an imperfect solution which we substitute for the unknown in the equation.


Girolamo Cardano, Ars Magna

Dee's eagerness to meet his old acquaintance seemed to mask his anxiety.
'Quite a mind, Cardan,' he said, shaking his head as it bobbed from side to side. Rangone had loaned us money for horses, but we had underestimated the cost of a good horse in Venice. Dee did not seem to care as our charges jerked this way and that along the road to Bologna. 'His father knew Leonardo da Vinci, you know. He invents secret codes. He even solved the cubic equation!'
'What's that?' I asked.
'A puzzle of al-jabr, the ancient art of finding unknowns and creating balance.'

The more Dee spoke about Cardan the more I became anxious also. The man was a master of numbers, and the more I learned the more I realised that numbers were intertwined with life: navigation, astrology, music, medicine - all the world seemed ruled by numbers. What kind of wizardry would Cardan be capable of?

When I saw the house where the great man lived, I was mystified. His estate was large, but ill-kept. The garden was overgrown, weeds crawling on to the pathways. The woodpile near the entrance was growing mouldy. No servants or secretary met us at the door, and inside the curtains were drawn.
‘Hello?' shouted Dee.
For such a large house there was little furniture, just a few dust-coated tables and chairs. Books and papers were piled in teetering stacks, others just strewn open on the floor.
'Hello?' Dee called again.
'Ssshhhh!' hissed a voice suddenly. We both jumped, peering down a short corridor to a dim room to the side. As we entered it I was assaulted by the smell of dried sweat. A man was on his hands and knees, staring at the floor. He looked haggard and ill. His sideburns were dark at the roots and white at the ends, two bushy hedges joining his moustache in an archway over a mouth that was missing several teeth.
‘Cardan?’ said Dee in disbelief.
'Sssshhhh!' repeated the man. One of his hands was fidgeting with an emerald that hung upon a string around his neck, the other clenched a near-empty bottle, and his concentration was focused on the stone floor. When we were close enough I realised he was studying two tiny bugs engaged in a struggle on the floor. 'Come on, come on! Gah!'

He stood suddenly and slammed his boot down upon the two insects, making me jump again. His game over, he acknowledged us with sunken eyes and fished another bottle from behind an upturned chair.
'Never back the scarab beetle, Dee,' he said angrily, 'all they do well is eat shit.'
'Is this a bad time?' I asked as Dee stared at his old friend.
'A bad time?' said Cardan incredulously. 'You mean there are good times? Tell me, stranger, when do they begin, these good times? Everywhere I look there are enemies, all around me, above and below.'
'Who are your enemies?' asked Dee. 'In Milan they say you stole another man's work.'

Cardan laughed, joylessly. 'Ah, yes, Fonta-ta-ta-ta-tana. "The Stammerer", they called him. Do you know why? Years ago the French stormed his hometown, raping and murdering to teach obedience. His father, a messenger, was long dead - murdered on a delivery - so Fontana hid his mother and sisters in the cathedral and kept guard. When the soldiers caught him he refused to surrender the women, so they put their daggers in his mouth and cut him.' With his fingers Cardan traced a line from his mouth to his ears. 'He was twelve years old.'

A shudder ran through my back.
'Would such a man part easily with a secret? I think not. When I learned he had solved the cubic I invited him to Milan. I treated him like a prince, he treated me like a fool. Finally, after drinking my house dry, he gave me the solution on condition that I promise not to publish it before him. Years went by, Fontana sat silently on his discovery, and I kept my promise. But I was not the fool Fontana thought me to be. I journeyed far beyond him. I solved the quartic equation, can you imagine? I wrote to him, begging him to publish, offering him partnership in my work - but all I received in return was ridicule.'
‘So you broke your promise?' I asked.
Cardan scowled at me. 'I have never broken my word in my life. But after many years I met a man here in Bologna, the son-in-law of Scipione del Ferro, who taught Fontana's greatest rivals. He showed me Scipione's notebook and, would you believe it, there was the cubic solution - written thirty years before Fontana put quill to parchment! What sin was it, therefore, when I published the solution? It was not mine, nor Fontana's, but Scipione's. What oath had I made to him? None! But now I am hated!'

He snatched at the papers that littered the room and shoved them into Dee's hands.
'The professors conspire against me, sabotaging my classes, turning my students from me. See, see! Plots, conspiracies!'

Dee flicked through the pile, glancing at Cardan. 'Letters. Innocent letters about innocent matters. Orders for your books. A summons from the Duke of Urbino. An invitation to dinner.'
‘Fool!' hissed Cardan. He fished amongst his files and retrieved a square of parchment in which were cut little windows of various shapes and sizes. 'Read what that spells.'
'Ve... ne... num...' read Dee. 'Poison. Yes, I see. But you cut these holes yourself, I presume?'
'Of course! At first it was an experiment, a method for encoding secret information. One writes a message through the windows and fills an innocent message around the words. Then I realised: if innocent words can hide secrets, then nothing is innocent! All text may hide secrets! Look at this menu - innocent enough until I place the grille over it and... mors... death!'
'Where is Lucia?' asked Dee.
Cardan's eyes misted. He threw the letters aside and drank deeply from his bottle. 'My sweet, darling wife is gone. Taken from me by him up there. A cruel, unkind, uncaring master.'
'I am sorry to hear that, my friend,' said Dee, sitting down. 'God's will is most mysterious, but we must trust that all things happen for a reason.'
'Must we?' spat Cardan, pointing at the ceiling. 'What does he up there, all-powerful, all-knowing, care of us down here? He watched his son tortured, and executed, even when he begged his father to use his power to change his fate. Do you have a son, Dee? I did. Giam. A good boy. Never committed a sin in his life, not until the day he poisoned his money-grubbing, vile, cuckolding whore of a wife. They tortured my boy for it. They cut his hands off in front of me, and worse. He begged me to stop them, but I was powerless. I gave every last scudo I had to the judges, the governors, and my son's greedy in-laws, but they all crossed me. They hanged him, Dee.'

Dee's mouth opened, but he did not speak. He looked at me, and I felt that I should say something - but there was nothing to say. Cardan stared through the wall at something nobody could see. Then he remembered something. Searching through the papers he found a scroll and held it out to Dee, his eyes glistening with a fierce look. Dee unfurled the scroll and inhaled sharply when he saw what it was.
'A horoscope,' he said through his teeth. 'Of Jesus the Nazarene. You have lost your mind, Cardan. You know this is illegal.'
'Why?' said Cardan defiantly. 'Are we not to know the will of God?
Read it, Dee. I spent months calculating, correcting the calendars until I was sure. He was meant to die, Dee. It was fated. It was in his stars, his planets.'
'So?' said Dee. 'What did you expect? It was God's will.'
'Exactly!' said Cardan. 'It was God's will, from the time he first set the stars and planets in motion. And yet he waited - he watched the fall of Babylon, the rise of Egypt, the flight of the Jews, the empires of Greece, Macedon, Rome, and he waited and waited before finally sending his son, his own son, to be tortured and killed in a desert in Arabia. Why?'
'You want to know why?' said Dee angrily. He opened his satchel and pulled out the Steganographia. 'Then help us. Help us unlock this book, and we will share in wisdom once more.'

Cardan waved the bottle dismissively. 'It no longer matters to me. I have cast my last reading, and it was my own. As the stars predicted my rise, so they did my fall. I am to die tonight.'
'You could never forecast deaths, Cardan, and you know it. You told Professor Cheke he would make it past sixty. You told King Edward he would outlast Solomon. Remember?'
'I do,' said Cardan sadly. 'That is why I took precautions this time, to ensure the accuracy of my prediction. I drank poison just before you arrived.'
‘What?' I said. Dee stood suddenly.
Cardan gestured to his physician's chest in the corner of the room. An empty bottle lay near it. Dee ran to me and grabbed it.
'Cardan, you fool, what is it? Is there a remedy?'
'Of course,' he replied, staggering into a chair and collapsing on the floor. 'I am a physician, after all.'

The chest was locked with a heavy padlock. I remembered Mazzoni's trick with the cape pin, but then I realised this lock had no keyhole. Instead there was a cylinder of dials inscribed with symbols and letters.
'Where is the key?' shouted Dee, grasping Cardan by his shoulders.
Cardan laughed. 'Not all keys can be held in the hand, dear Dee. Clever, isn't it? Commandino gave me the idea, the Duke of Urbino's physician. Only when the dials are turned correctly does the catch release.'
'This is madness, Cardan, what is the code?' cried Dee. He dropped his drunken friend and ran to the chest, turning the dials and tugging at the lock.
'Try them all, Dee!' laughed Cardan. 'Five dials with ten symbols apiece, the sursolide of ten gives you one hundred thousand possibilities... but only one that matters! That is the magic of probability, Dee. A man wagers every moment of his life - that he will not be struck down by a carriage as he crosses the street, that he will not choke on his beer over dinner, that his wife will not fall dead from some disease. He plays the odds each day based only on the days that have come before.'

My heart thumped in my chest as I watched him dying, and Dee crouched over the chest in panicked concentration, his thumbs rolling the dials methodically. I ran out into the hall, and could still hear Cardan shouting inside.
'To everything there is a pattern, woven of the threads of happenstance, and to our sightless eyes the weaver is blind! But now we are armed against fate we have the presses! Never again shall records be lost. Patterns emerge. And where there is a pattern, prediction is possible!'

I ran into the garden and looked around desperately. There, in the woodpile, was an axe. With all my strength I wrenched it from the $\log$ in which it was buried and raced back inside.
'Move!' I shouted at Dee, and as he darted out of my way with a look of shock on his face I attacked the chest with wild, savage blows. The wood was heavy, and my arms were quickly straining as I brought it over my head in huge swings. When I felt I could scarcely lift the axe again I looked at Cardan. He was sprawled against the upturned chair, tears in his eyes, watching me.
'It is a rare man who raises a blade against fate,' he said, and smiled.
I filled my lungs with a great breath and slammed the axe down once more. The lid of the chest exploded into splinters, and Dee pushed me aside to drag out its contents. He scanned the labels of several bottles until he found what he was looking for, taking it to Cardan and forcing him to drink from it.

The old man's eyes closed and Dee put his ear against his chest. There was no sound in the room for what felt like an age. Dee stood.
'He will live,' he said, sighing. 'But he will sleep soundly for some time. We'd best put him to bed and keep watch - he will be no use to us until morning.'

## Chapter Thirteen - The Julian Calendar


#### Abstract

But there were three main schools, the Chaldean, the Egyptian and the Greek; and to these a fourth system was added in our own country by Caesar during his dictatorship, who with the assistance of the learned astronomer Sosigenes brought the separate years back into conformity with the course of the sun-and this theory itself was afterwards corrected (when an error had been found), so as to dispense with an intercalary day for a period of twelve successive years, for the reason that the year which had previously been getting in advance of the constellations had begun to lag behind in relation to them. Both Sosigenes himself in his three treatises-though more careful in research than the other writers he nevertheless did not hesitate to introduce an element of doubt by correcting his own statements-and also other authors whose names we prefixed to this volume have published these theories, although it is seldom that the opinions of any two of them agree.


Pliny, Naturalis Historia

Sleep did not come easily that night.
How could the distance between men's lives be so vast that some sought immortality whilst others begged for death? There had been times I had considered ending my own life, even before the long, black nights in the Fleet. At the seminary there had been nights when dreams of impossible shores would leave me waking to the weight of the world in my heart. My life would suddenly seem smaller than the tiniest insect, and I would long for the boot-heel to drop from above and crush me. Many moments had I cradled the knife in my hand, fondled the noose, stared into the moon's reflection from the bridge, only for fear to hold me from it.

Then, always, the sun would rise and chase the shadows away for another day. So it did at Cardan's house in Bologna. I had dozed until dawn in a chair
that welcomed the sitter to deceive the sleeper, to awaken to the sound of voices rumbling upstairs.

Dee was sprawled back in a chair by a bed where Cardan sat upright. On the blanket before them the Steganographia was open, sprinkled with toast crumbs.
'Doctor Cardan informs me he has forsaken astrology,' said Dee, his fingers to his temples, 'and therefore cannot assist in our calendric calculations. Instead he is gracing us with a critique of the Abbot's words.'
'Forget the words,' said Cardan, ripping at his toast with his toothless gums. 'Words are naught but letters, their orders change, exchanged from one voice or quill to another. Words lie. But, see here, the Abbot has numbered each of the lesser and greater angels. Numbers... numbers never lie. They cannot. As in all of life's puzzles, look only to the numbers.'

Dee was unimpressed. He stood, stretching, and rolled his eyes at me as he retired downstairs. I sat down in the chair.
'I suppose I owe you thanks, boy,' said Cardan, without actually thanking me. 'You diverted a river of madness. Today I am reborn.'
'What did you mean last night?' I asked as I took the Steganographia to brush Cardan's contributions on to the floor. 'Where there is a pattern, prediction is possible.'
'A little revelation I had in a gambling house - yes, I admit, I had fallen far. There were winners there, and losers, just like in all of life. And just like in all of life the losers would curse the Devil, curse the fates, curse providence for their losses and ask God for mercy. But the winners, the real winners, thanked no one. They counted everything, and played the odds. One in two on the flip of a
coin, six on the roll of a die, seventy-eight on the draw of the tarot. To each outcome there is a number, calculated from all the other numbers around it. The more I knew, the more I won.'
'Did you ever lose?' I said.
'Of course. One cannot win always; such is the nature of the odds. But one can fortify oneself against losing.'

Downstairs, Dee was packing his things.
'The man is corrupted,' he snapped, 'a mind gone to dust. He is summoned to the impregnable court of Urbino, to meet the Prefect of Rome, but he would rather wallow in self-pity in Bologna. It is a humbling day, Riven, when you see you have outgrown your elders.'
'Has he not met the Duke, then?' I asked as I picked up the summons.
'It is a rare honour, one you or I will never have!' said Dee. 'For all his praise of the man's physicians Cardan believes his wisdom would not be respected there. Does he think it is here?'
'Then why don't we go in his place?' I said, gathering my bags.
Dee paused. 'To Urbino? You mean, pretend to be Cardan?'
'Why not?' I said. 'You claim you have outgrown him - you could pass for him, then.'
‘Cardan told me there are mathematicians there,' said Dee, thinking carefully. 'Experts on the Greek masters. If there is meaning in the Abbot's numbers, I suppose they are the men to find it.'

He clapped his hands.
'So be it. We ride for Urbino.'

Cardan was not sorry to see us go. Whether it was fatigue or just the man's temperament, he bade Dee farewell not as an old friend but as a tiresome relative who has outstayed their welcome.

Nevertheless, our spirits were high as we travelled south through the Italian countryside, all around us bursting into Spring. At the gates of Urbino the Duke's guards met us and, on presentation of the summons and Dee's claim to be "the astrologer from Bologna", we were ushered to the palace.

Duke Guidobaldo II della Rovere walked like a soldier, to each step or stance a purpose and precision. His braided sleeves bulged over enormous arms, and upon his broad chest hung a medal of the Golden Fleece.
'You'll excuse me if I am curt,' he said, nodding toward us as he was handed a pile of correspondence by a page. 'Though no longer capitano generale for His Holiness, for which I am grateful, I am now servant to King Philip. Incidit in scyllam cupiens vitare charybdim. In return for soldiers and the funds to pay them I am expected to defend Spanish interests from Suleiman - or any others who might deign to attack His Majesty.'
'Apart from the Pope,' said Dee.
'Apart from the Pope,' conceded the Duke, grinning, as he marched away.
We were entrusted to the care of Commandino, the Duke's private physician. He was a sharp man, and Dee's ruse was brought to an abrupt end.
'You are not Cardan, that is certain,' he said when he met Dee. 'Though given the man's history I am not surprised he would send a surrogate. A pity. I was looking forward to picking his brain.'

Dee was not surprised at being discovered, or at least showed no concern. 'Dr Dee, at your service. And I assure you, my brain is yours for the picking if you are willing to return the favour.'

The two men bonded quickly, kindred in scholarship, which Commandino considered far more important than his duties as physician. When I sought his advice about my slow-mending leg he brushed away my complaints, suggesting I join the Duke's soldiers in training to regain my strength. Dee concurred, if only to busy me while he worked with his new friend, and I found myself in the company of boisterous guards by day and boastful scholars by night.
'All other knowledge could evaporate, and yet we could rebuild it from Euclid's writings,' Commandino would say as he and Dee translated manuscripts over cups of wine. 'Numbers. Numbers are everything.'
'Numbers aren't everything,' the captain of the guards would bark as we drilled in the yard. 'The greatest of barbarian hordes can be outmanoeuvred by a handful of trained soldiers. It is all about knowing how to break the opposing line.'
'The opposing line can never be broken, see?' explained Dee as he sketched in chalk on a wooden tablet. 'Euclid's last rule - a line can not cross its parallel no matter how far each is extended. A truth, obvious enough, yet like so many of life's mysteries it can be only believed, never proven.'
'Believe nothing without proof,' shouted the sergeant as we swung wooden swords at each other. 'An enemy's movements may be betrayed in many ways - tracks in the dirt, campfire smoke, the conspicuous shit of a military horse. Nothing happens without leaving a trace in the world.'

Days passed, then, sooner than I realised, months.
As the Tsar's soldiers had done in Muscovy, the guards at Urbino were too busy drinking and brawling to respond to my attempts at comradeship, but my strength was improving. I would train in their midst and retire each evening to my quarters, near Dee's, to lose myself in the books I could take from the Duke's library.

Time was the problem. According to the Abbot, an angel would appear if summoned with the correct incantation upon the correct date. But the Abbot had worked from dates in the calendars of the Caesars and the Jews, each of which had been reformed by men who did not know what men of my time did.
'It is hopeless,' I said to Dee and Commandino as we dined in Dee's room. ‘The stars have moved over countless reforms of the calendar, and still it does not align with the equinoxes. Thanks to the Jews and their Gemara we live in a universe six thousand years old, yet all of it made in the first week.'
'You are not the first to notice,' said Commandino abruptly. 'My predecessor, the former Duke's physician, was summoned to the Lateran council to contribute to the codex that His Holiness compiled on ways to reform the calendar.'
'And?’ asked Dee, expectantly.
Commandino shrugged. 'A Polish monk, Copernicus, advised him against it. He said until a year as defined by the Sun could be properly fixed, it was impossible.'
‘Consider,' said Dee, sliding his work to Commandino. 'The Hebrew Sefer ha-Temunah reveals that each "thousand years" is but one of the seven
cosmic sh'mitah cycles, seven thousand years each. Sefer Livnas ha-Sapir states that we are in the age of the sixth sh'mitah.'

Commandino frowned. 'Then the world is thirty-six-thousand years old?'
Dee shook his head. 'The ninetieth psalm - a thousand of your years are but as yesterday to Him.'
'Aha!' said Commandino. 'So for the Almighty each of the thirty-sixthousand "years" is maybe a little over three-hundred-and-sixty-five-thousand years.'
'Of course,' said Dee, clicking his fingers and scribbling on the table with a stylus. 'Thus the six days of creation for God were as to us... thirteen-thousandmillion years!'
'Day one,' continued Commandino, calculating. 'The void appears, more than thirteen-thousand-million years ago. Day two, the dark sky breaks into stars - ten or eleven-thousand-million years before now.'

Dee nodded, scrawling quickly as he did so. 'On the fourth, light that splits day from night, the Sun; that would be over four-and-a-half-thousandmillion years ago. Life in the sea on day five, and life on land around two-and-a-half-thousand-million years.'

Commandino put down his quill and pinched his nose, eyes clenched shut. 'And on the final hour of that sixth day, Adam ate from the Tree of Knowledge?'

Dee scrunched the precious papers into a ball, as though they were no more than leaves or kindling, and threw it hard across the room. 'Nonsense.'

He stormed from the room to stand out on the balcony. Commandino sighed and shrugged, muttering to himself as he stood to retire to bed. I took the ball of pages and unfurled them, flattening them carefully.
'Dee,' I said, stepping out on to the balcony. 'The sign - why have you drawn it amidst your work? Is this part of the rite?'
'What?' snapped Dee. He stared at the page. I pointed at the double cross that was scattered between his numbers.
'That is not the sign, Riven,' he sighed. He disappeared inside the room and returned with a book - The Whetstone of Whit, by Robert Recorde. 'It is shorthand. A stroke for subtraction, a cross for addition. Parallels denote two things are the same - crossed-through parallels say they are not. That is all.'

He saw the disappointment in my face, and placed a hand upon my shoulder.
'Riven, do not place too much faith in crosses. There are crosses everywhere. Signs simply mean what men wish them to mean.'
'That cannot be true,' I insisted.
'Really? And why do you worship the cross?' asked Dee.
'It was the instrument of Christ the Saviour's martyrdom,' I replied, automatically.
'Was it?' pressed Dee. 'Do we not know that the garrisons of Jerusalem executed their political prisoners upon a single pole? And that Constantine's cross was simply the initials of Christ, chi rho? Or how similar the Pagan cross of the Sun, the Egyptian Ankh of life, the Greek Caduceus of Hermes - all absorbed by the Christians of Rome?'

I knew it all to be true, but it troubled me.
'Then... then... then what does that mean?' I insisted. 'There are no coincidences - you keep saying so yourself. Look at the Keys of David and Solomon, crossed in silver and gold by Saint Peter, Bákocz's claim for the

Papacy, the budding Papal staff - everything points to Rome. What if Trithemius is trying to tell us that the keys to the Steganographia are in Rome?'

Dee realised what I was saying. 'You would have us go to Rome? After escaping Catholic cardinals, Catholic bishops, and Catholic soldiers, you would have us march into the lion's den?'
'Caesar did. Saint Peter did. So did Constantine,' I said. 'Would you rather die old and ignorant, or a martyr to the truth?'

I could see Dee's will weakening - a sight as rare as an eclipse of the sun.
'I would rather not die at all,' he replied.
'I too,' I admitted. 'And that is why we must answer the Abbot's riddle for immortality.'

Dee nodded.
'To Rome, then.'

## Chapter Fourteen - The Crossed Keys

The Pope casts coins three times
Into the people while saying: "We do not have gold
And you do not have shining silver for enjoyment
What there is, this with an eager
Hand he endeavors to distribute."
Cardinal Giacomo Gaetani Stefaneschi, Opus Metricum

I tried to map the strange journey that had brought me to Rome.
First sheltered then driven from the Church as a boy, I had sought adventure and received persecution for my sins. From the depths of madness an angelic vision - a budding emerald staff - had drawn me to the service of a man who sought the counsel of angels. A secret book had come to us by a false prophet, teaching the language of the highest angels who ruled over time by ordinance of the planets, the moon and the sun. All of history had been chronicled to the motion of these wanderers as they circled the earth. Now I had come to Rome; seat of the Church, where a staff had once blossomed, and the calendar been born.
'Eo Romam iterum crucifigi,' muttered Dee as we entered the Holy City.
Much had been rebuilt in the three dozen years since the imperial troops of Charles V, greedy for payment after defeating the French army, had stormed Rome and held Pope Clement VII for ransom. The current Pope, Pius IV, had worked hard to restore the city's to greatness; the mansions that spilled down the sides of Vatican Hill were grand and majestic. They also appeared to all be empty. The Council of Trent was in session once again, and the cardinals had left Rome en masse for the bishopric in the Alps.

Despite the vacant palaces the only rooms for rent were behind the gates of the ghetto in Sant'Angelo, where the air stank of fish and the walls were crumbling. No sooner had we settled in our damp quarters there was a great blast of trumpets, and from the window we saw a great procession gathering in the via outside. Drawn by our curiosity Dee and I decided to join them.
'Oy a broch!' cursed a woman at my side phlegmatically as we moved into the throng. 'Every year. Nim 'as li!'

She was fixing a yellow scarf around her neck. As the crowd began to march up the hill, I noticed all the women were wearing yellow scarves. The men were all placing yellow hats upon their heads.
'We should be observing Tisha B 'Av,' grumbled a man behind me.
The discontent in the crowd grew as we passed the campidoglio, onlookers now gathering to watch, and I gasped as a structure rose into view in the distance. It was a ruin, enormous, but a fragment of what it had been in Bruegel's painting. I clutched at Dee's sleeve and pointed.
‘The Tower of Babel!’ I cried.
Dee squinted. 'The Colosseum,' he corrected.
The procession stumbled into assembly on the eastern side of an ancient marble arch. It was sculpted with friezes that showed a group of Roman soldiers carrying a huge candlestick and two long tapered horns, carried to form a cross. As I stared at the image there was another blast of trumpets, and guards in striking blue and yellow uniforms and silver helmets with red combs cleared the streets to make way for a carriage.
'His Holiness, Pope Pius the Fourth,' called the herald, and from the carriage a man in white robes and a red cape emerged. He raised a hand over the crowd, and they knelt.
'Look behind you,' he ordered. 'You stand between the Arch of Constantine and the Arch of Titus. One stands forever to commemorate the victory of Christendom under the sign of the cross. The other serves as a reminder: that there is no merit to vanquishing a people forsaken by their own God.'

A rabbi came forth from the crowd carrying a heavy money purse. Turning to face them, he led the gathering in a pledge of allegiance to the Pope. The leader of the city governors then emerged from behind the line of guards, took the purse from the rabbi and then - face set sternly as though acting a civil duty - kicked him sharply in the buttocks.
'You may remain in Rome another year,' announced the Pope.
The crowd remained silent, waiting for him to leave before they could disperse.
'Constantine ordered tolerance,' shouted Dee. I felt the burn of a thousand pairs of eyes turn upon us, and the crowd began to part around us. 'Is this how the Church interprets the Edict of Milan?'
'Who said that? Come forward!' cried a familiar voice.
The demand came from a man in cardinal robes, struggling to remove himself from the Papal carriage. I recognised him as the man who had chased me in Milan, the Pope's nephew Borromeo.
'Sorcerers!' he cried when he saw me, pointing a ruby-ringed finger. 'Holiness, these are the sorcerers I told you of. How fitting that we should find them amongst the Jews, here in Rome. Guards!'

The men in the striped uniforms ran forward, pushing people out of the way.
'Do you ever tire of attracting unwanted attention?' I hissed at Dee.
'You wanted an audience with the Pope, you will have one,' he replied as the guards grabbed our arms, shoving back the crowd who now began shouting curses at the Papal entourage. 'Besides, never save your spittle when brutes are loosing theirs on the weak.'

We were escorted - by now a familiar sensation - beyond the walls of Vatican Hill, through the gardens to a small villa. It stood in the shadow of an enormous unfinished palace, which I realised with a turn in my gut was the famous Basilica of St Peter.

As a boy one of my duties had been to sell indulgences for the construction of the great church. To the sick or the grieving of Ludgate Hill I would go with my beggar's purse and a vision of a place I had never been, offering redemption from purgatory in return for coin. Now, as I looked up at the castle drum that towered over the old basilica, I wondered whether so many souls should not have bought more stone.
'The infamous Doctor Dee,' said the Pope as we entered the hall. He was sitting at a chequerboard table, like those I had seen in the house of Cardan, staring at an arrangement of carved figurines. 'I received word from the Low

Countries that Elizabeth's wizard was loose in Europe, seeking unholy books for his unholy mind.'
'You have been misinformed,' said Dee, unperturbed as the guards' halberd tips followed him across the marble floor. 'I have come seeking wisdom of the holiest kind. You have books here, confiscated by your cardinals; the keys to the voices of angels.'
'My nephew has told me all about your quest,' said the Pope, his fingers hovering over the figure of small obsidian horse. 'And I have no doubt you are convinced of its virtue. But you must understand, Dee, that words are more powerful than you or I could ever know. In the beginning was the word, and the word was with God, and the word was God. Now words are made by men, stamping them out on their iron presses. They transform the word of God into vulgar languages. It is the Church's duty to protect God's children from the words of men, that they might be led to the light by the word of God.'
'I agree,' said Dee. 'But it is not words which I seek. It is numbers. We learned of a manuscript, compiled by a man named Lilius. It concerns the reformation of the calendar.'
'Lilius and his numbers!' said the Pope. 'Worse than words are the numbers men use to reduce the majesty of God's kingdom. The Jews, they use numbers to grow money from money. Usury! The merchants do the same. Men have the world backwards when they seek a truth in numbers which they cannot find in the world they see.'

Pius stood to appraise Dee.
'I am a moderate man,' he said. 'But too many men claim divine providence in place of common fortune. My concern is the will of God.'
'Then why not test it against me?' said Dee.
'You mean, see if the executioner's axe bounces off your neck?' asked Borromeo.

Dee shook his head, casually. 'God does not manifest in such ways, you heretic. Should he will the condemned to live, he guides the minds of men to mercy.' He gestured at the table. 'This game, I am told, is impervious to common fortune.'
'Uncle,' snapped Borromeo angrily, 'do not indulge these men.'
'Hold, nephew,' said the Pope. 'Fortune, yes, but not skill. Even Christ's vicar falls to those who have devoted their lives to the study of the game. There are men here in Rome who are unmatched in the world.'
'Really?' said Dee. 'Surely God could intervene if he so wished. If I defeated one of your masters, would it not show you God's will was guiding my choices?'
'Perhaps. But I fear God would not trifle with such a matter as your desire to eat fruit from the Tree of Knowledge,' said the Pope.
'True,' said Borromeo, now grinning as he met his uncle's side before Dee, 'but suppose his life balanced the wager. If he could not win then would it not be heresy, his claim to divine providence? An offence punishable by death.'
'So be it,' said Dee, staring straight at Borromeo, and I was sure I had misheard him. 'Before His Holiness we agree - I defeat a master of chess tomorrow, I read Lilius's manuscript. I fail, I die.'

The Pope seemed uncertain. 'And how do we choose your opponent? There are several masters, each equally matched.'
'Then it matters not which one I defeat,' said Dee. 'I will play them all. Simultaneously.'

Borromeo raised his eyebrows. My mouth fell open.
‘Blindfolded,' added Dee.
'Are you insane?' I shouted over the rabble as Dee finished another cup of kosher wine. We had been offered accommodation in the Vatican palace, but Dee had refused. Instead we had returned under escort to the ghetto, where the gates had been locked for curfew but fasting had come to an end. The people of the Jewish community had brightened since the parade at the Arch of Titus, and back in our quarters Dee was being treated as a guest of honour after his display of defiance.
'They fear us,' said the rabbi with a shrug. 'It is illegal for a Jewish doctor to treat a Gentile, you know. After fifteen hundred years, can you believe these sorts of things still occur?'
'Things change,' said Dee as he poured another cup. 'You might win the lottery!'
'Ha!' snorted the rabbi. 'They forbid us from buying numbers above thirty, or more than ten apart - they think our Jew magic makes us luckier. Have they heard about our past?'

Dee burst into laughter. I did not share his good mood.
'Dee,' I insisted, 'you will not stand a chance playing Rome’s greatest chess masters - even if not blindfolded and all at once!'
'How hard can it be to play a game that the Persians invented?' said Dee dismissively.
'You mean you don't even know how to play?' I exclaimed.
He clicked his fingers. 'Good point. Rabbi, have you any books about the game of chess?

The rabbi raised his hands. 'Of course. Jews are skilled players.'
I was sent to the house of a neighbour to collect the books, as well as a board and pieces. By the time I returned there were more people, as well as two great loaves of bread, a bowl of dates, four jugs of wine and a strange stringed instrument that looked like a lyre. There were two empty flagons on the ground, and one next to Dee that was probably empty, because he was attempting to play the lyre when I entered the room.
'Ionnas Riven, drink kosher wine and read to us,' he sang, in what he must has thought was the same melody he was playing. He stopped and thrust a flagon into my free hand and watched me until I drank.
'The modern game is swifter,' I read as the revelry continued. 'Bishops now flank the royals...' - this caused him to catch his drink in his throat - '... and the Queen may be taken from any angle...' - which made him choke so hard he had to put down the lyre until he recovered.

I watched as Dee celebrated with the people of the ghetto, and lost game after game of chess against the rabbi. The more he played, the more we drank, and the more I suspected Dee really believed he was destined to survive. I would have to do something.

Sipping from the flagon, I began to think.

## Chapter Fifteen - The Chess Master

> Rabbi Judah said: Only in his generations was he a righteous man; had he flourished in the generations of Moses or Samuel, he would not have been called righteous: in the street of the totally blind, the one-eyed man is called clearsighted, and the infant is called a scholar.

Midrash Rabbah, Genesis (Noach) 30:9

Crows cawed and I awoke. It was well past sunrise.
I crawled from beneath a blanket on the floor, my joints crackling like breakfast bacon. I felt heavy, as though within a suit of armour, and it took some moments before realisation swelled into a fountain of panic inside me. Whatever plan I had concocted had been not preserved but dissolved in alcohol. The events of the night before were now crumbs and fragments scattered in the cruel sunlight that pierced holes in the curtains. Dee was inert on a bench. At first I was unsure if he was even breathing, but after some time, effort and, in the end, an upended pitcher of water, he suddenly sprang to life.
'Dee!' I cried. 'We have to leave at once - the guards will be here any moment.'

Within the thumping in my head I discerned a thumping upon the door downstairs.
'It seems that moment is upon us,' said Dee, his eyes still closed, as he felt inside his pockets. He withdrew a small silver flask, unscrewed the cap, and tilted it to his mouth. His eyes popped open, sharp and red. 'Come, Riven. Destiny awaits.'

The Swiss Guards escorted us from the gates of the ghetto to the Vatican. Instead of the Villa we were taken to the site of the half-finished basilica.

Foundations were being dug all around the great building. Within the enormous construction site the walls and pillars were bare. Four monolithic arches rose from the ground, crowned with a drum of pillars. Transepts extended from the four arches, forming a symmetrical cross. The apse, at the far end, was vaulted with a half-dome, scaffolds still standing against it. Dwarfed beneath the whole façade was a lesser structure, still some scores of feet high, of three arches. It was from this that Pope Pius IV emerged.
'Before you stands the tomb of Peter the Apostle,' he said as our escort bowed. I followed, instinctively, and was surprised to see Dee take a knee - until glancing up I realised he was prying a clod of clay free from his boot sole.
'Erected by Constantine,' said Dee, standing and nodding as he brushed his hands clean. 'Odd that a Pope would tear it down.'

At the centre of the floor, beneath the drum, a group of men was assembled. Borromeo was amongst them, of course. I sensed he would not miss this for anything.
'Providence smiles upon us, it seems,' he said, raising his hand to the gentlemen at his side. 'Four masters of chess are in Rome this very day. May I present Senor Paolo Boi...,
...an older gentleman stepped forward and bowed, his sharp fingers arched together..
‘...Giovanni Leonardo da Cutri...’
...a surprisingly young man, around my own age, boyishly handsome...
'...Padre Ruy Lopez de Segura...'
...a priest, wide-eyed, alert, fingers tapping at his sides..
'...and Padre Alfonso Ceron...'
...who squinted with a quiet, thoughtful expression.
Dee appraised his opponents.
'It has been many years since any of these men lost a game,' said Borromeo. 'Boi once bested Pope Paul III. Yet today Doctor Dee believes, by the will of God, that he will defeat one of you. We shall see.'

The boards were set at the four ends of the cross, with Dee seated upon a chair at the centre. He was over a hundred feet away from each opponent, with four acolytes ordered to run back and forth to dictate the moves. They would whisper in his ear and he would sit in contemplation, looking for all the world like a king upon his audience throne, a velvet sash tied fast across his eyes.

Nobody was allowed close to Dee, upon suspicion that he might have bribed assistants. Builders who had arrived for their day's work put down their tools and began to form crowds around Dee's opponents, and soon others gathered to join them. The masters did not seem to notice. They each stared at their boards, oblivious to the world beyond the chequered squares. Boi sat with his fingers arched, meeting at his chin, his eyes closed between moves. Leonardo licked his lips and bit them as he watched his polished pieces intently. Ceron would rub the tips of his fingers, blinking fast, and squinting. Lopez tilted his head slowly from left to right, stretching the muscles in his neck.

As concerned as I was at the progress of the games, there was one man in the crowd whom I could not stop watching. He was old, ancient, with skin like papyrus. His head was turned upwards and he was staring at the drum, muttering to himself.
'It will never be finished,' he said as I neared him.
'What won't? The church?' I asked, following his gaze. He turned and looked at me.
'Indeed,' he said. 'The Church. Forever halting progress for internal disputes. How do they expect to complete what they have begun when they can't keep their own workers motivated?'
'Are you the foreman?' I asked.
'The architect,' he said. 'Not that you'd know, for the patchwork design. The Pantheon's dome, on a market hall, all standing on a pagan cemetery? The perfect image of Peter's legacy - a melange of ancient outdated beliefs.'

He spoke as an old man: uncaring for the danger of his words. The Pope crossed the floor to meet him.
'Ah, Divino,' said His Holiness, and grasped the old man's hands warmly. 'You have come to witness the tournament.'
'I have come to demand an answer,' growled the architect. 'I hear rumours from Trent that there are more plans to censor my paintings.'
'Divino,' said the Pope, raising his hands defensively, 'you must know that your work is admired by all. Such passion. But we are charged to preserve the dignity of the Church's image. Passion must be treated with caution. The Protestants point to Rome as the spring of all abuse - we cannot risk our art arousing any desire in our flock but the desire to praise the Lord.'
'Desire?' said the man. 'Desire is no sin. By naming it such your flock shackles their desires in the darkness, where their neighbours will not see what evil might grow from them. Why is the body - of Adam and Christ - an icon of shame? Why forbid women from clergymen when they seek them in the brothels by night? Why execute the man who lies with his fellow man? Why do the
cardinals demand the Inquisition louder than any - so that whispers of their darkest, most shackled desires might be policed behind the doors of the Church instead of out in the streets by constabularies?'
'Please, Terribilita,' said Pius, raising his hands to quiet the man as the guards arrived to usher him away. 'You must not ask such questions.'

Before midday the first king fell. It was Dee's black, against Boi's white. An acolyte announced the Sicilian's win to a round of applause from the crowd. Boi rose and bowed to His Holiness, who raised two fingers and traced the sign of the cross in the air before him.

Dee called for food and wine. That he had lost was no surprise, but I was amazed he had lasted so long. Mere hours earlier he had been referring to the game as 'The-Queen-Goes-Mad-While-The-King-Hides-In-The-Corner', yet now he was competing with masters upon boards he could see only in his mind.

A maid was sent to bring food to Dee. He did not show any concern. With three games to concentrate on he seemed more relaxed, and the maid's giggles echoed around the bare stone walls as she tried to drop food into the blindfolded Dee's wicked little mouth. In the left transept Padre Lopez had been awaiting his opponent's move so long he had begun to talk to the people in the crowd around him.

Soon enough a second king fell. It was again one of Dee's, his white against the young Giovanni's black. The boy stood proudly and summoned his applause from the onlookers before bowing to His Holiness. Pope Pius was not watching him, however. He was looking to Dee, whose smile had dropped when the announcement was made and whose head was now hanging low.
'You lasted some time against these masters, Dee,' he said as he approached him. 'And that is indeed an astounding achievement. Yet I fear today you will become an example to all men who gamble their lives upon the ineffable will of God. The Protestants are tearing our Church apart under the claim that each of them knows God's will better than we do.'

Dee raised his head.
'Did you ever believe I could win?'
Pius shrugged. 'I believe all things are possible.'
'And what about your nephew?' Dee turned in his seat to face Borromeo through the blindfold. 'Did you believe?'

Borromeo strode forward. 'I believe that once secular men begin to delude themselves that they might know God's will, they have forfeited the gift of life given to them.'

Dee grinned. He raised his hands above his head and began to moan. Words crept into the wailing, fragments of Latin, Greek, Aramaic and others that I could not discern. All noise in the basilica faded as the crowd watched and listened. Finally he stopped.
'In that case, Cardinal,' he said, placing his fingers on his temples, 'my rook takes Lopez's bishop, my knight Ceron's pawn, and you will find both masters, Holiness, are - by the will of God - checkmated.'

Dee pulled the blindfold from his head and stood, stretching. He clicked his fingers, and the maid hurried to him with a cup of wine which he drank gratefully. Murmurs began around the two remaining boards. Lopez returned to his table and examined it, before upturning it suddenly in anger. Ceron simply stared at his pieces, shaking his head in disbelief. Two acolytes came running to
the Pope, and as they confirmed the outcome he turned to face Dee in astonishment. Raising two fingers, he traced the sign of the cross.

A cheer arose from the crowd, from all except the builders, who knew their distraction had ended.
'You bribed the Spaniards,' I said as I watched Dee read.
He laughed as he flicked through the pages of the codex, making notes in a book beside him. 'All of those men were financed by the Vatican treasury, Riven. A greater miracle would have been raising a bribe large enough to tempt them.'

I moved behind him to read over his shoulder. To the outrage of his nephew, the Pope had conceded Dee's victory and invited us to study Lilius' manuscript in the Villa.
'Then you bribed the acolytes,' I said.
'Any of whom, you presume, could best the chess champions of Europe?' he replied as he handed me pages to sort over his shoulder.

As my mind burned, trying to unravel the events I had witnessed, a guard arrived ahead of Pope Pius.
'Doctor Dee,' he said, and motioned for the guard to leave. 'I hope you will forgive my hesitation today. It is a rare thing in this age to bear witness to a miracle, but as one who prays often for a sign of God's will, I find it most reassuring.'
'Holiness,' said Dee, standing and bowing. 'I am pleased you are a man who chooses to believe what he sees with his own eyes, rather than what is whispered into his ears.'
'Ah, Borromeo, yes,' said the Pope, a smile creasing his face. 'He has passion.'
'And passion must be treated with caution,' I said.
The Pope nodded at me. 'An astute young man, your disciple. It is no wonder God has chosen you for this journey, whatever it may be. But I wonder if you would consider a favour for this humble servant of Christ.'

Dee glanced at me, then back at the Pope.
'King Maximilian,' he continued, 'son of Emperor Ferdinand, is shortly to be crowned King of Hungary. It will likely be the last coronation before he accedes to the Imperial throne. I was to send Borromeo as ambassador to the proceedings, but after today I fear my nephew might not go with God's blessing. Besides, a sudden financial crisis seems likely to detain him. Hungary is rent in twain between those loyal to the Holy Roman Emperor and those loyal to Zápolya, vassal king of Suleiman, who contests the Habsburg claim to the throne. It is imperative that the Hungarians support Maximilian's right to rule,' said the Pope.
'And you think we will be able to make them?' asked Dee.
'After today, I think you might,' replied the Pope.
He was about to leave, but I wanted to know. 'What was your Borromeo's crisis?'
'Ah, it seems my nephew saw fit to accept odds from the Sant'Angelo quarter against your master's wins. One ducat paid ten thousand, apparently. The only ones fool enough to take the offer were the Jews in the ghetto there. Around a thousand of them.'

He closed the door behind him, and I looked at Dee. He looked back innocently.

## Chapter Sixteen - The Secret Writing


#### Abstract

Ego autem metuens, tam mirabile opus propter nimiam obscuritatem vilipendi ab imperitis, aut tandem igni cremari: cuin eo multis probationibus iam diu sim expertus: ita illud literis commendare apertioribus volui, vt \& viris eruditis ac in magicis studiosissimis, cum Dei auxilio, possit aliquatenus fieri peruium: \& tamen imperitis Rapophagis omni tempore maneat occultatum, \& nullatenus eorum obtuso intellectui cognitum.


This I did that to men of learning and men deeply engaged in the study of magic, it might, by the Grace of God, be in some degree intelligible, while on the other hand, to the thick-skinned turnip-eaters it might for all time remain a hidden secret, and be to their dull intellects a sealed book forever.

Trithemius, Steganographia, Book III

We arrived in Vienna at the end of summer.
The Lilius codex had a strange effect on Dee. It contained mathematics and astronomy stretching back through history, collated from every corner of Europe. It had been from the Egyptians that Caesar had learned of a calendar determined by the sun, instead of the moon. By combining this with the ancient Roman system the Julian calendar was formed, with 365 days to a year plus one every fourth. For some years now the Church had been concerned that the calendar was corrupt, as the date of the vernal equinox no longer aligned with the anniversary of the crucifixion as determined by Constantine.

More interesting to me was that the anniversary of the crucifixion was aligned with the Jewish pesach feast: the anniversary of Moses summoning the angel of death upon the first-born of Egypt, and blacking out the sun. It was the sun that Dee was concerned with. Trithemius' works listed the planets in their order from the Earth as described by Ptolemy. The Lilius codex contained other models that described the movement of the lights in the sky. One, by the Polish
monk Copernicus, mapped the orbits of the planets around the Sun instead of the Earth. The Earth was relegated to the third of six concentric circles, orbited only by the Moon.

It was a novel description, predicting the same paths of the planets as any other, but Dee was fascinated by it. As an astrologer he had spent his life tracing the movement of the planets as they circled the Earth in a search for some glimpse of meaning in the future.
'If it were true it might not be so beautiful as we imagined,' said Dee, staring at the sketches as though staring at the sky itself. 'But it would be true.'

The imperial procession was gathering when we arrived in Vienna. We had rested our horses well the night before, and we walked them the remainder of the journey to ensure they were ready to leave if the moment called. Thousands of militia were being ordered into formation in the streets and cannons were wheeled past us as we made our way to the Hofburg Palace. If Suleiman planned to attack the imperial entourage, he would be met with opposition.

Upon presentation of a letter that His Holiness had provided we were ushered by a page to the courtyard of the Emperor's home. Noblemen were saddled, wearing their finest regalia, conversing with each other as they waited for the march to begin.
'A fine horse, Your Highness,' said Dee, approaching the king as he checked his livery. 'I once owned one like it.'
'Doctor Dee, isn't it?' said Maximilian as he dusted his hands. 'An Englishman. You are a most unusual guest to be delivered from His Holiness, but if you are to replace his nephew in my retinue then you are a most welcome one.'

When the king caught sight of me over Dee's shoulder his brow creased.
'You! I recognise you,' he said, moving around to get a better look at me. 'The sorcerer who flew from the rooftop in Milan. Father!'

Behind the king a tall elderly gentleman strode in a huge fur coat, despite the heat. Even beneath his thick beard I noticed his jaw protruded below his face like a drawer left open. Dee bowed, as did I, before Ferdinand I, the Holy Roman Emperor.
'Father, this is the boy I told you of,' said Maximilian with a grin on his face. 'Dropped like a cannonball, and yet here he stands. He must have guardian angels watching over him. You should have seen the look on Borromeo's face, the fool.'
'Maximilian,' said the Emperor to his son as he looked me over. 'You are a defender of the cross, yet you surround yourself with heretics and curse the cardinals. What do you imagine the archbishop will make of it?'
'Where is your horse, father?' asked the King dismissively.
'I shall not be riding with you,' said the Emperor as an ornate carriage pulled into the square. The door was opened by a footman and he climbed inside. 'I will take the river and meet you in Pressburg. Do not be so taken by your jesters that you lose sight of the road to Hungary, son.'

I had never imagined that kings could wish for the approval of their parents. Now as I watched Maximilian see his father leave the courtyard without him it occurred to me that all leaders of men were boys themselves once.
'He will not have me under his roof, he will not ride alongside me,' said the King as he hoisted himself unaided on to his horse. We mounted ours also,
and took pace. 'All because I would have men of different minds build bridges where he would have them dig moats.'

The parade began to the sound of trumpets and gunfire. Nobles fell into line behind, followed by the decorated carriages that carried the women of the royal family. Soldiers and archers flanked the procession, and I noticed they would keep watch in every direction.
'Hungary was once united under the allies of the first Maximilian, my great-grandfather,' said the King as Dee scanned the horizon. 'He was the last of the great knights. But, perhaps due to his love of learning, some suspected his loyalty to Rome. When Bákocz, the Archbishop of Esztergom, failed to have himself elected Pope he returned to Hungary with a plan to beat the Emperor to starting a long-awaited final crusade against the Ottomans. The fool had a Transylvanian general raise an army of peasants, but rather than march a thousand miles to fight the Turks they instead turned upon the ungrateful nobility. Suleiman wasted no time - in return for their vassalage he armed the Princes of Transylvania against Bákocz's general and took the south, killing the king in battle and leaving my father's crown contested by the Transylvanian pretender.'

I learned much of the history of the eastern empire on the road to Hainburg, where we would stay the night. Excellent food was served, fit for a king; scented meats and fruits, bread and olive oil, many kinds of wine and beer and afterwards a dish of fresh ice flavoured with honey and juices. We slept in beds at a house shared by a group of Viennese noblemen, and rose early the next morning to continue the procession.

When the sun was high overhead we saw riders approaching in the distance. It was the Hungarian cavalry riding out to meet the royal retinue. Leading the cavalry was the archbishop, a man named Olahus.
'I apologise that our lords could not be here to greet you,' he said, 'but they are leading their men in defence of our borders from Suleiman's armies as we speak.'
'As I expected,' replied Maximilian.
'Where is your father?' asked the archbishop, looking around. 'I was looking forward to seeing him after so long.'
‘Ill, I am afraid,' said Maximilian, clearing his throat. 'He shall join us in Pressburg tomorrow. At his age a soldier's journey is disagreeable.'

By late afternoon we were crossing the Danube, beneath the royal flags that hung above the bridge's archways. Cannons fired, making me jump in my saddle and clap my hands to my ears. The trumpets blared again, and the people of Pressburg emerged from their houses and peered from their windows to squint through the thick clouds of gunpowder smoke at the parade.

Olahus offered the king residence at his palace and Dee arranged for us to stay there also. I sat amidst noblemen and feasted once more upon foods that I could never have imagined in my days as a seminarian. That night I dreamt that I was a prince wrapped in furs, medals hanging around my neck. In the dream I knelt in a church, confessing for the first time in years; when I raised my head I found the statues of saints and angels that surrounded me were staring and pointing at me accusingly.

Over the following days the King was detained in meetings with the nobility, presiding over the affairs of the Hungarian estates. I hobbled through the
streets of Pressburg, watching the festivities, the games and performances. When my leg began to ache beneath the scars I would retire to my chambers to rest, and would journey through the books instead.

For the first time I turned to the Hebrew texts that had been banned by the Vatican. The Jewish form of mysticism was known as kabbalah. It contained four approaches to understanding the Torah, like Dante's four compass points of meaning. There was the simple meaning of the words, the allegorical, the comparison to other texts and the hidden.

To find the hidden meanings of words there was a process known as gematria. Letters or whole words were replaced by numbers, and through the magic of mathematics the numbers would change; when transformed back into letters, new meanings would appear. Or there was temurah, a method of transforming letters themselves based on their place in the alphabet: albam replaced each one with that twelve places ahead of it; avgad swapped each with the one preceding it; and atbash turned every letter into its mirror inverse in the alphabetical order. I thought of Cardan, a man obsessed with seeing meanings where others did not. He had said that it was only when one started to count all things was one able to see the patterns.

In the Steganographia there were various tables of numbers, interspersed with symbols, to be used in the astronomical calculations. The first was for when Saturn was in the ascendant. I began to count, and noticed that there was always forty numbers between each symbol in the table. The first list began with 644 , the second with 669 , the third 694 , and so on, increasing by 25 each time. The second number in each list similarly increased by 25 , as did the third and so on all the
way through to the fortieth. No group contained two numbers more than 25 numbers apart.

Dee must have had the same idea as far back as our meeting with Gesner in Zurich. Amongst our papers I found lists, endless lists: tables of every date mentioned in the Steganographia, and everything that had happened on those days; every name of an angel or place and their comparative appearance in the bible or other books; every word the Abbot wrote in alphabetical order, with the number of times they appeared in each book. He had even counted every single letter, meticulously recording the number of times they occurred.

I imagined Cardan placing bets on the appearance of a letter, calculating the odds by dividing each count against the total. It was not random, I noticed. Some letters were more likely than others. Curious, I counted the appearance of each number in each list of the Abbot's tables, dividing each count against the total number of numbers. This was not random either. In fact, each sequence of 25 numbers corresponded to a frequency table that was the mirror inverse of the frequency of the 25 letters in the rest of the Abbot's text.

By my fifth morning in Pressburg I had constructed my own code, where each sequence of 25 numbers was replaced by the mirror inverse of the alphabet. It was madness, I knew. Like the astrologers who conjured models of numbers to predict the motion of the planets I had plucked a pattern of numbers, formed only by hopeless counting, to find some order in a work of mystery.

Nevertheless, when Dee arrived after breakfast to inform me that the King was ready for coronation, I realised I had done it.

# Chapter Seventeen - The Order of the Dragon 

Annus secundum Aegyptios indicabatur ante inventas litteras picto dracone caudam suam mordent, quia in se recurrit

According to the Egyptians, before the invention of the alphabet the year was symbolized by a picture: a serpent biting its own tail, because it recurs on itself.

Servius, Commentary on Virgil's Aeneid

All my life I had been ordered to be silent in church, when all I wanted to do was speak.

I tucked the Steganographia under my cloak as we joined the solemn procession into St Martin's, but every time I tried to whisper to Dee he would raise a finger to his lips. The noblemen and princes exchanged looks and nods of silent reverence as we rocked in line to the sound of gentle music and a thousand pairs of shuffling boots.

When the church was full the bishops entered, leading King Maximilian, adorned in ancient robes, to the altar. Carried behind the banners of the lands of the east were the orb, the sceptre and the holy crown. The Eucharistic blessings were read, and Maximilian watched sternly as only the bishops consumed the wine.
'Dee,' I hissed and tugged at his sleeve. 'Look.'
As stern looks fell upon us Dee glanced over at my notes dismissively.
'Ga...zaffre... quen ... slibby... nonsense,' he whispered, squinting. 'Very Paracelsian - gibberish begetting gibberish. Your handwriting is terrible, by the way.'
‘Gaza frequens Libycos duxit Karthago triumphos,’ I corrected him, impatiently.

Upon the altar the blessings had begun. As Olahus stood before the King, recounting the duties of the monarch, Dee snatched the notes from my hands and stared in complete astonishment.
‘Crowded with treasure, Libya was led by Carthage in triumph,’ read Dee. He was shushed by a man standing behind us. 'Yes. Yes, the only true rival of Rome. Carthage, capital of ancient Libya, gateway to the mountains of Atlas.'

Olahus anointed the King with oil and girded him with the sword. Maximilian then drew it from its sheath and raised it to the four winds. The archbishop took the orb and the sceptre and, blessing them, handing them to the King.

Dee stared at the words on the page, for the first time entangled in his own thoughts. 'What does it mean, Riven?'

It was the moment I had been dreading. There was no other way to say it. 'I don't think it means anything. It is cursive practice.'
‘What?' replied Dee.
'We used to write it at the seminary to practice our cursive. Well, the other boys did. It uses every Latin letter, see? It's clever. But meaningless.'

Olahus now raised the crown of St Stephen in two hands above the head of the kneeling king, crying out for the first of three times, 'Do you, the people of the lands of Hungary, accept this man to be your King?'
'Yes,' responded the crowd, though without much enthusiasm.
'But... but... perhaps that means something?' whispered Dee.
'I checked the other tables,' I replied. '"Trust not he who bears this message", "Have mercy on me God". I think they are just psalms and phrases to demonstrate a code.'
'Do you, the people of the lands of Hungary, accept this man to be your King?'
'Yes,' murmured the congregation.
'I am sorry, Dee,' I said. 'Could it be that it is just a book, no different to any other?'
'Do you, the people of the lands of Hungary, accept this man to be your King?'
'No!' shouted Dee.
There was a rumble of uncertainty throughout the cathedral. The archbishop looked stunned, and the guards that lined the walls craned their necks to find the source of the exclamation. Maximilian glanced over his shoulder as the Emperor rose from his throne behind the altar, his face red with rage. Another voice cried out from across the floor.
'No!'
More voices joined the chorus of dissent.
'No! No! No!'

Dee was oblivious to the outcries. He was staring at the page. I had not imagined what effect the revelation would have on him - to consider a work in which he had placed so much faith to be nothing more than an obsolete codebook. In his eyes was an empty look, as though unable to see what was in front of them.
'Why should we bow to another Habsburg?' shouted a voice. 'They failed us before and they will fail us again!'
'Dee,' I whispered as the murmurs grew into ovation. 'Dee, we must do something! His Holiness said this would happen!'

The Emperor stood upon the altar, demanding silence.
'Dee!' I snapped. At last he looked up. Without hesitation he pushed forward through the crowd, fighting his way towards the altar. The guards saw him approaching and moved to apprehend him, but Maximilian motioned for them to hold.
'Hungary will follow no Habsburg King,' shouted Dee, and raised his hands to quiet the crowd before continuing, 'that does not drink the blood of Christ!'

He took the chalice from the altar and held it above his head.
'Not because it unifies us, but because it separates us. Abraham, Moses, Solomon; all men made sacrifices to the gods. Flesh was consumed and the blood spilled upon the altars to atone for sin. But Christ was the last sacrificial lamb. Eating flesh was the old tradition; revolution was to drink the blood. We combine it with water, for it was blood and water that issued from the lance-wound of Christ. Jews, Muslims, they fear us for it. But Moses himself predicted that God would seal his covenant with blood.'

Dee held the chalice out to Maximilian, who looked from the awaiting congregation to his father, to the archbishop, then back to Dee. He took the cup, raised it to his lips and drank, and the people cheered.
'Now,' cried Dee. 'Do you the people of the lands of Hungary accept this man to be your King?'
'Yes!' they cried out in exaltation.
And so did I.

The ceremony concluded with a triumphant procession, and Dee marched beside the King like his major-domo. The archbishops retired to their conclave to debate the precedent that the new monarch had set, and that afternoon the royal entourage attended the first of the coronation tournaments outside the city.

Dee arranged for me to sit amongst the Transylvanian nobles on the wooden castle that had been erected as a viewing platform, overlooking the playing field. To my right were the Báthory princes and princesses, including a little girl more interested in biting the shins of spectators than in the tournament itself. To my left were the Rákóczy nobles. One of them, a man sitting next to me, wore a medal of a serpent eating its own tail beneath a double cross.
'That symbol,' I said to him. 'What does it mean?'
'The Order of the Dragon,' he replied. 'Legacy of Sigismund of Luxembourg, the last emperor before these useless Habsburgs to defend the true cross - Constantine's cross. The dragon is in honour of a Roman tribune, George, who slew a Libyan serpent with the lance of the Praetorian emperors.'

I leaned in closer. 'This lance, what happened to it?'
The man shrugged. 'Legend has it that on his way back to Nicomedia the tribune bequeathed it to Maurice, leader of the Theban legion, who had been ordered to defeat a monstrous uprising in Gaul. He won, of course, but was executed by his own heretical emperor, Maximian.'
'Father of Maxentius, both defeated by Constantine,' I concluded.
'By the power of the true cross,' repeated the man, before turning back to his conversation.

The coronation tournaments re-enacted battles from the history of the kingdom. Men were dressed in the armour of the many armies that had marched across the land over the bloodstained years. Hunyadi defeated the Turks at Belgrade; his son Corvinus crushed them at Szászváros. Vlad Dracula, Knight of the Order of the Dragon, smashed the Danube ports and bathed in the blood of his victims. Sigismund fought the Hussite heretics in Bohemia.

When the Battle of Mohács began the crowd became enraged. The men in Turkish armour marched on to the field, outnumbering the Hungarians three to one, ready to take the south in the name of the hated Suleiman.
'Listen to them,' said Rákóczy grimly. 'History itself will condemn the Habsburgs.'

I watched as the crowd began to jeer and shout. In the royal box the King sat in humiliation, watching the fall of his family's once-great empire. Dee sat nearby. He was staring at me strangely, doing nothing. I stood and cupped my hands to my mouth.
'Your Majesty!' I shouted, and pointed to the field. 'Your Majesty! The Turks are invading! Do something!'

Maximilian stared at me in confusion. Beside him his brothers Charles and Ferdinand, the Archdukes of Austria, stood and drew their swords.
'Well, brother?' said Charles. 'Will you stand by and let Suleiman take Hungary?'

A look of realisation came over the King, and he leapt from his throne. Followed by his brothers, he vaulted the rookery and slid down the ladder at the front of the platform. Drawing his own sword he took to the field and ran towards the army of Turkish soldiers, who began to look at each other in uncertainty. The
crowd watched, astonished, then slowly began to cheer as the Emperor's three sons cried out in fury, swinging their swords at the terrified men for whom the battle had only been a performance. Now they were falling over themselves as they tried to get out of the way of the charging royalty.

The bench beneath me began to shake, and I saw that more spectators had gathered and were climbing the scaffolding to get a better view. On the field those Turks that had not thought to flee or play dead were being struck around the head and back by the Habsburgs' swords. With every strike there was a tremendous roar from the crowd who were now standing with their hands raised above their heads.

Even the Transylvanians, whom I now suspected were the supporters of Dee's unintended rebellion at the coronation, were standing and chanting with the rest. Only Dee remained seated. I could see flickers of his eyes through the crowd, still watching me.

The bench shook again, but this time it felt wrong. Straining wood groaned beneath the stomping feet, and the planks began to splinter. A portion of the platform fell through, taking a number of people with it, and there was a series of noises like thunderclaps. The cheering turned to screams as the structure started to collapse and smoke rose from below. As I struggled to pull men and women back from the imploding scaffolding I could see red flames licking at piles of fireworks that had been stored underneath.
‘Get down! Get down!' I shouted. Sleeves and hands slipped through my fingers as I tried desperately to keep those around me from falling, but when I felt myself starting to slip I struggled only to save myself. I tumbled towards the rookery and jumped, falling too far and landing heavily on the field. My weak leg
buckled beneath me and I rolled away from the stand as it crashed into a rupturing ruin of burning wood and flesh.

Men, women and children crawled and ran in chaos as both performers and real soldiers rushed to drag the survivors from the still burning and bursting rubble. The royals were rushed to safety. As I limped away I saw Dee through the smoke, standing, staring.

When I returned to Olahus' palace I found we had been removed from our quarters. The bishops had declared the incident a punishment from God for the sacrilege of the wine. The dissenting princes suspected the Habsburgs of an assassination attempt. I gathered our things and took them up the hill to the castle, where Dee was attending dinner with the King.

The tragedy at the tournament had already been forgotten, and the Habsburgs were recounting their mock victory over the Turks to the women who had not been in attendance. When I entered the banquet hall Maximilian raised his cup to me and cheered.
'Here he is! The sorcerer's apprentice, herald of our triumph!'
The diners thumped their fists upon the table and I was shown to a setting where wine was poured for me.
'Let the boy be an example - the Habsburgs will re-write history in Hungary.'

Dee sat opposite me.
'Rescued from the flames again,' he said.
'Fortune favours this one,' said the King cheerfully.
'Others were not so lucky,' I said gravely. 'They were pulling bodies from the wreckage. The hospital is full.'
'It was as though the world itself was falling,' said the Emperor, his face grim.
'Fiat iustita, et pereat mundus,' said Dee, raising his cup. The Emperor nodded and raised his own, and the toast was repeated by all at the table.
'Your turn,' said Maximilian, pointing at me, 'a toast, Little Faustus.'
My mind was blank. I searched for phrases and platitudes, but nothing was inspired by the tragedy and triumph I had witnessed that day. 'Gaza frequens Libycos duxit Karthago triumphos,' I said at last, staring at Dee.

The King's expression changed from anticipation, to a frown of confusion, to a look of astonishment. Then he a smile spread slowly across his face.
'Yes. Yes! My word, what a clever young mind,' he said, raising his cup. 'A most fitting toast! Gaza frequens Libycos duxit Karthago triumphos!'

## Chapter Eighteen - The Branch of the Tree


#### Abstract

There is no abbey so poor as not to have a specimen. In some places there are large fragments, as at the Holy Chapel in Paris, at Poitiers, and at Rome, where a good-sized crucifix is said to have been made of it. In brief, if all the pieces that could be found were collected together, they would make a big ship-load. Yet the Gospel testifies that a single man was able to carry it.


Calvin, Traité Des Reliques

Neither Dee nor the Habsburgs seemed surprised by the day's events.
The royals turned to the preparations for the following day's coronation of the queen, but Dee... Dee was a man who revealed no motive until the game was won, when all seemed intended. I had followed him because he had seemed so certain. Either he had foreseen the accident and done nothing or he had been powerless to prevent it. Neither inspired me to follow him any further.

Before dawn I slipped down to the docks to seek out the first ship leaving for the west. For the first time I felt the tug of England, my home, and the longing for familiar surroundings. A cargo river ship was passing through en route to Vienna - under-crewed, with space enough to hide. Its captain was a nervous, impatient man, and he had docked next to the imperial ships only for inspection by the guards. An argument had ensued, and bribes were negotiated. In the dim predawn light I waited until their backs were turned and climbed the mooring line on to the deck, ducking behind a stack of crates just as the lines were cast off.

From the stern I saw the silhouette of Pressburg shrink into the sunrise and thought about my future. Following Dee, following the book, had given me a purpose; but I had been following maps written by blind old men. It was time to write my own. I imagined the maps I had seen as a boy. Lord Cecil would surely
pardon me in return for what I had learned of Dee. The Muscovy Company's doors were closed to me, of course, but there were other merchants looking to sail. They would need navigators, men who knew mathematics.

I made my way to the cargo hold and dropped through the hatchway.
'Riven?' whispered Dee as I landed beside him.
I nearly died from the fright, but caught a cry in my throat. He was reclining on a pile of rugs, and watched me with a stare in which I saw no condemnation, but neither any guilt.
'Here you are, then,' he said.
'You knew I was leaving?'
'Of course,' he said, pulling a piece of fluff from his coat.
'But you sneaked on the ship before me,' I pointed out.
'It was inevitable you would leave. The journeyman does not remain where there is nothing more to learn.'
'Did you know the platform would collapse when you sat me there?'
'Are you Lord Cecil's spy?'
I did not answer. Dee shrugged.
'It seems some secrets are not meant to be shared. Fate's motive, by contrast, is clear: to thrust us together once more. The summer is ended, as is my stipend, but in Frankfurt the printing fair will be shortly underway. There from all corners of Europe books will be traded; an arsenal of the mind on display for all who care to equip themselves. You may go where you wish - it seems our company has ended - but that is where I shall be.'

I had wanted to separate myself from Dee, and now I was stuck below deck with him. There were several compartments in the hold, and as I climbed
through them to find somewhere to hide I became aware of a number of strange smells. The cargo was mostly sacks of grain, but there were odours peering through the curtains of mustiness. Out of curiosity I untied the top of a sack and reached inside, my fingers sliding past the granules until they touched another sack beneath the surface.

It contained hard brown beans that smelled bitter and rich. Another sack contained a red spice, another yellow spice. In another was a sack of powdery black pebbles, and sitting atop them was a sleep-bringer bulb.
'Dee!' I hissed, and climbed back towards him.
'There is no need to apologise,' he said, his eyes closed as he dozed on the rugs.
'Dee, this is a smuggling ship!' I whispered.
He opened his eyes.
'Excellent,' he said. He inspected the goods I had found, and raised his hands, saying, 'Manna from heaven. When next we dock, take what you can and flee.'

From his coat Dee produced a spirit flask, into which he poured as much of the black powder as would dissolve. He swirled it and drank, before offering it to me. I did not want his generosity, but my leg was aching and I remembered the effect the sleep-bringer had had in Padua. I took the flask and drank deeply.
'Here,' said Dee, taking a handful of the black beans and chewing on them. 'Chaube. They make a Turkish potion with them - a sort of sleep-taker.'

They tasted utterly bitter, and I blanched as I chewed them, but I kept from spitting them out and swallowed. As the smugglers' ship rocked upon the Danube I felt the pain leave me. My mind felt sharp.

I don't know how soon we passed through Vienna, but the smugglers travelled fast, passing Linz in less than two days. They did not stop, wishing to avoid inspection, and Dee and I were forced to remain below deck eating handfuls of grain to stave off hunger, chaube for sleep and sleep-bringer powder for boredom.
'In Pressburg I spoke with a chief rabbi from Prague,' said Dee as we lay upon rugs, euphorically immobilised. 'An expert in kabbalah. He told me that the power of life and death was known by men at the dawn of time.'
'Eden,' I said, 'the Tree of Life. But Adam forfeited it when he ate from the Tree of Knowledge.'
'Did he?' asked Dee, sitting up. 'The Midrash legends say that Adam took a branch of the Tree of Knowledge, which became his staff. It passed down through the patriarchs: Seth, Jared, Enoch, Methuselah, Noah, Terah, Abraham, Isaac, Jacob, Joseph. Jethro planted it in his garden, where it stuck, like Excalibur, until Moses plucked it. He raised a serpent on it and used it to heal men...'
'Like the Greek stories of the healer Asclepius,' I said, a chain linking in my buzzing mind. 'Son of Apollo, both of whom held snake-entwined staffs.'
'Or Ningishzida, Lord of the Good Tree, for the Sumerians,' said Dee, pointing with each hand towards kingdoms far beyond the cargo hold walls, 'Or Wadjet, for the Egyptians.'
'Moses and Aaron performed miracles with the staff to defeat the Egyptians,' I said, my chewing quickening with the revelations, 'and for Aaron it blossomed to signify his right to rule! They sealed it in the Ark of the Covenant!'
'Which Joshua took when Moses died,' said Dee, now standing and moving his fingers in the air as he paced the planks, like he was unravelling invisible threads. 'When the Philistines stole it, Samuel the prophet rallied an army to defeat them, crowning Saul as the first king. He was betrayed to the Philistines by David, who claimed his throne and the Ark, bestowing it to Solomon who housed it in his temple.'
'And when the temple fell to Babylon the Ark disappeared,' I said, defeated.
'But the temple was rebuilt, by the Persians,' said Dee, tapping his chin. 'Daniel the prophet foresaw that a greater conqueror would rise: Aristotle's student from Macedon, Alexander the Great. His general Ptolemy - patron and student of Euclid - was given rule of Egypt, and built a library at Alexandria to house the relics and texts of the empire. The first librarian was Apollonius, who, we know, recorded the story of the Golden Fleece.'
'And the library burned when Julius Caesar attacked the eighth Ptolemy,' I said, again defeated.
'But,' said Dee, holding up a finger, 'his relic-keeper was Cydas, a spearman from Hermopolis. He saved the staff by hiding it amidst his spears at the temple of Thoth in his hometown, where it remained until the priest Aphrodisius delivered it to a Galilean carpenter who claimed that he and his child bride were rightful heirs of the House of David.'

It struck me like a bolt of lightning. 'Joseph? The father of Jesus?'
'Yes!' cried Dee excitedly, grabbing my shoulders. 'The Gospel of James says that Joseph's staff blossomed to signify he would father the son of God!'
'So the lance and the staff could be one and the same - the keys of David and Solomon combined,' I said.
'Yes! Yes!' cried Dee, clutching me by my shoulders and shaking me hard. 'For what is a key but that which opens and reveals the truth - like the lance that enters the body of a mortal man and brings forth the blood and water of immortality!’
'Dee,' I said seriously. 'I think my mind is bursting.'
Dee cocked his head to the side and frowned. 'No, I can hear that too...'
We were thrown from our feet as the ship suddenly lurched. Now I realised the heavy thumping I could hear was coming from outside the hold.
'Are we under atta-' I began, as a bullet blasted a hole in the wood near my ear.

Dee ran to the hatch, raising it just enough to peek out.
'Imperial guards,' he said. 'I fear as stowaways we may share the captain's fate.'

Gunshots sounded above deck. Beneath the haze of the sleep-bringer I felt an anger rise inside me. Dee did not look worried. He never looked worried. Death followed him everywhere, yet he blazed through life as though angels truly did watch over him. As I stared at his cold, calculating face I felt my own flush red and my fists clench.

The punch caught him by surprise, and he staggered backward, tripping over a rug. Infuriatingly, though, his expression remained calm as he raised his fingers to touch the welt the blow had left. Then he grinned, wolfishly.
'Brilliant!' he snarled, and rising to his feet he swung a fist at my face. Dee was small in frame, but he summoned enough force to knock me down

Blood filled my eyes, and I realised my nose was broken, but whatever pain I should have felt was a drop in the ocean of sleep-bringer we had consumed.

When I stood I saw Dee was ripping the rope from the sacks. He grabbed my wrists and wrapped them tightly together, before doing the same to his own. In moments the hatch to the hold was flung open and two men dropped below deck, pistols in their hands.
'Help!' shouted Dee, raising his bound hands. 'God be praised! We are saved!'

When the guards helped us to shore we learned we were on Altmuhl river, less than a day's march from Nuremberg. The smugglers had not survived the skirmish, so Dee claimed they had robbed us and intended to keep us as hostages. The contraband was to be taken to the city, where we were told we could recover at the hospital.

If I spoke on the journey to Nuremberg, I was not coherent. My skin had begun to turn cold and wet. Inside my stomach a serpent was writhing.

Indecipherable voices chattered in my ear, affording me no rest, no counsel. Pain started to return to my body, slowly at first, then in unbearable floods. I begged for the sleep-bringer, but it was refused.

By the time we reached the Hospital of the Holy Spirit I was raving like a lunatic. My wounds were treated as best as possible, and I was confined to a wing reserved for the possessed and maniacal. The other inmates were a sad, strange collection. There were men with sunken eyes and wormlike tongues that would wriggle out of their mouths if they did not keep them in check. There were women who would hoist their skirts around their hips and kick their legs high,
forcing the men to turn away. There we were forgotten by all, except when a patient escaped to climb the balconies of the church or give chase to the nuns.

I clawed at the walls, babbling stories woven from the threads of Egypt, Assyria, Babylon, Greece and Rome. I would grab at the rags of my afflicted neighbours, trying to explain about a staff that had power over life and death, a spear that had been carried by Constantine, the holy roods that gave men power.

Disciples gathered around me, drawn to my fisher king limp; ex-soldiers whose minds had rotted, sons and daughters of the gentry who had turned to thievery or lust. They drank my words like elixirs, praising me as their king. They anointed my feet solemnly in holy water, fetched from the slop in the stables. They crowned me with a holy wreath, woven from stinging nettles.

The days passed like years, but slowly the poison left me and the clouds in my mind began to clear. My strength began to return and, scratching my itching scalp, I realised I was not the only messiah in the asylum. As my speech became lucid my followers lost interest, favouring a new arrival who had scars on his head and an eye that drifted when he raved.

One day a crowd of people gathered outside the hospital church. I pushed my way through and peered over the crowd to see a huge chest being lowered on a pair of chains from the ceiling. Guards stood by, watching with the same awe as those gathered, as the chest was opened and from inside a series of objects was removed.
'Behold the Holy relics!' announced the archbishop, his hands raised over them.

An ornate cross was removed, a sliver of wood at its centre, then two chain links, a scrap of cloth, and, finally, a spearhead. Every man, woman and child in the crowd dropped to their knees before the items - all except me.

It was not the true lance. It could not be. That hunk of metal, before which people bowed, was as worthless as the words in Trithemius' book. I turned, walked, and did not stop until I reached the dock, boarding the first boat I could find.

## Chapter Nineteen - The Gift of God


#### Abstract

The first inventor therof (as most agree) is thought to be a Germaine dwellyng first in Argentine, afterward Citizen of Mentz, named John Faustus, a goldsmith. The occasion of this invention first was by engravyng the letters of the Alphabet in metall: who then laying blacke incke upon the mettall, gave the forme of the letters in paper. The man beyng industrious, and active, perceavng that, thought to procede further, and to prove whether it would frame as well in wordes, and in whole sentences, as it did in letters. Which when he perceaved to come well to passe, he made certeine other of his cousaile, one John Guttemberge, and Peter Schafferd, byndyng them by their oathe, to keepe silence, for a season


John Foxe, Actes and Monuments

My first port was Frankfurt, where the book fair was underway

When I had seen Granvelle's library I had thought: if a man committed his whole life, he might read every book ever written, and thus know all that could be known. It had never occurred to me that the printing press would give birth to books faster than men could read them.

In the church on the lane at the centre of the fair a priest was giving a sermon.
'We are all of us victims of a cosmic plot,' he said. 'We see in the world hints and whispers of great mystery, but we are doomed forever to know only that there is mystery. Godless men believe not in nothing, but in all things. Gods of the sky, gods of the earth, rivers, thunder, lightning, harvests, love; they tell their stories in pagan names and refuse the unity of the One True God, the conspirator, who is Lord over all things.'

Watching the sermon, amidst the stern and solemn faces, was one that I could not look away from. It was tucked beneath a bonnet, framed by curly red hair, with pretty green eyes that watched the priest in total captivation.

When the crowd dispersed I followed her down the lane, watching as she drifted from stall to stall leafing through the books as I pretended to do the same. Lifting a book, she would feel its weight in her hands, opening it gently to read a few lines, tracing a finger across the print to feel the texture of the parchment. In her hands books were more than paper cages for words, they were objects; rich and real.

I lost her when she rounded a corner, and I stood staring at the sea of strangers for a moment when I felt a sharp poke in my side.
‘Are you following me?’ she demanded, angrily.
'No!' I said instinctively. 'Just because two people take the same route, doesn't mean one's following.'

Her frown quivered, then she broke into a giggle. 'I was only teasing. Is this your first time at the fair? You look utterly lost.'
'Not any more. I am on my way back to England,' I said, before attempting to impress her. 'To become a mapmaker.'
'Really?' she said disappointedly. 'How dreadfully dull.'
'Dorothea!' called a commanding voice. A man was approaching us; young and frustratingly handsome, with broad shoulders and keen brown eyes. In my life I had noticed that simply turning my attention upon a pretty girl could summon this kind of devil better than any alchemical rite. 'There you are. Our boat is waiting at the dock.'
'I'm on my way to the river myself,' I said. 'I'll walk with you.'
'John Corput,' he said and shook my hand with a crushing grip.
'John Riven,' I said, and tried not to wince in front of Dorothea.
'And you are Dorothea,' I said. 'Gift of God.'
'Excuse me?' said Corput.
'My name,' explained Dorothea, linking her arm in his. 'Mr Riven is to be a famous mapmaker in England.'
'Is that so?' asked Corput, interested, but not much. 'Where did you train?'
‘Train?' I said.
'Who was your mentor?' he asked, impatiently.
'Doctor...' I began, considering my options. Dee's reputation had caused nothing but danger in Europe. It was as though his name itself was an incantation, guaranteed to bring trouble. Searching for an alternative, I finished '...Mercator.'

Dorothea and Corput looked at each other.
‘Gerard Mercator?’ asked Corput.
His amazement bolstered my confidence, and I pulled my shoulders back and lifted my chin, taking pride in the lie. 'That's right. Greatest mapmaker in the world. Oh, we had adventures, he and I. Sailing the coasts of Europe, crossing the vast expanse of Cathay.'

Corput's mouth broke into a grin, and he shook his head at Dorothea who seemed about to speak.
'Do you hear, Dorothea? This Riven has travelled the world with the great Mercator!'

She rolled her eyes, and Corput laughed more than I felt was warranted.
'Dorothea finds such feats commonplace,' explained Corput. 'Please, tell us more.'

As Dorothea's interest dwindled, Corput's grew, and I began to enjoy the attention I was offered more than that which I desired. I recalled the adventures I
had shared with Dee, replacing him with my vision of the great Mercator - a huge, bearded hero who carried two swords, leathered skin covered in scars embellishing, exaggerating, inventing, and more often than not borrowing from stories I had heard as a boy.

Despite Dorothea's protests, Corput invited me to travel with them, and even paid for my seat on their boat travelling up the Rhine. Occasionally he would roar with laughter as I offered a detail about Mercator's dalliances with native priestesses, or simply shake his head in disbelief as I described in detail an imaginary battle we had fought against fearsome pagan warriors.

By the third day on the Rhine all the passengers on the boat were listening to my tales; all except Dorothea. If I faltered for a moment, forgetting what colour the giant's beard was or how many Moorish guards were vanquished, Corput would offer a suggestion which I would include, pretending it to be an astoundingly lucky guess. The infinitude of make-believe made the truth feel insufficient by comparison. The Pope, the King and the Holy Roman Emperor were men of meat and gristle and broken minds for Dee and me; for Mercator they took on the traits of the ancient gods of Egypt, Greece and Rome - great and powerful and full of vengeance.

At length we diverted into a tributary, which Corput told me lay on the old course of the Rhine, and docked on the right near the walls of Duisburg. Corput knew a great deal about the geography of the area; he peppered his speech with technicalities I had never heard, and would watch for my nod of recognition every time.

When we reached the Oberstrasse he requested that I accompany Dorothea to her father's home, as he had to meet with the city officials. It was the first time
since Frankfurt that we had been left alone, and the more I had tried to impress her with stories the less she had spoken to me. In fact, she spoke not a word as she led me to her home - a large, expensive house with a high walled courtyard.

Inside, a bearded old man with curly hair spilling from under his hat was sitting on a bench with an arm on the shoulder of an elderly woman. At the sight of Dorothea they both stood and - whatever sad and quiet moment they had been sharing set aside - moved to embrace her. I stood some feet away, awkwardly, not wishing to interrupt the reunion but not acknowledged either.

Dorothea whispered to the old woman - her mother, I presumed - and they retired to the house, leaving me and her father in the courtyard without introduction.
'A pleasure to meet you, Master...?' I prompted, my hand outstretched.
'Mercator,' he said. 'Gerard Mercator.'
'Do you not remember your old companion?' said Corput as he appeared at the gates, leading an escort of guards.
'What are you talking about, Corput?' grumbled Mercator.
I had been a fool. In an instant I realised that the secret to Dee's magnificent lies was that they were built upon a foundation of truths.
'The boy who fought Moors with you in Africa, who stole the Khan's gold with you in Cathay,' continued Corput, grinning, as he motioned the guards to flank me.
'Africa? Cathay?' scoffed Mercator. 'I've never been further than Paris in my life.'

But more than the fear of arrest, more than any humiliation at being exposed, I felt an overwhelming sense of disappointment.
'You?' I said, looking at the slow, grey old man. 'You're Gerard Mercator?'

I had begun to believe my own stories, believe my own lies. I had built Mercator in my mind into something he could never have lived up to - a hero, a legend, a god - and here he was, just another man.
'I am. And who are you?' he demanded.
'Riven,' I replied as the guards surrounded me.
Mercator's expression changed. 'John Riven? Dee's boy?'
'That's right,' I said, surprised. 'How...?'
'Did he send you?' he asked, his eyes narrowing.
I considered the trouble my lies had brought me already, and surrendered to the truth.
'No,' I sighed. 'I was on my way back to England. Corput brought me here.'

Mercator's eyes swivelled to Corput. ‘An Englishman? You brought an Englishman to my house?'

Corput's smile slowly faded. 'Yes - I mean - no, he was spreading stories about you - claiming he was your student -,
'Did you think now was the time to bring an Englishman to my door?' snapped Mercator.

Corput looked as though he was about to argue, then he dropped his head.
'Dee wrote of you in his letters,' said Mercator, pointing at me. 'He wrote little, but it was... enough.'

I could not read his expression. What had Dee written of me?
'Why did you claim that I was your master?' he asked.

I stared back at him for a moment, and shrugged. 'Because I wished that it was true.'

The captain of the guards shifted uneasily on his feet. 'Do you wish us to arrest this man, Mercator? Or arrange for his exile?'

Mercator eyed me. If I could not read his expression, I was unsure what he saw in my own.
'No,' he said. 'He will work for me here in compensation for his libel.'
He moved to Corput and pointed a finger in the man's face.
'You will be responsible for him. He is not to leave your sight. Guards, thank you for your duty.'

The captain saluted, and gestured for his men to leave. Corput glared at me, his eyes burning.
'But, master,' he began.
'We will speak later,' snapped Mercator, and he returned inside. As he reached the door he called over his shoulder. 'Take him to the workshop. Show him what it means to work for Mercator.'

# Chapter Twenty - The Mercator Projection 


#### Abstract

I had to wonder, how it could be that ship-courses, when the distances of the places were exactly measured, at times show their difference of latitude greater than it really is, and at other times on the contrary, smaller and again frequently upon a correct difference of latitude for the places in question. Since this matter caused me anxiety for a long time, because I saw that all nautical charts, by which I was hoping especially to correct geographical errors, would not serve their purpose, I began to investigate carefully the cause of their errors, and found them chiefly to rest on an ignorance of the nature of the magnet.


Gerard Mercator, Letter to Antoine Perrenot de Granvelle, February 1546

Working for Mercator was draining and dull.
Corput ensured that feelings of welcome or comfort never entered my day. I swept the workshop, cleaned the presses, fed the animals and even emptied the cesspits - as the servants watched - all under his military command. At night I would sleep on the floor of the stables, struggling to keep warm beneath a threadbare rug that smelled of horse, thinking about slipping away unnoticed in the fog. But that was what Corput wanted.

I was in the house of Mercator. In some small way I was a part of his work. I would drift into sleep dreaming that the ground beneath me was a map that stretched beyond the horizon... and each morning I would stir awake on the cold dirt, a slave by choice.

Sweep. Clean. Feed. Empty. Sleep. Days and nights took on a rhythm, but all the time I watched. That was my secret. Whether a broom in hand or a bucket and brush I would watch the press operators and commit their movements to memory, as a prisoner counts the footsteps of his guards. All the while I wandered my memories, wondering about all the ways of the world I had learned
and how little I felt they could help me now. When I had been a boy I would have prayed for some miracle to intervene; then scoured for reasons when my prayers were not answered.

One night, in the stable, I dreamed of a great crab that tore open the sky, letting loose spores of sickness that landed in the beds and the clothes of all around me. In the morning, when I awoke, I stole into the servants' quarters and removed the linen of the stable boy, whose coughs and splutters had grown hoarser and wetter as the weather had done likewise, exchanging them with the bedding of one of the lodging workmen.

It was several days before the workman fell sick, and soon his bed was empty. Fear of plague meant that illness was not to be tolerated in the workshop, and there were murmurs of concern as to where a replacement might be found at short notice. It looked as though the workload would simply increase and delivery delayed.
'I could do it,' I said as I dropped a mop into its pale the morning of the discussion.
'You?' scoffed Corput. He had been addressing the other workers in a huddle as the brothers had done in my youth, when there was some scandal to be dealt with, or some secret that was not to be let loose on the open air.
'I know the work, I can ink the plates and scrape them down,' I said, leaning on the mop handle and staring at him.
'You're a church rat, aren't you?' he said, stepping forward to eye me with a regimental glare. He slapped the press with the palm of his hand. 'I'll bet you fear this machine. Puts you monks out of a trade, doesn't it? Who'll pay for your scribbles when copper and wood has torn the wisdom from your clenched hands?'

I looked to the other men. They had families; that much I knew from their idle chatter throughout their long working days. Their minds worked simply, like the press itself, turning like the great threaded shaft to make pressure from the gentlest of pushes.
'What say you men?' I said. 'I would do the work of one of your number, lessen your load - though not your pay - and see you home to your wives by sundown.'

Eyebrows rose in hope at the suggestion, and I saw that Corput knew the men were swayed. He cocked his head to one side.
'Very well,' he said at last. 'Let the church rat play the presses.'
'I've never seen him surrender before,' said Dorothea as I passed her on my way out of the workshop.
'If that was surrender I dread to see him attack,' I replied.
'Why do you so badly want to work for my father?' she asked as she watched me wash my hands in the courtyard trough. 'As a teacher he is strict as he is a father.'

It was a question I had given much thought to. 'His name will serve me greater favour in England than that of my former master.'
'So you do mean to return, then?
‘Of course,' I said.
'Carrying a name that will glorify your own,' she said, thumbing her dress. 'I sometimes wonder whether I am to marry for the same reason.'
'I had heard from the pressmen your fiancé is the son of a burgher.'
'Yes. But like you, he cares more for my father's name than his own.'
' A wise union, then.'
She sighed. 'And what could be better than wisdom?'

Mercator's pressmen did not share their master's love of scholarship, though working amongst them was an education of its own. As we scraped and scrubbed the copper plates, spreading the ink flat across them so there were no lumps or bubbles, they talked and talked - of their wives, their children, the bastardly weather and the failing farms.

I felt that without Dee's dark shadow looming over my back I was free of a weight that hitherto had anchored my tongue in the company of other men. I would laugh and nod or shake my head to their chorus of swearing and muttering, as Corput worked alone in the next room, appearing only to order us to lower our noise or raise our pace. It was as though some part of Dee's ease and flair had rubbed onto me, like chalk smudged on a coat, and only in the absence of his blinding person could its little glow be seen.

Mercator would work in an office in the house, where I would find him surrounded by papers and manuscripts whenever I was sent - or, more often, volunteered - to ask for a piece of advice or instruction as to his prints. Like Dee, Mercator would look up from a book as though his interrupter's face were words that did not belong in the sentence in his mind, and it was only then that I could imagine two such different men sharing younger years at university.

Occasionally I would see Dorothea watching me as I waited outside her father's office, my hands folded dutifully behind my back. Perhaps it was another echo of Dee, or perhaps it was the tempering of my mettle by time, but where once the gaze of any girl had driven my eyes downwards with a blush I found
myself gazing back, counting the moments before either one of us would blink, or turn away, or footsteps from behind the office door would warn us of her father's approach.

The night I woke to find Dorothea standing over me in the thatch-dappled moonlight of the barn I could swear I watched myself from outside my own eyes. Neither one of us spoke; the wind whistled high outside for us like a friend or confidant, swallowing the breaths and gasps that escaped our mouths whenever they briefly parted each other.

The moment - that moment - that so briefly seemed to hide us from the world, was over so quickly. She did not stay, but gathered herself with an air of purpose that gripped my attention, and was gone.

The following day I did not even see her, though I knew she was about the house. That a moment so swollen with meaning, and import, could come and pass and fade without the ripples being seen in the faces, the brickwork, the landscape about me filled me with unease. I worked amidst men with the knowledge of a secret singing in my ears that none but me could hear; and I found myself thinking of Dee, whose mind was filled with and sought more secrets than there were spots of ink on every page of every book that every man had ever printed.
'It must be kept secret,' said Gerard as he addressed the workers one morning - and for an instant I thought my mind had printed itself across my face. 'It is not the finest of our work, that I will admit, but it is of great value and I am afraid my most trusted agent is still abroad.'

There were mumbles amongst the men.
'I gather you understand, then, that delay of delivery necessitates delay in payment - a burden that is felt by all of us.'
'But some of us more than others,' said one of the older workers. His colleagues agreed with him angrily.

I did not care. All that I could think about was getting close to Dorothea, but since that night Corput had clung to her like ivy. He sensed something, I was sure. Anytime I would shuffle in her direction in the yard he would appear from the house and call for her, on the most trivial of errands.

My own errands continued to take me to and from Mercator's office. One day as I was leaving he beckoned me.
'What make you of Corput?' he asked.
He watched my eyes carefully as I considered my answer, and folded his hands as the pause betrayed my hesitation.
'Is he a man I can trust?'
The men knew Corput and I were rivals. The whole household had seen him order me, humiliate me and belittle me. Granted, Mercator spent most of his days in his office, but I could not fathom that he did not know the enmity between me and the man who would marry his daughter.

Then I realised. Mercator needed a delivery boy for his maps. With his sons still at school Corput was his closest confidant; and if there were tales to be told of the workshop's fearsome supervisor they would leave only the lips of he who had least to lose. It was a perfect opportunity to discredit the man who stood between me and Dorothea; then again, it was a perfect opportunity to have him sent on a long and dangerous errand.

What would Dee do?
'He has only your interests at heart,' I said honestly.
Mercator rubbed his chin beneath his beard and nodded.
'And is there a place in his heart for your interests?' he asked.
I was prepared for this. 'He is strict, it is true. But I believe a master should be strict. Do you yourself not treat your own children as a teacher who strives for the best from his pupils?'

The old man straightened in his chair.
'You are most astute, young Riven. As, I see, is he.'
I left the office, finding no sense in this last remark until the following day, when once more the men were gathered in the workshop to be addressed by our master.
'I have good news,' he said as he rubbed his hands against the cold morning air. 'A solution has been found to the delay of our consignment. The maps are to be delivered by John Riven.'

There were cheers of approval from the men, who slapped me on the back and grinned at the stupor evident on my face.
'Corput assures me you are the best man for the job,' said Mercator as the maps were rolled and slid into their leather tubes.

A horse was ready for me in the yard, saddled by Corput himself.

# Chapter Twenty-One - The Monas Heiroglyphica 


#### Abstract

The angel of light that was, when he presumed before his fall, said within himself, 'I will ascend and be like unto the highest; not God, but the highest.' To be like to God in goodness, was no part of his emulation; knowledge, being in creation an angel of light, was not the want which did most solicit him; only because he was a minister he aimed at a supremacy; therefore his climbing or ascension was turned into a throwing down or precipitation.


Francis Bacon, Of the Limits and Ends of Knowledge

Corput planned to have me arrested in Antwerp, of that I was certain.
There were times on the road that I considered turning back, or fleeing to another town. But something was drawing me back there, like a current in a stream. It felt as though the maps would burn right through their leather tube, so important were they. Something else occurred to me on the road. Suppose I didn't return to Mercator with the payment for the maps. The money would be enough to take me back to England and, after my debt to Lord Cecil settled, I would have enough left over to begin a new life.

At the city gates I expected the guards to stop me, but I walked straight past without a glance in my direction. By the time I reached the Kammenstraat, I was aware of every pair of eyes passing me. Were they watching me? Was someone ready to summon the alarm?

Where I had last seen an empty warehouse, the Golden Compasses were alive with activity. Men were stained with ink, like the workers of Mercator's press, and I moved inside easily, without notice; one of them. Plantin, it turned out, was out. I considered leaving the maps, but I knew Mercator would not be satisfied if I did not see them in the printer's hands.
'Where is he?' I asked the foreman.
'The Golden Angel,' he replied. 'Everyone's there.'

Indeed, the world had seemed to have gathered at The Golden Angel. A crowd was mingling, their voices melded in a chorus of indistinct rumour and hearsay. They were waiting for something to begin, and I moved amongst them, inconspicuous, before I noticed the guards that were patrolling the borders of the courtyard.
'Riven? John Riven?'
The voice called from the doorway. I was in the middle of the crowd, and before I could turn back I caught the eye of the crier. I didn't recognise the man, though he stared straight at me, before his gaze darted to the other potential Rivens in the crowd.
'Is there a John Riven here?'
Heads turned left and right, as each half-heartedly sought to help find the man none of them would know when they saw. Then I caught a man, one of Silvius's printers, squinting in my direction. He pointed.

## ‘That's him!'

Hands on my shoulders bustled me to the door, and I was pulled inside, up the stairs, and to the end of a dark corridor, where I was suddenly left alone. Before me was a door. I raised my hand to knock, but before my knuckles touched the wood it swung open as though by magic, or a noiseless gust of wind.
'Enter.'
Inside my nostrils were assaulted by the acrid stench of sweat and urine, couched in a heady mist of lamp smoke and the odour of wine. The room was dim - a fire burned in half of a wine barrel, charred scraps of paper scattered
about it. I picked one up to find it was covered in miniscule numbers, each scratched in a feverish scrawl.
'You were wrong!'
He was lying on the ground, on his back, legs crossed, pointing a bony finger at me. At first I didn't recognise the eyes, sunk deep into the face buried beneath a moss of beard.
'Dee? You look...'
'Wonderful, thank you,' he said, leaning over to suck the remaining wine from a bottle on its side by his head. 'And you?'

I picked up a page from the sheaf on the table - more numbers. In an instant Dee was at my side, snatching the page from my hands and slipping it between the others. Next to them, open, was the Steganographia. Dee slammed it shut before my fingers could reach it, a knifepoint hovering just below my chin.
'Perhaps you're not such a fool,' he circled around me, cautiously. 'You realised you were wrong, so you came back for it.'

I raised my hands, slowly. 'Have you been asking for me?'
'Of course not! Why should I seek out the lunatic who nearly convinced me that this,' he lifted the Steganographia in front of my face, not moving the blade, 'was the mere scribbling of word muddler. But I have cracked it. I vowed not to leave this room until I had, and I have. And now you've come to steal my secrets.'
'Dee, I don't know what you're talking about. Mercator sent me.'
A spark lit somewhere in the back of Dee's eye, and he lowered the blade. I could see the memory of his old friend shaking loose the cobwebs that had
strangled his mind for however long he had been living in this room - which, judging from the content of several of the bottles, was some weeks.
'Mercator? That old fool.' A smile found its way through his beard, and he patted the stack of papers. 'Is he here?'

I shook my head. He nodded, sadly. The silence was broken by a hammering at the door. Dee slid to the wall, his eyes on mine.
'It's not ready. Tell them it's not ready.'
I opened the door, and a hand grabbed me, pulling me out. It was Silvius. He looked shocked at the sight of me. 'You? I thought you'd been arrested. Where's Dee?'

The door slammed shut behind us.
'He's not ready.'
'Not ready?' Silvius bubbled in rage. 'What does he think he's doing to me? He must be ready! If he won't leave his room willingly, I'll have the guards drag him out. Guards!'

The printer was shaking me by the collar. 'What I mean is, he's not presentable,' I stammered. 'He needs a fresh suit of clothes. And a brush. And shears.'

Silvius nodded vigorously. 'Yes, yes, anything - just get him down there!'
He dropped me, pushing past the guards who had appeared at the top of the stairs. I slapped my hand on Dee's door, but he must have been holding it shut from the other side.
'Dee?' The guards were growing restless. I slapped again. 'Dee, you're right. You were right all along.'

Downstairs, the murmurs rippled into polite applause as Dee appeared at the doorway. He had transformed, as I had seen him do in Rome; his beard was neat, and his eyes glowed with a devilish spark. All eyes followed him as he strode to the fireplace, plucked a piece of coal from the grille, and approached the bare wall opposite the doorway. With two swift movements he traced the sign of the cross on the stone. The devout in the crowd marked the sign on their own shoulders and foreheads, but Dee raised a hand.
‘Could this ever be enough? An intersection. Two lines, met once and only at a single point. Two and one. Body and spirit: soul. The three. But two lines so bisected become four: earth, air, fire, water. Combine these four with the three to find seven: seven planets, seven powers. But wait!'

Dee swirled his hand around swiftly, marking a circle at the top of the cross, transforming it into the symbol I recognised as Venus, stabbing a charcoal mark it at its centre.
'The monad, the centre, the beginning; a circle orbiting its centre, as the sun orbits the earth. And the moon!'

A flourish marked an inverted half-circle to crown the circle, forming the sign for Mercury, and Dee raised his hands to the night sky that hid beyond the ceiling.
'Its diameter equal to the sun, for the perfection of eclipse - and thus we find the horned head of Taurus in his zodiacal house of Venus.'

A murmur stirred through the crowd, and even I for a moment was amused by the multiplicity of symbols that were appearing as Dee guided our thoughts to witness them. He held out one hand as the other traced two curves, like wings, branching out from the base of the cross.
'The horns of the ram Aries! Minister of fire, favoured by the sun in nycthemerons, the equinox; and the symbols of Jupiter and Saturn, rotated, inverted, and Mars - the orb and trident!'

I had to squint, and turn my head to be sure, but there the symbols were, all evident in the glyph that Dee had drawn.
'Now we find the one that is all: the Monas Heiroglyphica. From seven we find eight in the twinning of the arms of the cross to its four angles; to ten when we turn the cross sidelong, the letter ' X ', twenty-first of the Holy Roman letters, three lots of seven, seven of three, seven and three - the Latin ' X ' - ten! But what is ' X ' but a ' V ' reflected upon a lake - two ' V 's, five and five, yes, ten or five of five, thus the twenty-fifth letter! Finally, now, return those 'V's upright once more and we see they concealed our 'L's, fifty, twice, one hundred.'

Dee beamed expectantly at the crowd, assuming we had raced ahead to some conclusion that was so obvious to him.
'L-V-X... fiat lux... and light there shall be! For now we combine our four lots of five, our four lots of fifty, our ten, twenty-one and one, within our crucible to discover two-hundred-and-fifty-two! Two lots of two lots of three lots of three lots of seven; or the sum of the square, the cube, the zenzizenzike and zenzicube and the first and second sursolides of two; or the maowr, the source of the light and sun and the moon that rule both the day and the night!'

He fell silent once more, though this time it was clear he was finished. I sensed a ripple through the crowd, and it reminded me of the times back in St Paul's Cathedral when the bishop finished a particularly tangential sermon. The cadence of his voice suggested an important truth had been revealed to us all - but

I was sure no one knew what it was. Like all crowds do in such situations, this one broke into applause.

Dee bowed low, and Silvius stepped forward to take orders for printings of Dee's manuscript.

## Chapter Twenty-Two - The Judas Kiss

Therefore death to us
Is nothing, nor concerns us in the least,
Since nature of mind is mortal evermore.
And just as in the ages gone before
We felt no touch of ill, when all sides round
To battle came the Carthaginian host,
And the times, shaken by tumultuous war,
Under the aery coasts of arching heaven
Shuddered and trembled, and all humankind
Doubted to which the empery should fall
By land and sea, thus when we are no more,
When comes that sundering of our body and soul
Through which we're fashioned to a single state,
Verily naught to us, us then no more,
Can come to pass, naught move our senses then-
No, not if earth confounded were with sea,
And sea with heaven.

Titus Lucretius Carus, De Rerum Natura, Book III
'Plantin!' cried Silvius as he signed orders with a grin. 'Shall I mark you for a copy?'

I followed Silvius' gaze to a tall, handsome man who was standing amidst the crowd. He was smiling too. Behind him entered a pair of guards. Silvius’ smile fell.
'Christopher,' began Silvius, but Plantin was pointing at Dee.
'You. I believe you have something that belongs to my client.'
The crowd was dismissed, and it took only the promise of a fresh barrel of wine to lure them outside, leaving the warehouse empty but for Dee, Silvius, Plantin and me. The guards took their posts outside, and as they exited two huge dogs entered, dragging behind them a small, red-faced man.
'This is Sambucus,' said Plantin, as the man nodded and waved, trailing the dogs as they sniffed at every corner of the room. 'Some time ago he agreed to trade me a casket of jewels, as deposit for a most particular tome - a manuscript penned by the Abbot Trithemius.'

I shot a look at Dee, who simply cocked his head and raised his brow in response to the story, with an air of innocent curiosity.
'The manuscript was stolen from an associate of mine. I have been told it was you who stole it, Doctor Dee.'

The dogs snapped at Dee's feet, but he sat, motionless. When he stared down into their eyes the dogs licked their lips and backed away, suddenly interested in other things.
'Christopher,' said Sambucus in a thick accent like those I had heard in Hungary, 'he does not have it. Do you think a man such as this would be involved with your... friends?'

I caught Plantin just as he was entering the Golden Compasses. He inspected the maps, pleased, and rolled them back into their cases.
'This business with the manuscript and the jewels has made my already loose financial footing all the more treacherous,' said Plantin plainly as he handed the roll to a messenger. 'Unfortunately I will not be able to pay Gerard until the first sale. I will send the money on.'
'No!' I cried, and Plantin glanced at me curiously. The messenger paused.
'You think you will find another buyer?'
I shook my head, and Plantin dismissed the messenger.
'You are welcome to remain in Antwerp as my guest until such time as I can make payment.'
'I'm afraid I am far from welcome in Antwerp.'
'Then your roads are crossed, my friend.'

Dee was at the residence of the town's physician, Goropius, when I found him. An English family was with him; nobles, I presumed, from their clothing. A lord, his pregnant wife and his sister - whose face I felt I recognised. The physician was inspecting her with his instruments while Dee browsed the volumes on the walls. When he saw me, he excused himself.
'What are you doing?' I hissed. 'Don't you think it would be wise to conceal ourselves in this town?'
'They cannot have it,' said Dee. I blinked. 'You are here to persuade me to part with the Steganographia. They cannot have it.'
'Why not?' I demanded.
He pointed towards the other room. 'She is dying.'
I glanced through the doorway where the woman sat as Goropius moved about her. A memory stirred, of a woman I had once met in a ghetto in London. When I needed money for a book, I'd don my robes and visit the local parishioners, offering absolution in return for a donation. If the scriptures were correct, it did not matter where the money went, only that the faithful were willing to part with it in return for salvation. Of course, this noblewoman could not be the same, and yet her face conjured the memory so vividly.
'There is nothing on earth that can save her,' said Dee softly. As Goropius placed his hands upon her I noticed a mark on her breast - a darkening, with veins that crawled out like the legs of a crab.
'Cancerus,' confirmed the physician after his examination. 'Lady Brooke's condition, I fear, will not improve.'

Dee's fingers moved in the air as he calculated in his mind. 'The constellation rises soon, its domicile the Moon, Saturn the detriment, Jupiter in exaltation. When could the rite be next performed?'

I caught Dee's wrist. 'Sickness and stars are not twinned for sharing a name, John. Words hold no power over that which they name.'

Goropius pulled a volume from his shelf. 'Perhaps, perhaps not. Did you know that the language of Antwerp is as ancient as Eden? Oldest in the world. Which makes me wonder - what power is in a thing until it is named?'

Dee yanked free of me and moved to Lady Brooke as she entered. Her brother and his wife stood by as Dee kissed her hand; then she saw me.
'I remember you. You came to see us in Blackfriars. When Mary stripped us of all we owned, and my husband was near to death. You said if we gave what little we had to the church, the Lord would see him well again.'

My cheeks burned as she recalled my sin, without any malice or accusation. She took my hands and held them tightly.
'Thank you,' she said softly. I lifted my head, astonished. 'You saved us.'
I avoided meeting Dee's eye.
'Now, I fear, it is I who is ill. Doctor Dee ensured me the finest physicians in world, but it seems that for some, death cannot be so readily forestalled.'
'What about the Emperor's physician?' I said suddenly. 'The Hungarian?'
'I do not believe we would be in a position to request His Excellency's help,' snapped Dee, suddenly.
'Surely the great Doctor Dee is welcome to the Emperor's hospitality?' I persisted, feeling Dee's wrath turning in my direction. 'Is there not some gesture you could offer in return? After all, the Emperor's own bibliographer is in Antwerp this very night.'

The Brookes turned to Dee, expectantly. For a moment I saw the same twitch on Dee's lips that I had seen in Rome, when he had been blindfolded. Then he smiled.
'Why of course. Why did I not think of it before?'

Sambucus was staying in the house of Ortel. The wrinkled old colourist recognised me when we entered, but knew better than to show it. Plantin was inspecting one of the English maps that had been spread across a table, and as Dee entered I noticed him glance back at it two or three times before addressing the Hungarian.
'I understand you are in a quandary. You must return to the Emperor, but cannot do so without possession of a certain manuscript - a tome of immense power and wonder. No doubt you have heard what I have heard of the Abbot Trithemius.'
'That he was a genius?' prompted Sambucus.
'That he was a madman,' corrected Dee. 'Invisible spirits? Silent speech? His work contained nothing that could be seen, nothing that could be tested. It is like an old map - one that hints at places that never were. What you need - what
your Emperor needs - is a new book. One that draws the lines of power clearly, so that any man could find them - if only he has the wisdom.'

From beneath his cloak Dee produced a manuscript. It was not the Steganographia, but a newly printed volume. He opened the cover with a flourish, and I saw, printed neatly in ink that had barely dried, the Monas Heiroglyphica. Beneath it was a finely scripted dedication to the Emperor. Plantin frowned.

Sambucus took the book with a frown and turned its pages slowly, head tilted backward, so that his eyes peered down the sides of his nose which rocked back and forth with each line. After a few pages - presumably of the same incomprehensible didactics that I had heard at Silvius' - he closed the book.
'Of course, I can see that this work is most impressive,' he said at last. 'Only a fool would think otherwise.'

Dee bowed curtly. 'Then may we consider your bargain with Mister Plantin completed?'

From beneath his cloak Sambucus retrieved a small casket, and offered it to the astonished printer.
'And for the young mapmaker's apprentice?' said Dee. Plantin plucked something small from the casket and tossed it to me. It was a dark, glimmering emerald. My ticket home.

I didn't wait to make my goodbyes, simply rushed to the docks and scanned the signs for a launch bound for England. It came as some surprise when Dee appeared to see me off.
'You pity me, don't you Riven? You think me a fool.' he said as he paced behind me. 'Perhaps I am. For a while I trusted you, after all.'
'You trust no one, Dee,' I said. I caught the name of a ship on the chalkboards hung outside the agents' doors, and walked up the dock in search of it. Dee followed me behind.
'That is not true,' he snapped, in a tone that commanded my attention. He approached me, and for the first time I saw the cunning fall from the man's eyes, replaced by something akin to remorse. 'I trust something greater than men. Greater even than God.'
‘What?' I spat. 'Love? Power?’
'I do not know its name yet,' said Dee quietly. 'But when I do, I will know all I need ever know, in this world or the next.'

I scoffed, and turned to walk away.
'The maps you brought here,' he called after me. 'They are invasion plans.'

I stopped. 'You're a liar, John Dee. You would transform the truth to whatever ends you pleased.'

But something in his tone made me realise this was a harder truth for him to believe than it was for me.
'They mark every Catholic ally in England. They show Scotland as a storm cloud ready to rain down on Elizabeth's dominion. It is a Papal flag, your map; a threat.'

He was right. I knew he was right. I could picture the detail in my mind the bishoprics, the cathedrals, the towns and ports where Catholics - even Catholic soldiers - could find welcome.
'What do you care?' I said at last.
'I care for England,' said Dee. 'I care for a world freed of Rome. It was I who marked the date of Elizabeth's reign, and it is I who shall mark the date of her Empire.'

He put a hand on my shoulder.
'You are a traitor, Riven. By rights I should kill you here and now. But you believe in nothing but yourself - and so you are already dead. Do not return to England. There is no England for you now.'

He left me that night on the docks in Antwerp, and as I sunk to my knees I remember only the graffiti on the wall slashed by moonlight. It was a grotesque caricature of Cardinal Granvelle, with devil-horns - around his neck hung a sign that read 'For Sale'.

## Chapter Twenty-Three - The Staff of Jacob


#### Abstract

Who, then, will not agree that all beings that fall within our experience, including even the angels, are subject to change and alteration and to being moved in various ways? The intellectual beings - by which I mean angels and souls and demons - change by free choice, progressing in good or receding, exerting themselves or slackening; whereas the rest change by generation or corruption, increase or decrease, change in quality or change in position. Consequently, things which are changeable must definitely be created. Created beings have certainly been created by something. But the creator must be uncreated, for, if he has been created, then he has certainly been created by some one else - and so on until we arrive at something which has not been created. Therefore, the creator is an uncreated and entirely unchangeable being. And what else would that be but God?


## Saint John of Damascus, An Exact Exposition of the Orthodox Faith

Homeless, adrift in a changing Europe, I made my lonely way back to Duisburg. If nothing else, I would not die a thief - I had at least to deliver Mercator's payment. Again, along the road, I was plagued by the temptation of flight, but the thought of casting myself adrift without purpose filled me with uneasiness. In a world where maps existed, I thought, how could one wander or be lost?

The first familiar face I saw was that of Bartholomeus, one of Mercator's sons. He hailed me in the street with a grin.
'I didn't think we'd see you again,' he said, matching my stride. 'You'll be a surprise for Corput.'

If I was, he barely showed it as I entered the workshop. The other workers glanced from me to him, watching for his reaction - but his mouth simply tightened, and he said nothing. Mercator was similarly stoic when I handed him the emerald.
'Was the bank empty of coin?' he grumbled as he examined it, before tucking it into his pocket. Then, not meeting my eye, he shuffled away. 'Back to work with you then.'

And just like that I was back again, working amongst the pressmen, who were pleased to get paid at long last. They treated me with more respect than before - all but Corput, of course. He would leave the house each day with his tools and return in the evening to check on the progress of the prints we were making; commissions of Mercator's portfolio of maps. In his absence, I would glimpse Dorothea in the garden, tending to the plants and the house.

I had kept her from my thoughts since that night in the barn, but a part of me had starved with wonder for what she would do or say upon my return. Our moment together had changed me, and I wanted to know if it had changed her too.
'How does one know what a woman thinks?' I asked Bart one morning as I filled water from the well in the yard. 'Not what they say they think, but the secret, unspoken things?'

He smiled. 'How does one know anyone? You must walk in her shoes, tread the path she treads. Know her enemy as your own, her love as your love.'

Her love? Corput? When evening came I waited for him, following him to the workshop as he entered to lay down his tools.
'What is it that you do all day?' I asked.
'Your business is your own, Riven. Mine is mine.'
I waited until he had entered the house for supper before inspecting his tools. They were surveying instruments, like those I had seen back in London but of a far greater craftsmanship. One I had never seen before: it was a short staff with two cross-beams near its top - a double-barred cross. Beside it a leather
tube contained pages of sketches of a town, notes scrawled all over marking corrections and adjustments. It was Duisburg, I realised.

The next morning I followed Corput. He moved throughout the town, making notes and counting his footsteps between the corners of buildings, occasionally pulling out the cross-staff and raising it to his eye. He was using it to measure angles, but he never seemed satisfied by what he saw when he checked, mumbling, against his notes.

At one corner, as he stared up, I noticed a small boy emerge from the alleyway across the street and move, quick and silent, towards him. Distracted, Corput did not feel the boy's fingers slip into his coat pocket, but quite by chance he stepped back for a better vantage and trod on the boy's boot.

The boy yelped, and Corput turned, bothered, but apologetic. Then, as though by habit, he reached into the same pocket - as if to retrieve a coin for the boy's injury - and frowned. The boy ran. Corput called after him and gave chase, but the boy was quick. I darted out from where I hid and yanked the boy off his feet. He dropped the purse in shock, kicked me hard in the shins, and I dropped him. Thinking better than to run back for his prize, the boy fled into an alleyway as Corput reached me.
'Riven?' he barked, scooping up the purse. He checked its contents and breathed heavily, relieved. 'If you're expecting some sort of reward, you won't receive one, for it was not coin he would have taken.'
'Your forgiveness would be reward enough,' I replied.
'Forgiveness?'
'I entered your world via deception - I should now like to earn your trust.' I pointed at the cross-staff. 'You are mapping the city?'

He sighed. 'I have tried to. It is one thing to envision the world from above, as God sees it - quite another to trace it from the ground.'

I glanced up. 'What if I could help you get closer to him?'
He followed my gaze.
'This will not work, Riven,' he said as I pounded my hand against the door of the church. 'Believe me, I have already tried to reason with the clergy.'
'Reason?' I said. 'That's your problem.'
The priest who answered us was a bald, bearded man with clouds in his eyes.
'Mapmaker?' he said hoarsely. 'I have told you already, no lay may access the bell tower. It is a sacred honour, reserved for the ordained.'
'Wait, Father,' I said, jamming my foot in the door before he could drag it shut again. 'Is it not for the glory of God we make humble homage to his creation on Earth?'
'God didn't create Duisburg,' he grumbled. 'If he did he wouldn't have put the inn behind the church to encourage sinners to piss all over the presbytery wall.'
'He does work in mysterious ways,' said Corput, unhelpfully.
'Listen,' I said, leaning on the door. 'Perhaps if we were to make a contribution to his house, God might forgive the trespasses of these two sinners, just for today.'

The misty orbs of the priest's eyes moved back and forth as he considered this. I dug into my pockets and retrieved the few coins I had managed to save from my wages, and pressed them into the priest's hand. He rubbed them together for a moment, then tucked them beneath his vestments.
'I need to visit a parishioner at the far end of town,' he said, shuffling out. 'It is forbidden for anyone to enter the bell tower in my absence. If they were to be caught, their penance would be severe indeed.'

He shuffled past us, leaving the door ajar.
'I expect I shall be some time,' he said, not looking back.
Corput looked at me in surprise.
'You bribed a priest!' he exclaimed as we emerged at the top of the tower. Duisburg was spread out below us, making the buildings look no bigger than boxes. 'Are you not concerned about the $\sin$ ?'
‘Mine or his?' I asked as I leaned over the parapet to look down below. I could see a couple walking side-by-side, a group of children chasing one another, a milkmaid carrying her yoke upon her shoulders - yet from so high up their movements became graceful curves and flows. They were leaves gliding atop a stream, carrying them through their lives.

Corput unravelled his sketches and began comparing them. He shook his head as he scratched out the first error he found, then another, and another, scribbling notes and stroking the lines of the landmarks about the town.

I picked up the cross-staff and examined it. It was just a tool, I reasoned, like any other. Yet the shape seemed to be haunting me, following me
everywhere I travelled. Twin transoms intersecting the stave. It was the mast of The Jesus. It was the emblem of Hungary. It was the rod of an ancient Pope.
'Clever, that,' said Corput, glancing over. 'They call it Jacob's staff.'
Of course they did. Jacob. Descendent of Abraham. Combatant of angels. I was submerged in an ocean of symbols, and could not see the connections from within. Looking down at Duisburg, I saw the double-barred cross joining every intersection to every other. There had to be a way to navigate the symbols, the stories, the doorways that opened and closed before me. But not from within.

We stayed atop the tower until sundown, when we walked together back to Mercator's house. While Corput updated his mentor on the progress of his work, I kept company with Dorothea.
'My father thought you would not return,' she said when I sat beside her.
'Then why send me to Antwerp?'
'Perhaps he thought the maps were better off lost,' she replied. 'You and my betrothed are friends now?'
'No, not friends,' I said. 'We share a common interest.'
Dorothea let her hand drop near to my thigh. I met her eye. Then Corput appeared at the workshop door.
'Riven! He wants to see you.'
Mercator? Wanted to see me? I stood at once.
'Fine work,' said the old man, holding the Duisburg sketch before his eyes in both hands. 'Fine work indeed. You seemed to have gained some perspective, I see.'
'Riven is a man who knows how to see things clearly,' said Corput.
'Is he?' asked Mercator, turning his gaze upon me. He studied my face for a moment, with the same intense stare he reserved for his maps, and nodded. 'Join us tomorrow. You will learn the rules of mapping.'

I dined with Corput and the Mercators that night, recounting the adventures I had shared with Dee. Corput grinned through them - having heard them first as lies - and Mercator shook his head at each mention of his old friend's audacity.
'Listen to me, Riven,' said Mercator sternly, pointing his finger across the table at me. 'It takes more than seeing the world to truly know it. Dee may have travelled, but he lacks the patience and the discipline for greatness - for true wisdom.'
'You're wrong,' I said. 'He's searching for the pathways between things he wants to know everything. He's building a library, one to rival Alexandria.'

Mercator stood from the table and curled his finger, summoning me to follow. I glanced at Corput, who rolled his eyes, and obeyed.

The old man took me to his study, which was lined with shelves and shelves of books - each spine perfectly aligned with its neighbours. A stack of papers rested upon a table, and Mercator gestured to them.
'No two things are alike, Riven. Everything must be studied in detail, recorded, collated. You cannot map a territory simply by having mapped another! No. Dee believes that one thing may contain the secret to knowing all things. I believe knowing all things is the secret to knowing any thing at all.'

Mercator's wife called for her husband, and we returned to finish the meal.
When he retired that evening she paused a moment, looking at me.
'He likes you, you know,' she said. 'You remind him.'
'Of what?'

She smiled, and followed her husband to bed.
I knew. I reminded him of Dee.

## Chapter Twenty-Four - The Beggar's Cap

For the things we have to learn before we can do them, we learn by doing them; men become builders by building and lyreplayers by playing the lyre; so too we become just by doing just acts, temperate by doing temperate acts, brave by doing brave acts.

Aristotle, Nichomachean Ethics, Book II, Chapter I

My first attempt at making maps was flawed.

Mercator would have me study a reference map and make a tracing, but I quickly became impatient and would find myself straightening the curve of a coastline or dismissing a branch of a river. Then I would hear the sudden swish of a yard-rule and, a moment later, the red-hot sting as it snapped the back of my hand. As I blinked back the tears of pain Mercator would chide me for my carelessness, and I would have to start again.

Corput and Bart watched from his corner of the workshop, a smirk on his face - and now I realised that they had felt the sting of the yard-rule himself, countless times.
'Was your father strict too?' asked Bart as we ate together, my hand still aching.
'I don't know,' I said. 'He died before I was born. I was left to the church.'
'But you found your own way out,' said Corput approvingly. 'My father wanted me to be a burgher, like him.'
'A nobleman? Why didn't you?' I asked.
'Look at Mercator,' he replied. 'He could be a burgher if he wanted. But he has dedicated his life to the pursuit of wisdom.'
'Some men lust for gold, others for wisdom,' said Bart, chewing thoughtfully.
'Riven!' Mercator's voice barked from the workshop. I dropped my spoon and heeded my master's call at once.

He was peering at my work - the lines of which I had painstakingly traced and retraced until they were perfect in every way.
'What is this? What is this?' he demanded. He stabbed a finger at bottom of the page, where I had proudly titled my work. 'This is how you write? How do you expect to create anything of worth if nobody can read what you read?’
'I can read it,' I protested.
'Oh, you can read it? Very well. Your own precious map, just for you. In a language only Rivens can read. Why not invent your own mathematics and geometry while you're at it? Then you could truly keep your wisdom secret.'

He unravelled a scroll from the shelf at his side and showed it to me: a glorious map, every word scripted in impossibly small letters, each curl licking like the loop of a growing vine.
'We are not recording the truth, Riven. We are creating it. Does a king cast aside the crown for a beggar's cap? No. No king is a king without his crown, no beggar the beggar who wears one.'

From then on my daily duty included the practice of handwriting. I would trim and slit a quill, then line after line after line of chancery hand would crawl across the page, each letter frozen in a lean at a precise three-and-three-quarter degrees.

Gaza frequens Libycos duxit Karthago triumphos.

If I wrote too quickly the letters would spill together like children falling over each other, transforming into symbols for which no meaning yet existed. Worse yet, I made a horrifying discovery as I copied from a long list from Mercator's notes. They were names in brief of astronomical bodies, in Latin and Greek, and when my quill deviated by the haste of my hand, I saw alchemical symbols leak forth in ink. Kappa rho. Theta rho. Phi omega. When merged, the letters became the signs of Saturn, of Mars, of Venus; Kronos, Thouros, Phosphoros. I tried again, deliberately, seeking a mutation this time, and found Mercury and Jupiter - Stilbon and Zeus. Could symbols of such power, so revered by men like Dee and Cardan, be truly mere slips of the nib by a careless scribe?

How long might I have been guided by a sign that had lost all meaning?
How many lives had been sent off-course by words transmitted without sense?

Gaza frequens Libycos duxit Karthago triumphos.
My life had been guided by other men's words and symbols until now. It was time to write my own. I started to write everything that was in my mind, everything that was in my heart. I wrote carefully, each letter crafted and formed as though etched in stone.

I wrote to Lord Cecil, damning Dee as a madman. I wrote to the Pope, demanding proof of his divine ordination. I wrote to my father. I wrote to my mother. I wrote to God, begging him to write back. Then, after reading every word I had written, I burned my pages in a pale outside, watching each one curl from embers to ashes that drifted up towards the stars.

I decided to write to Dorothea, to tell her everything that was inside me but when I drew the quill from the inkwell it hovered over the page, resisting descent. A single black drop welled at the nib, but would not fall.

In the morning a letter had arrived - for Corput.
It was from his father, informing him of the unrest in their hometown where he served as burgher. He entered the workshop where I was finishing the lettering on the Duisburg map, and slammed the letter down upon the table.
'They complain about food - yet they know there is drought. They complain about taxation - yet they know there is war. What would they have my father do? It is the Prince's doing.'
'The Prince?' I said, taking the letter to read it.
'William of Orange - a title inherited from his French cousin. It was he who drove Granvelle from Brussels, and now he stirs the people against the Spanish. He fans the embers of discontent, but do you think he'll stay and get burnt when the fire takes hold?'
'I don't think the people need much encouragement to turn against the Spanish,' I said, handing him back the letter. 'He asks for your help. Will you go?'
'Would you?'
'To lead the weak against the strong? Of course,' I lied. With Corput in Duisburg, it was simply impossible to meet Dorothea alone. I worked on Corput more over the following days. 'You are a leader, Corput. You are a mapmaker, after all. You can see things that other people can't - you can see from above.'

I told him of the anger I had witnessed in Rome and in Antwerp, of a people who no longer wanted to pay tribute to a church they felt misrepresented them to their god. I told him about the Spanish soldiers, and their ruthless persistence. I coloured my story, like Ortel did his maps, adding texture where I could not recall the truth. Bart would listen, too, enthralled by my tales.

Finally, the weight of his conscience broke Corput's will. He left one early morning for Breda, with a tearful farewell to Dorothea and a cold and stoic nod from her father. He put his hand on my shoulder and looked me in the eye.
'Will you do something for me, Riven?' he asked. I nodded. 'Look after her.'

Dorothea would not meet my eye as Corput rode through the town gates and disappeared over the first hill. She would not meet my eye the whole walk back to the house, nor over dinner with her parents, nor when she closed herself into her bedroom that night before the candles were snuffed.

With Corput's absence I noticed a change in Mercator's workmen, too. I didn't recall until after he'd left the way they would focus when he entered the room. Even as their junior in years, the young man had commanded an authority that I now sought to emulate. The limp in my leg had lessened with the years, and I now I modelled my walk on Corput's certain stride, as though every step was measured with a straight-edge by map.

Dorothea's father, meanwhile, refused to accept any new commissions.
He would spend hours in his office, meticulously copying lines from his books in his perfect, miniscule script. If I tried to persuade him to read the latest letter from France or Spain, he would respond by enquiring as to my progress in fashioning my tools.

I had not realised until he had left Duisburg that the instruments I had been using thus far were made by Corput. Upon his departure he must have sold them when I asked Mercator where I might purchase my own, I once more earned his scorn.
'How do you expect to call a work your own when it's made with another man's tools?'

I was to seek out the town's blacksmith and - with copper and lead bought from my own pocket - learn to fashion them into the tools of a draughtsman. The work was even more tedious than handwriting. The metal had to be heated and cooled, heated and cooled, heated and cooled until its yellow glow burned a pattern I could still see when I closed my eyes each night. When soft I would tap with a hammer again and again - never a beat too heavy, or the metal would breach and the whole process need be started over.

By evening I would be exhausted, yet would tap at Dorothea's door, again and again - softly, perhaps too softly to rouse her from misery but not so loud as to alert her father. One evening as I swept the courtyard I saw her silhouette in the window. Her eyes were two flashes catching the torchlight, and I knew she was staring somewhere far beyond the city walls, beyond the horizon.

One evening Mercator's wife finally persuaded him to leave the house for a stroll. Of course I knocked at Dorothea's door, but to no avail. I waited, waited, and waited some more, until I felt in my soul that never more would her door be opened to me. Dejected, I noticed Mercator's office door ajar. I pushed it open to find it as it always was; books neatly ordered, papers stacked high, with stones to keep them from shifting in the breeze.

I lifted a page, and noticed a fleck of wax at its edge. Turning it over in my hand I discovered a different handwriting. Mercator had run out of paper, and was using the backs of commission letters. I leafed through the pages to find requests from the farthest reaches of the world: France, Spain, Hungary - even Muscovy. The man was welcome everywhere, and yet wished never to leave his home.

The last letter I lifted dropped from my hands like a white hot flake of metal. I considered leaving it on the floor, but I could not help myself picking it up to look at the strokes of ink there, impossible to ignore. A double-barred cross.
'Lorraine?' snorted Mercator in the workshop the next morning. 'Why should I want to map the forests of Lorraine?'

The commission was from the Duke of that land, an offer to map the disputed territory between France and the rest of the Empire.
'Why should you not?' I suggested.
'I have been chosen for a higher task,' he replied, seriously. 'A map of such complexity, of such richness and detail that not only the land and sea will form its content, but the stars, the planets, the men they have guided and their journeys since the beginning of time itself.'
'And when will that be done?' asked Barbara, Mercator's wife. She was holding the letter I had left on the kitchen table. 'This grand project? When will it be published?'

Mercator's expression changed. 'It is a grander work than any that man has attempted. I need more time. More resources. Do you think books as I need simply fall from trees?'

I pounced. 'Where did Waldseemuller study on the road to becoming the greatest mapmaker the world had ever known? Where are Vespucci's letters that tell of the new lands to the West? Or Caveri's planesphere - the finest and most complete in all the known world?'
'Lorraine,' mumbled Mercator. 'But you do not understand. I am old and weary. My legs are no longer ready for that kind of mapping. Mine is exploring of the eyes and the mind.'
'We could do it,' said Bart, suddenly. He had been listening intently from the corner of the workshop.
'Who?'
'Riven and me,' said Bart, standing beside me. 'He's ready, father. He's as good as Corput. Better, even.'

Mercator nodded. 'Barbara,' he said, 'I have begun to suspect that all of history is a conspiracy, that culminates in the present.'

I was beginning to feel the same way.

## Chapter Twenty-Five - The Cross of Lorraine

The journey through Lorraine gravely imperiled his life and so weakened him that he came very near to a serious breakdown and mental derangement as a result of his terrifying experiences.

Walter Ghim, The Life of Mercator

Spring carried me from Dorothea, and south, to where I felt sunshine for the first time in an age.

Bart and I spent the days surveying the countryside, making sketches and notes and reporting back to Mercator - mirthless and ungrateful as he checked them, with frowns and nods, questioning our mathematics at times, and always correct. It was not until we arrived at the ducal palace in Nancy that the old man's mood changed.
'Gerard!' cooed the woman sat upon the throne to which we were presented, her form drowned beneath the black velvet gowns that spilled to the floor about her. We bowed, and as we rose a young man hurried through a door to our side.
'Mother, I was to be informed before our guests arrived,' said Charles, slowing to catch his breath.
'A queen should be the first to know who comes and goes in her lands,' she said.
'Queen?' I whispered, not as quietly as I had thought.
'Of Denmark, Norway and Sweden,' she snapped. 'Not like your English Queen,' she continued, noting my accent from a single word. 'The fool refused her chance to marry my cousin. She could have been part of the Holy Roman

Empire; now she rules an island of heretics no worse than Margaret's to our north.'
'My mother, Duchess Christina, is still bitter that she was passed over for the regency of the Low Countries,' said the Duke, ushering us through to a hall lined with portraits towards the library.
'Not at all!' barked the Duchess, striding ahead. 'Though I would not have been quite such a puppet to my advisor as she is.'
'Yes, I heard of Granvelle's dismissal,' I said.
She stopped suddenly and turned to face me. 'The good Cardinal is taking a well-earned reprieve to visit his poor mother in Burgundy. That is far from dismissal. I spoke of that cretin, William of Orange - poisoning her mind to favour lay over clergy.'
'So you know the Cardinal?' said Mercator, changing the subject.
'Of course!' she smiled. 'Who do you think recommended you for this commission?'

The man in charge of the ducal archives was named Alix, and after a flourished greeting and grovelling farewell to the Duchess he noticed us with some surprise.
'I am something of a mapmaker myself, you know,' he said as he toured us through the manuscripts and artefacts that lined the shelves. Mercator did not respond - moving instead from globe to chart to manuscript with increasing awe and delight. He would mutter to himself excitedly with each discovery, and as Alix would attempt to introduce an item Mercator would scurry off to another that had caught his attention.

I took my chance to point out the huge standard that hung from a wall over the entrance.
'Where does it come from, the cross with two transoms?' I asked.
Alix was pleased to find a willing pupil, and dragged me to an alcove where the oldest books were kept. 'The Cross of Lorraine? It was the standard of Saint Joan of Arc. The Duke's great-grandfather claimed it along with all of her relics when he defeated Charles the Bold. His father was Philip of Burgundy, Joan's captor, you see.'
'And founder of the Order of the Golden Fleece,' I recalled, disbelievingly.

He nodded as he opened a manuscript to an engraving of the martyred maid. In one hand she held the standard - in the other a lance of faded green.
'This lance,' I said, pointing. 'Would the Duke still have it?'
Alix frowned as he squinted at the engraving, then flicked open another book and leafed through its pages. 'Interesting. The annals tell of Joan carrying a magical espe - a sword or spear - that once belonged to Charles Martel, grandfather of Charlemagne, descendant of Attila the Hun. It was hidden in a legionary arms cache, in the shrine of an Alexandrian saint, until an angel guided Saint Joan to it by the sign of the cross.'
'Then it is possible this espe once belonged to a Roman legionary who had travelled through Alexandria,' I ventured. 'Say, from Libya?'

Alix shrugged as he leafed through another book. 'More than likely. There is no mention of it in the records of the Battle of Nancy. Although, the Duke is King of Jerusalem - a title attached to some relic his great-grandfather
claimed from Charles. A rod of greenwood, I believe, that he claimed was present at the crucifixion.'

As I stared in stunned silence at the image of Joan and her greenwood lance, Mercator approached us from behind.
'About our payment,' he began.
Alix clapped the book shut with a smile, and beckoned towards the small room that served as his office. 'Of course. Four-hundred francs, no less than a man of your reputation deserves. And in return - a map of Lorraine like none before, with the name of Mercator to grace it.'

I entered behind Mercator to find him staring in anger at the wall. Upon it hung a map - a map of, I discovered when I neared it close enough to read the title, Lorraine. It was not a bad sketch, though the lettering was imprecise and the lines uncertain. So accustomed was I now to Mercator's perfect penmanship that all other work looked cheap and careless by comparison. The names of the towns were accented in the French style, and a lengthy French hymn adorned a space occupying more than half the territory the map depicted.
'A French map, for a French Lorraine,' said Alix proudly. 'I told you I was something of a mapmaker myself. The Duchess, that is, the Queen, is most satisfied with my work - but I am merely her humble servant. My name may well as be her own. But yours, yours is a name that will command the respect such a document deserves.'

I stared from Mercator's set face, back to the map. Bart - who had been silent in wonder at all we had seen until now, suddenly stepped forward, a finger pointed into Alix's chest.
'Do you think you can purchase the signature of Mercator to decorate your map of... a graveyard for the enemies of France? A French hymn, to a French God, to celebrate the blood on French hands!'
‘Enough!’ snapped Mercator, silencing his son, who prowled away, his cheeks flushed red.

Alix placed an arm around Mercator's shoulder, and brandished a bag that clinked with the sound of silver inside. 'Four hundred francs, for just your name. And access to the archives - for as long as you wish.'

Mercator looked at me. Then he took the money. I hung my head.
'We shall complete our survey of Lorraine as requested by the Duke,' said Mercator. 'And it shall appear as I intend it to appear: truthful. I teach my men the value of a map is as good as its fidelity to the truth. What would you have them believe?'

I looked up. Bart grinned proudly, and followed his father out of the room. Alix hissed and caught my arm as I moved to follow too.
'I shall complete my map - with or without your master's consent.'

We stayed no longer in Nancy - travelling east to continue our survey. Bart and I exchanged furtive, excited accounts of Mercator's defiance to the villagers we met along the way - expecting them to bristle at the gall of the Duchess in her effort to gratify herself to the French court. Instead, upon hearing of Mercator's stand, they would keep their distance and refuse to help us with directions. It was as though they did not want their homes to appear on a map even though penned by the hand of Mercator himself.

We soon found ourselves lost somewhere in the north-east, as one village began to appear like another, and the forest became thicker. Finally, one evening, night fell while we were between towns - too far to track back, and no certainty of where the next town lay. I offered to make a camp, but Mercator refused to spend the night in the woods - insisting we press on until the next village. As we argued, Bart stared into the darkness. I motioned Mercator quiet, and Bart pointed to where a light was visible, flickering between trees in the distance.

Before I could stop him, Mercator was waving, and shouting. 'Hello there!'

The light split into two lights, then four, then eight, and we heard the sound of boots landing heavy on leaves, and the clink of armour. Within moments we were surrounded by soldiers in Spanish uniform.
'Thank the Lord,' said Mercator. 'I feared we might never be found!'
The captain of the guards drew his sword. 'You were right.'
I grabbed Bart by his shirt and ran, but the guards were prepared and reached us before we had taken more than a few steps. As I struggle against their grip I heard a sudden screeching cry. From the bushes leapt a huge creature, covered in grey fur. It knocked the soldier to the ground, and warm blood spattered my cheek as I dropped to the ground. More creatures dropped from the trees and rose from the undergrowth, slashing at the soldiers who swung at them, catching one or two with a blow from their swords, but their attackers were too fast and brutal. I remembered the skeleton I had seen in the grave in Basel - halfman, half-beast.

When the captain of the guards dropped, eyes glazed, I peered up at the grey figure that loomed over us. Its eyes were those of a man, but wild, glinting
within a wolf-head hood above a grizzled beard. He dragged me to my feet by my hair and growled at me, pointing. I walked in shock, falling behind Bart. Mercator was gone.

They were a tribe of savages, and spoke no language we had ever heard. We did not know what they wanted, only for us to walk when and where they walked. They fed on the creatures they caught in the woods, all game and sinew, and we sucked the scraps and juice from the bones left over.

How quickly life turns from the torment of choices in a plan unseen, to mere survival. The sunlight that had been so welcome disappeared behind a veil of cloud, and darkness consumed the woods and us. I had stopped counting the days and nights by the time we reached the mountains. The bearded man led us towards one peak that looked much like the others, to where a ravine carved into the earth beneath a canopy of twisted trees.

We marched towards where it vanished into the rock face, and the mountainside consumed us through a narrow crack that split the stone, turning it from grey to muted green. I hesitated at the entrance, where a shadow in the wall morphed in the flickering torchlight into a symbol: a circle, and a cross. A sharp shove in the back and I descended into the abandoned copper mine, where the air was thick and heavy, hung low with an odour of a sour, resinous perfume, and I was swallowed beneath the mountain.

## Chapter Twenty-Six - The Venusberg

Wantonness and remorse were once at war, each went and to Jupiter complained, Who prescribed a remedy therefor, but both from amending their ways refrained. He therefore, grown irate, deigned to respond by coupling them with a steel chain. And thus it has always been: wantonness and remorse inseparable remain. Dirck Volkertszoon Coornhert, ABC Book, Chapter W

The next time I woke, I thought I had gone blind.
Pain in the back of my head told me I had been struck, or had fallen. Water dripped on me from above. Slowly my eyes caught shades in the dark, beyond the mere tricks that fill a man's vision when the light has gone. I had been thrown into a pit. An iron collar scratched at my neck. A scraping sounded to my right, and I peered into the swirling black to find not Bart but the figure of a girl, dirty and thin, a collar around her neck too. Her fingers danced across the rocks, and as I crawled towards her she began to hum a moaning, frightening tune. I croaked at her, but I could see that even were she not mad, she was almost certainly deaf and blind.

Her chain and mine were one and the same, disappearing up through a hole high in the roof of the cavern. When she moved, my chain tightened; when I moved, hers.

Hunger soon clawed at my gut, twisting my insides like a snake. As I lay in the dark I tried to reason why we had not been killed - or, at least, why I had not. Why let us starve to death? Then I remembered the stringy, mangy vermin that the tribe had caught and savoured so in the forest. I had thought then that prey near death might offer less fight than a quarry more plump and spritely. But
now I knew the truth - starved meat was the only taste the tongues of these savages knew.

Cowering there in the dark, chained to the crippled waif, I cried, and I prayed. It was not like the prayers I had offered up to the cross and the saints in St Paul's as a boy - those well-rehearsed exchanges, polite little bargains, trading the virtue of the future for the vice of the past. Nor was it the oft whispered prayer of cold dark nights, those begging, fearful pleas, for a holy water rain to wash away the ash and filth. This prayer was a song of anger. It was a rising hymn of fury, boiling from the juices deep within my empty centre, freed of plenty, at a mad and rabid god who had left his world to rot and crumble. This was a threat: if I were to meet my maker in the next world, then he would pay.

I pulled on the chain, hard. I forced my empty bones to move, hauling hard. She clawed at the air, and at her collar, and I felt her pain stab my heart, begging my fingers to slacken her noose, but I forced my pity down into the bile and pulled harder and harder. Her toes left the rock and she rose with each tug. The clawing stopped by the time she passed through the hole, and by the time the chain held fast in my hand my strength had nearly left me. I hauled against the weight of my own body - nothing, as it was, but like iron to my weakened arms.

Up I went, inch over inch, until at last I felt the cool air of the cave on my fingers and I was free of the pit. She was waiting at the top, limp like a doll but for her neck that tore at the iron ring through which our chain was looped - her gallows, now.

I coiled the chain around it to stop it dragging me back into the abyss, and as I was about to collapse from exhaustion I saw two eyes watching me. He was a small figure, no more than a boy. In one hand he held a long, thin, tree branch,
and in the other a ring with a rusted key. He was, I supposed, my guard - though his look of puzzlement convinced me that no one had ever left the pit; no further thought ever necessary for preventing escape. After a moment he reached up and unlocked the collar around my neck. He offered me the branch.

Ahead, the cool air blew in from the cave entrance. I was about to leave, when I remembered. I turned back towards the darkness. I was about to take a step, when I realized that a drop into another pit would break my neck. I turned back to the boy, and took the branch.

Tapping it ahead, I made my way through the darkness until, enveloped by the darkness, the branch clanked against another chain; another pit.
'Bart?'
I heard no answer, nor from the third or fourth pit, deeper and deeper into the mountain, until finally, as I was beginning to give up hope, I heard a voice.
'Riven?'

The boy was gone - they were all gone - as I dragged Bart up and out of the Venusberg, into the rain, that blessed and baptised us. He threw his arms around me and wept, in great shuddering breaths, and, when he had emptied himself, he collapsed into a deep sleep.

I half-dragged, half-carried him, supporting myself on the branch that served as a walking stick, not stopping until we had left the valley - not even turning back. I wanted no landmark in my memory, no way to retrace my steps there. The Venusberg would not appear on any map in my mind. With each step his body felt heavier, but I willed myself onward - not a will to live, but a will to distance myself from the horror behind me.

Soon he awoke, but could not remember what had happened. Perhaps he did, and would not bring himself to speak of it. Whatever the case, I felt myself forgetting too, with every step, until the ordeal was like a dream that fades with the rising of the sun.

At long last Duisburg appeared on the horizon. It should have felt familiar, it should have welcomed me like an old friend. I had mapped every step of it with Corput, I knew it better than it knew itself. But instead it was cold and different. Nothing had changed, except for me.

Bart's pace quickened as we passed through the city gates, and mine slowed. As we neared his house I felt as though I was walking through water. I stood at the entrance to the courtyard and watched as Bart ran to his mother, who fell to her knees, tears streaming from her eyes. I looked to the house and saw the old man - Mercator. His eyes were sunken into his skull, his beard white. He hobbled to his wife and son and met them in a loving embrace.

Only Dorothea, who appeared in the doorway behind her father, saw me. Her eyes were filled with tears as well, and she held her arms open, beckoning. I shook my head, and turned away. Now it was easier to move. I ran, unable to find any warmth in my chest, my feet pounding against the dirt in the road.

She was not mine to love. Not me, a wretch, a twisted, transformed vessel of $\sin$.

Her love was in Breda.

Europe had changed since my time under the mountain. In Rome, the Pope whom I had watched Dee outwit was dead, replaced by a man loyal to the

Inquisition. The Low Countries were starving due to ice and war sealing ports to the north, and the price of grain doubled, then trebled.

In every town through which I travelled, two houses thrived: the churches and the inns - though the level of thievery and prayer in each was equal. At Breda, I elected the inn as my safe haven. It was called The Tree, named for a wooden cross captured from the Danes by the people of Brabant; but in my mind it was The Tree of Eden, whose wood had followed me my whole life.

Inside, I found Corput. When he saw me he stood from the table where I sat, crossed the floor to meet me and punched me hard in the right cheek, sending me sprawling backwards onto the floor. I did not fight back - even when he dragged me to my feet again and threw blow after wild blow, sending me across the room, over tables and chairs. I welcomed every flash of pain, like a cleansing fire, until he grabbed hold of my hair and raised his fist - his eyes red and wet. But then he stopped, lowering his hand, his whole body slumped like a man defeated. He walked to a shelf behind the bar and pulled a bottle down, and a glass. He poured a measure of something brown with an odour that stung the nose, and handed it to me, before slumping to the floor, his back against the wall, and swigging from the bottle.
'She never loved me,' he admitted, before I had even spoken. 'But I loved her. I did. You've never felt that before, have you Riven? You've never wanted something so much that you worried it might actually kill you, just the longing? Then, to have it taken from you...'

I lowered myself painfully to the floor beside him, and drank.
'In Muscovy,' I began, the memory hurting, 'there was a girl. The sailors had taken me to the whorehouse - to make a man of me, they said. She was shy. I
was too. We just sat together, the whole time, until our time was up. I saw her every day we were in port, until word came it was time to return. If I had the chance to see her again...'

I wanted to cry, then, but I could not.
'You're lying,' said Corput. 'But something in your story is true.'
'It is no lie,' I said - though it was not all the truth, 'and you can see Dorothea again.'

He shook his head and stood again. 'I have duties here.'
'What duties?'
'Have you been living beneath a rock?' he said, bitterly. 'A war is coming. The nobles are gathered here in Breda - princes of the house of Nassau, and their followers. They prepare for negotiations with Spain, to free the people of the Low Countries.'

He pulled a scroll from beneath his jacket.
'I am to deliver the names of my father's friends who will pledge themselves to the cause. If the governess decides it is treason - I may never return.'

I held out my hand.
'Let me do it. Return to Duisburg. Give me this last redemption, please, Corput.'

He hesitated. I closed my fingers around the scroll.
'You let me help you with your map,' I said softly. 'You know better than most where you are in this world. Let me help you one last time.'

He released his grip.
'There is a mansion outside the city. They ride from there tonight.'

I nodded. As I passed back through the doorway Corput called out behind me.
'My map is finished, Riven.'

## Chapter Twenty-Seven - The Compromise of Nobles


#### Abstract

With whatsoever name or fashion it is lawfull to call upon thee, I pray thee, to end my great travaile and misery, and deliver mee from the wretched fortune, which had so long time pursued me. Grant peace and rest if it please thee to my adversities, for I have endured too much labour and perill. Remoove from me my shape of mine Asse, and render to me my pristine estate, and if I have offended in any point of divine Majesty, let me rather dye then live, for I am full weary of my life.


Lucius Apuleius, The Golden Asse

I screwed the scroll into a ball, and tossed it into the river.

The bruises on my face were tender, but I cleaned my cuts as best I could and washed the fresh blood from my clothes - an act which was becoming familiar. I felt uneasy when I stood, shaking the water from my hands, and wondered why the sense of guilt had not washed away also.
'Riven?'

I did not recognise the man at first, dressed in a fine black coat and carrying a leather satchel on a rope over one arm. A memory of Basel stirred, of the graveyard and the Danse Macabre, and the face of John Weyer before the lines of age had etched it.
'It's Diederik,' he said. 'You visited my father, with the alchemist, I believe.'

I walked with him as he recounted how he had witnessed our conversation that night in Basel, and his father's obsession with demons thereafter. It seems Weyer believed that Dee had summoned some dark power that night, and had plunged himself into research to account for what he had seen. I remembered his notion of the illness of the mind, and pressed Diederik on it.
'He believes there is a cause for all things, even the will of madmen' he said as we arrived at the gates of a mansion outside the city bounds, his arm around my shoulder, as the guards motioned us through.

So it was, despite my intent, that I bore witness to the gathering of the League of Nobles, led by Louis of Nassau that day. The prince, I gathered, had already appealed to the governess for clemency over a people for whom Spain held no interest. The crowd of gentlemen was restless; a frisson of anger rippled through them, as Louis addressed them from atop a makeshift stage in the mansion's grounds.
‘Count Lamoral was laughed out of Spain!' cried a voice, to a confirmatory jeer. 'The people are starving! The edicts of Trent are smeared in the blood of innocent Protestants!'

As a furious cheer resounded, I smiled to myself at this boy's protest; the smile of a man who had spilled blood himself, who knew how it smelt and how it stained. Upon the stage Louis raised his hands in vain, attempting to quell the air of discontent that hung like a vapour ready to ignite. At his side, reclined in a chair, sat another man, silent, and brooding. He raised a fist to his lips and cleared his throat, now, and the crowd hushed - unused, I presumed, to this man's address.
'My brother's offer was rejected by Spain,' he said, as Louis stepped aside to allow this interruption. 'He asked for freedom; a price higher than any other. It should come as no surprise, the vendor declined. They call us heretics for we reject their relics; for they know their power is only as good as these cheap conjuror's talismans. But we are not warriors, my friends. We are merchants; far more dangerous. Thus, as merchants we shall act.'

Voices from the crowd responded. 'Where is your name on the petition? Why should we sign our own death notice for the Inquisition?'

He stood. 'It is true. In Bois de Vincennes I could have loosed an arrow through King Henry's neck when he called you vermin. I could have cut his throat when he planned with the fetid Duke of Alba...,

The name elicited a chorus of hissing, and the man raised a hand to silence it.
'...that rabid, foaming guard-dog of Spain, for the Inquisition that now looms over us like a blood-red evening storm cloud. Instead I played the diplomat. Instead I held my tongue. Instead I was Silent.'

He paused, the crowd waiting, anxious for his words.
'I will be William the Silent no longer,' he said as, with a flourish, he drew a quill and paper from his pocket, and signed his name. They were handed to the first man in the crowd, who signed also, and one by one the signatures of the men in the crowd were added. The page passed over my head to Diederik, who signed on behalf of his master, a wealthy count, and I realised what I had thrown away along with Corput's scroll.
'Let me ride with you,' I begged Diederik.
'Why?' he asked, bemused.
'I think this is where I am supposed to be,' I said. 'What William said moved me: I neither wish to be remembered as Silent. I must be there when this happens.'

He clapped a hand on to my shoulder and nodded, a like a brother to brother. A horse was arranged for me, and soon I was riding alongside him with the ranks of the nobles on the road from one mansion to the next, each one
grander than the last. I wondered how men with such wealth could be moved to petition their regent over something that could not be valued.

On the morning that we were to march to Coudenberg Palace, where Margaret and her ministers awaited, William broke his silence once more. He stood before the gathering and, when all eyes were upon him, unbuckled the sheath of his sword and dropped it to the ground.
'We march unarmed,' he announced.
There was disconsonance in the group, as hundreds of nervous hands closed for the hilts of their swords. I watched them, these men who had been taught the chivalric code, who believed themselves the heirs of the ancient orders of knights; they were less comforted by the weight of words than cold steel.
'Her men will cut us down the second our toes are through her gates,' argued Brederode, a friend of Louis'. 'Let them drop their swords if we are to do the same.'
'This is to be a negotiation,' cautioned William, 'not extortion. What good is a petition of signatures if it is merely the cloak over a thousand blades? The paper is our sword, not our shield.'

Brederode, moved by the words, unbuckled his sheath. Raising it high so the crowd could see, dropped it to his feet. Without joy, in reluctant solidarity, the men each unfastened their weapons and handed them to their aides for safekeeping in the mansion's armoury. I looked at the faded green staff in my hand. Was it a weapon? I didn't need it to stand anymore; but it brought me comfort. I decided to keep it.

The only sight more impressive than the formation of the league as it marched to the gates of the palace was the phalanx that flanked the entrance pathway, pikes at the ready. If William had announced that the party would be unarmed, he had either been ignored or distrusted.
'Berlaymont!' called Louis as he marched forward, hand outstretched, towards the man who stood in the centre of the pathway, sword at his side. The count's hands remained behind his back.
'Is treason to become a regular part of the lives of the gentry?' he growled. He signalled to the guards, who pulled the gates shut behind our gathering. The armed guards tightened their grips on the handles of their pikes. I tightened my grip on my staff.

William strode to Louis' side. 'We are unarmed, Berlaymont. You have us at your mercy.'

The count considered William for a moment, then turned his back on him, leading the way to the palace doors. Louis signalled for the league to follow.

Margaret de Parma looked small in her throne, and frightened, even as the unarmed nobles assembled within the walls lined edge to edge with guards. Berlaymont took his place by her side. Louis stepped to the base of the dais, the other most senior counts by his side. William lingered behind them
'Here they are then,' spat Berlaymont. 'The traitors.'
Louis lunged towards him, finger pointed. 'Take back that word.'
Berlaymont glanced sidelong at his captains, who had moved forward, hands on their hilts. He grinned. William moved to Louis and placed a calming hand on his shoulder.
'Hold, brother,' he said. 'Count Berlaymont would like nothing better than an excuse to order his men on us. But, again, I say - we are unarmed.'

Berlaymont descended the dais and met William eye to eye.
'It is not I who seeks just cause,' he hissed. 'His Majesty is waiting, waiting for the call to let loose the leash on his hound Alba.'

The name sent a shiver of unease through the assembled men - guards and nobles alike.

William raised his hands gently. 'And that is not a solution any of us desire. We have no need of an Inquisition in Brabant or the Low Countries.'
'Not what I hear,' scoffed Berlaymont. 'Granvelle left Brussels bearing tales of conjury in his own house. There are rumours that Suleiman himself seeks an alliance with the heretics of these lands. How do you expect Philip to leave the ruling of his lands to a handful of fools?'

William reached beneath his cloak and pulled out a chain, from which hung a small medallion.
'I am a knight of the Order of the Golden Fleece, along with Count Egmont and Count Hoorne.' The men so named stepped forward and bowed low to Margaret. 'With His Majesty, and the Holy Roman Emperor, we have sworn to defend Christendom from its enemies, both within our own lands and without.'

Margaret stood from her throne, at last.
'Berlaymont, let them bring forth their petition.'
Louis bowed to her as the papers were presented. 'For more than two hundred years, the people of these lands have been protected by charters, born in feudal times from the codes of chivalry. These charters promised the people that those who ruled them would represent their interests - in matters of war, taxation,
and law. Our people were promised the protection of their lords; yet their lords are forced upon threat of execution to turn them over to a foreign Inquisition, paid for by their own taxes.'

Berlaymont stepped between Louis and Margaret.
'For the crime of heresy, you forget.'
'Even the Catholics cannot agree that the words of Calvin and Luther are heresy.'
'They do not need to agree with one another, only their Pope and his King!' barked Berlaymont, his cheeks burning with indignation.
'And we humbly beg the consideration of our King,' said William. 'Though we fear the cries of pain and anguish from our people may not carry all the way to Spain.'
'It has been heard,' responded Berlaymont. He pointed at Egmont. 'It has been heard, and refused. King Philip does not negotiate with his enemies; he crushes them.'
'When did the King call his own people his enemies?' demanded Louis.
'When they ordered him to forgive their heresy!' shouted back Berlaymont.
'Enough!' cried a small voice. It was Margaret. Her eyes were glossed with tears - not of fear, but of pity. 'I will present your petition to His Majesty on one condition.'
'Name it, Your Highness,' said William before Louis could respond.
'You keep the peace in the Low Countries,' she said. 'No bloodshed from your people; no executions of the heretics until such time as His Majesty replies.'

Berlaymont wheeled on Margaret, astonished. William looked to Louis, who glanced between the other counts.
'Agreed,' he said at last. Louis signalled to the noblemen, who turned to the back doors. My place at the back of the crowd became the front, and I found myself facing the armed guard who blocked the door. He glared at me, daring me to move forward. I did.
'You heard Her Highness,' I said, my voice calm. 'Stand aside.'
Realising he had no other option, he did, and I stepped forward, pushing the doors aside to make way for the grinning nobles. As they marched out into the sunshine, the gates of the palace were opened before them.

I waited at the door see Berlaymont following Louis and William at the rear of the parade like a wounded jackal. He turned back to address Margaret, now slumped back in her throne.
'They have lost control of their estates, their land, their people - and still they think themselves wise enough to advise Your Highness? Is Your Highness really scared of this wretched pack of vagabonds... these beggars?'

Count Brederode, the largest of the counts at William's side, wheeled back on Berlaymont, causing him to stumble backward in surprise.
'Beggars?'
He fished into his pocket and pulled out a coin, flicking it at Berlaymont so that it bounced off his chest and rolled to a tinkling stop at his boots.
'Show me the beggar who pays tax to his king.'

## Chapter Twenty-Eight - The Golden Fleece


#### Abstract

For you it is the will of heaven and destiny that ye shall return here with the fleece; but meanwhile both going and returning, countless trials await you. But it is my lot, by the hateful decree of a god, to die somewhere afar off on the mainland of Asia. Thus, though I learnt my fate from evil omens even before now, I have left my fatherland to embark on the ship, that so after my embarking fair fame may be left me in my house.


Apollonius Rhodius, Argonautica

Diederik insisted I join him as guest at the celebratory gathering at Count Culemberg's mansion.

We entered the main hall amidst the throng to find tables straining beneath the weight of trays of meat, exotic fruit, bread and cheese and pitchers of oil, beer and wine. It seemed that the slur of "beggar" had inspired a hunger for opulence beyond that which had already been planned.
'It was Dee, wasn't it?' asked Diederik as we helped ourselves to the food. 'Granvelle's conjuror, I mean. He seems like the kind of man whose very existence causes ripples.'

I knew what he meant. I thought back to our escape from Granvelle's palace; to the chess game in Rome. Dee seemed able to summon the impossible, though I was certain nobody's God was intervening on his behalf.

A great roar of laughter suddenly sounded throughout the hall. On one of the tables Brederode stood, kicking aside trays of food. He was drunk, and he wore a tattered robe of rags. In his hand he rattled a coin in a filthy bowl, performing a pantomime of a beggar.
'Beggars! That's what they call us? Then that's what we are! The Beggars!'

As these wealthy men joined in the chant, I saw a figure moving through the crowd handing out medallions. They glinted, the flash of light on gold, as each man fastened his over his heart. When he came to me, the man pressed the medal into my hand before our eyes met. He grinned.
'I remember you,' he said. 'You're the alchemist's apprentice.'
I grabbed his lapels, and his bag of medals clattered to the ground. He raised his hands in surrender.
'And I remember you, Jacques Jonghelinck,' I said. 'Granvelle's sculptor.'

He raised his hands in protest. 'Not Granvelle's! Money is the same colour no matter your patron. You would know that better than most!'

I let him go, wondering whether that was true.
'Dee was no mere alchemist,' I said, as I helped him pick up the medals.
'How else could he have known how to make that explosion? Prayer? Ha!' he laughed, handing me one again. It was curved like a crescent moon, with letters around the edges. 'Black powder, high explosives. Quite ingenious. Positively Paracelsian.'

Liever Turks dan Paaps. Better Turkish than Papist.
'What is the meaning of this?' I demanded. The sculptor gestured to where William was climbing on to the table beside his brother, hushing the crowd with his hands as he raised a page.
'Word has arrived from the East. Suleiman supports our cause - he pledges anything we need to help in our war against Rome.'

Of course he does, I thought, as the cheer rose up. The Turks have been fighting a war with Rome since the fall of Constantinople. Suleiman isn't
supporting us - we're supporting him. Money is the same colour no matter your patron.

Jonghelinck smiled at me and held up a medal. 'You see, now? This is the real magic - when you can hold faith in your hands. That is the power of sculpture.'
'But isn't this the source of the problem? Trinkets like these that draw faith to them?'

As he wandered away to give them out he said, 'Some men wish to carve something deeper than a grave on the face of this world to leave behind them.'

Outside, in the cold night air, my mind wheeled. It seemed the world was turned on its head. I had met men who seemed free of God's will. Those who fought for the good of Christian faith were allied with the Muslims of the East.

I felt a tugging at my coat, and turned to see a haggard, wretched face, pocked with sores, hair unkempt, peeking out from beneath the finest velvet robes. This beggar's hands were cupped, his bowl bought from him by Louis, and though the traded robe kept him warm from the night air he still had nothing to fill his belly.

I tore from his grasp and staggered into the night. Outside the mansion, outside the cities, the heretics were gathering, each praying in their own language, by their own rites, each convinced that God understood them alone. How I envied them their faith. How I longed for some power to call down from above, to light the way ahead of me and dowse the fires of my past. I stared into the sky, to the stars that moved in the patterns only men like Dee understood.

I realised, now, that joining William's men could not drive the shadow that had lingered in my mind from haunting me. Only God could forgive - that was the great attractor to the faith, the spell that brought men back when all their faculties failed them.

I returned to the Catholic church, finding the first in a small town, where the priest was sympathetic and the parishioners hungry. Famine was clawing across the land and, though I had no doubt William and his league were feasting in the mansions, the common folk sought answers in the mansion of God.

I served as acolyte, mouthing the words of the liturgies, watching the effect each hollow syllable had upon the congregation. I saw the Eucharist dissolve upon the lips of each starving man, woman and child, the watered-down wine unquenching, like vinegar. Upon their knees they fell before the sculptures of the angels and the saints, before the crucifix where the figure hung, wracked, His side pierced by the lance, the staff, the branch of the tree.

Many of them attended the heretical gatherings in the woods each week, returning to the church to show their faces lest the purging recommence. I saw the fractures in their hearts and minds at each service; the movements of their lips an empty gesture, like my own.

One day the priest began his sermon with a triumphant exultation - King Philip had rejected the Beggars' petition. The news met with silence, and a few fingers danced the sign of the cross across the shoulders of the faithful. I was distracted, though.

From where I sat in my place in front of the altar, a strange illusion caught my eye. Whether by some trick of the sculptor's design, or the light streaming in
through the oculus, it appeared as though the eyes of the crucifix were fixed upon me. I met his gaze for a moment, before noticing the statue to my left; Teresa of Avila, I believe. Her eyes were staring at mine also; so too those of Gabriel, the archangel, who loomed from a ledge on a column by the confessional. Every pope, demon and saint rendered in stone was glaring in condemnation at me. I could feel their gazes scorching my skin, and rose suddenly from my seat.

The priest stopped, startled by my movement, as I wheeled, stumbling from the blazing stares of the stone sentinels. Only... they followed me. Across the altar their heads turned to watch. Behind the confessional more faces appeared - devils and beatitudes, unblinking, accusing. I choked for breath and turned to find the face of Christ staring down, arms outstretched. Lifting my staff, I swung hard, wrenching his body loose from the cross where it crashed to the floor.

The angry cries of the priest were distant thunderclaps in my ears as I raised my staff and crashed it into the eyes of the statue, again and again, scratches splitting into cracks, until the stone broke away. The hands of the priest were upon my arms for a moment, when he was dragged off me. I turned to see three of the congregation, thin, dark men, their eyes sunken by labour and hunger, haul the priest aside. Two more came towards me, but moved on past - to the statues that stood behind me. Lifting chunks of the broken Christ in their hands, they crashed blows down upon the other statues, wrenching them from the alcoves in great heaves.

A few women shrieked as the desecration began, fleeing through the doors of the church past men who entered bearing axes and clubs. I watched as they slaughtered the sculptures one by one, the faces of stone shattering into dust.

My eyes were on the priest, who just watched, his mouth open in horror. Hatred seethed through my veins as I saw in him every sin I had ever committed, laid bare - a cowering, shivering wretch, too afraid to fight even with God on his side. It was as though I was watching myself from above, through the oculus, perhaps, as I hauled him to his feet and dragged him across the altar to the baptismal font. He barely struggled as I plunged his head beneath the holy water, absolving him of his sins, of his faith, of the last of his breath, until his body went limp within his vestments and I let him slump into the rubble that had gathered at my feet.

They had set fire to the confessional by now, and the flames spread to the linens and pews. Smoke was filling the church, and I raised my arms by my side, waiting for the blaze to consume me... but instead hands grabbed my arms, dragging me out into the safety of the night air. The throng watched their work with a grim satisfaction. As I watched, the only thought in my head was that I never even learned the priest's name.

They called it the Storm of the Statues. Across the land, angry mobs stormed the churches and smashed to pieces every image they could find. The bones of saints were ground into powder; every object that was claimed to hold the power of God was destroyed - and with them, I believed, God's power on Earth was crushed too.

Almost immediately, reports spread of Spanish soldiers crossing the borders into the Low Countries. Orders were issued everywhere for the arrest of the petitioners. The list of names was now a warrant - the names of William and Louis the first upon it. Blame was laid upon them for inciting the riots, and
demands were made for the counts to surrender themselves to Spain for prosecution. Despite my crimes, my name appeared on no list.

For a time I felt I had been blessed, pardoned by some turn of fate that had kept my identity from any official. Soon, however, I realised that I was not important enough to warrant an arrest - that my name was meaningless in the great war that had fallen upon the Low Countries.

This angered me, and I resolved to turn myself in. The first town I came to I harassed the local Spanish captain - thinking to boast of all I had done - but he simply did not believe me. He was searching for a local count who had supported the petition, and when I admitted I did not know the man the captain rode his horse onward, leaving me in his dust.

No murderer would confess as I confessed, reasoned every soldier I met. Though all I desired was the absolution of an executioner's hand, I had watched the confessional burn; all I received from the soldiers were beatings for wasting their time.

Finally, in despair, I took to a platform in a market square and offered another story. This one was of a mystical tome by a tormented Abbot to whom spoke the hosts of angels and demons, whispering of a magic staff that was older than men and contained the power of God. The further I journeyed from the truth, the more bewitched my crowd, and I soon travelled so far upon my words that I could not find my way back again. My tales attracted clergy and lay alike, but still the soldiers would not take me. They listened, mouthing unheard words in each others' ears, and turned their mounts away on the westward roads from where they'd come.

I had been warned my words might summon the Devil. When the Duke of Alba arrived one evening, riding a pale horse, I knew they had. My crowd retreated like mice into doorways and alleys as he trotted to a halt at the head of five men, and listened as I spoke with the calm certitude of the priests I had watched as a boy. After a time he raised a gauntleted hand to hush me, then turned it to beckon.

Light, as though on air, I walked towards this spectre of death who towered over me from his horse and stared into the dark eyes that caught no light beneath his visor. He stared back, searching for something in my face and, when at last he found it, he motioned for the man at his rear to seize me.

# Chapter Twenty-Nine - The Northern Lights 

Ordering Tacticall, the helpe of his Geometricall instrument: Ring, or Staffe Astronomicall: (commodiously framed for cariage and use) He may wonderfully helpe him selfe, by perspective Glasses. In which, (I trust) our posterity will prove more skillfull and expert, and to greater purposes, then in these dayes, can (almost) be credited to be possible.

John Dee, Preface to Euclid

Happy at last, I waited in my cell to be summoned before the executioner.
It was larger than the one in which I had been held in London, with a bench and a table, upon which a diamond of light fell from the small window set high in the wall. I wondered how many other men had waited in this same room, nothing to do but think on their sins. Now I knew why the saints were so revered. The martyrs who faced their deaths must have found a peace as I did in their darkest moments before the end - as though that moment of grace was the secret that their whole life had been conspired to conceal.

But moments end, and moments of grace most of all. The blackness around me softened into shadow, and when no one would answer my calls at the cell door, I once again felt the familiar tightness in the gut of simple, vile, corporeal hunger. If there was a sensation that bonded men, I realised then, it was hunger. On a full belly men were free to catalogue their world, praise their gods, plan their wars and make their maps; in hunger, all man can do is beg for something to fill the void inside him. It is not the heart at the centre of man, no more a sack than the seat of his desire; it is the stomach, that empty yawning vessel at his core that abhors the vacuum within him. For the hungry man something rotten is always better than nothing at all; so too for the hungry soul.

The door opened, and as I dragged myself from the floor I saw the figure of the Duke of Alba, still in his armour, enter. He placed the palm of his gauntlet upon the table, as though he could feel its texture through the steel that shielded his flesh from the ill and breathing world.
'Tell me about this book of yours,' he said, in a voice as soft as the first low rumble of a coming stampede.

My face must have folded into the mask of a fool, for he thumped on the door and ordered the guards away. They returned a moment later with a bowlful of slop, some wettened grain from the stables, perhaps, which I pushed between my lips and chewed down, unashamed.
'What book?' I gasped, when I could suffer his stare no longer.
He motioned the guards away once more, and pushed the door shut, its hinges groaning until the wood struck home.
'The Steganographia,' he said, and sat upon the bench, gauntlets clasped together as though in preparation for prayer. 'You see, I know of your adventures, young Englishman. I know all about you. I know you are a spy. I know you are a sorcerer. I know you make maps. And I know you know a secret of some great power.'

He shifted, moving his gauntlet through the fading light, watching his shadow on the table.
'Now, you may know some things about me too. You may know I am the sword of the king, here to bring peace to the Low Countries. You may know I am a Catholic. You may know I belong to a sacred order, who has taken an oath before the eyes of God.'

His hand reached to the collar of his breastplate, and he pulled at a chain that hung around his neck. Upon it hung a gold medallion; a fleece. It was impossible. The Duke of Alba, of the same Order as William?
'Tell me the secret of the Abbot's book, and I promise your death will be swift.'

Now my hands were pressed together, as though to this man I offered my prayer.
'Please, sir, you don't understand. The Abbot's book was just a book - a manual for concealing the truth, nothing more. There is no secret to be had.'

He listened to this with a sigh, and nodded, but it was a gesture of acceptance for a lie he had expected, not of belief. Then he leaned forward.
'I will feed you,' he said. 'Not feeding you was a mistake, for which I apologise. I do not wish you to starve to death before you give me what I want. You will have physicians, too; we have captured many of the finest. By day they shall reverse the work of my inquisitors, and make you ready again each evening.'

The last of the light faded at his fingertips, and he stood.
'Let us begin.'

The dungeon that had been prepared for the inquisitors was not dissimilar to the laboratories I had visited in my travels - workbenches, instruments, cauldrons, ropes and pulleys, all prepared for a grand experiment. The workmen themselves were the same also; eyes dulled by the drudgery of their work, furrows lining their foreheads from frowns of concentration.

They taught me a pain that I had never felt before. Given the chance to write my story ahead of my fate, I would like to have imagined I endured with a
grim determination and a stoic resistance to the carefully rendered agony that entered my flesh. But in truth they broke me, with the merest of efforts.

Upon the rack the gristle that tugged my bones burst and cracked. I saw the cadaver upon the slab in Padua, sinews stretched and snapped like rope, muscles swelled and split like wood in rain. That body had been a map, upon which now white hot flame now branded new rivers and valleys. My throat emptied itself of screams too soon, but they echoed on inside my skull with each turn of the screws, each lash of the whip, each spark of molten steel against my skin. And all the while I prayed for death, for a secret to divulge, some lie to trade for mercy, but there was none.

Each morning they dragged me, comatose, back to the cell, where physicians bound in leg irons would tend my ragged, lifeless form and keep my wounds from festering. They worked under threat that the man under whose care I died should take my place in the dungeon, and the Virgin Mary herself could not have shown more care in nursing a wounded man.

Then the Duke would visit again, his question always the same, no answer ever satisfactory, and down again they would take me.

I prayed for death, but it never came. I would sink into blackness, and believe myself to have passed on to Hell, only to come swimming back to reality to find I was living in Hell. Then, in a moment of clarity, I realized that this was the secret: life was torture, waiting for an answer that would never come. You simply had to decide whether you were the heretic, or the inquisitor.

One night the Duke came for me, but without the guards. I was too weak to fight back, but the Duke seemed to be in an unusually good mood.
'We are in luck, Riven. An inquisitor has arrived from a distant land, with skills beyond my men's. He has knowledge of the body like a physician, and of metals like an alchemist. Would you like to meet him?'

He left the door to my cell open as he left, and a shadow entered. Fear gripped me, and I wondered what new Hell awaited. It reached out a hand and pushed the matted hair from my brow, to see my eyes. I looked up, an effort itself, and saw a pair of orbs that had lost their glint.
‘Dee?' I croaked.
He reached into his cloak and pulled out a flask, raising it to my lips. I tasted the familiar, bitter oil of the sleep-bringer, and sucked it in, choking.
'It is good to see you, my friend,' he smiled. 'You must know by now that we succeeded. Her Majesty's enemies are engaged in war against one another. Britannia shall rise, victorious, an Empire greater than any. Lord Cecil is most pleased with your work.'

At once I saw how Dee had achieved victory in Rome. A war could be won blind if your enemies were made to fight one another, instead of you.

He knelt by my side and smiled at me. 'Tell me the truth about Anael.'
The sleep-bringer coursed through my veins, and tears fell from my eyes that, for the first time in a long time, were not born of pain or fear. At last, the truth. Dee leaned close to my lips to hear, barely more than a whisper, as the vision took over.

I was young again, in Muscovy. I walked behind the sailors who grinned back at me, sharing their secrets above my head. I followed them into the doorway lined with curtains of red velvet, where the air hung heavy with perfume.

They handed over coins to the old woman who jangled when she moved, leading me down the hallway to a room at the end.

A girl sat on the cot, her shoulders bare. She looked at me, curious, and took me by the hand. When it was over, we didn't speak, but something secret started in me - a secret that the sailors waiting couldn't know, with their smirks and sniggers and slaps on the back. Each day in port I returned to her, and the secret grew between us. We would sneak out together, and walk in the hills, and lie together, just lie, until the time was over.

When it was time for my ship to return, I couldn't find the words to say goodbye. I spoke not a word when the ropes were cast off. Only her name. Anael.
'You took her with you,' said Dee.
I nodded.
'You told her to hide in the cargo hold,' he said.
I nodded.
'You woke to the storm, and they were dumping the cargo,' he said.
I nodded.
'And she was gone,' he finished.
Tears streamed down my cheeks.
'But the cross, Riven,' he insisted. 'The double cross.'
I shook my head.
'It is meaningless, Dee. Don't you see? There is nothing below, therefore, there is nothing above. Now, when all is lost, I cannot even die.'
'But you did it, Riven, you found the secret,' he whispered.
'No,' I said, shaking my head.

Then, I stopped. I was still too weak to stand, but the pain had gone completely. I lifted my head, and saw, in the corner, the staff. With the last of my strength, I pointed.
'I found it,' I whispered. 'In the Venusberg.'
Dee took it in his hands and held it before my eyes.
'Then it was all real, Riven,' he said. 'The branch of the Tree.'
'You can take it,' I said. 'You can save Lady Brooke.'
Dee looked down, and I knew it was too late for that.
'I'm sorry,' I whispered. 'I'm sorry for everything.'
Dee shook his head again.
'You are forgiven, Riven,' he said, and made the sign of the double cross over me.

He took the staff firmly in both hands.
'We could have the answers,' he said. 'We could know.'

I smiled at Dee. 'I already know.'
A tear rolled down his cheek, a final regret at what he was about to do. He looked down at the staff. Now, for the first time, I noticed two pairs of tiny buds bursting from the tip, the base of two transoms. Had they always been there? Had I never looked closely enough? He looked at me. I nodded.

Dee brought the shaft to his knee and pulled. With just a little effort, it splintered, and, finally, it broke. With a sigh I closed my eyes, and as the world drifted away behind me.

I saw Anael.
Lying in a field in Muscovy.
Staring at the sky.

The lights shimmered above us.
Innocent at last.



## THE WRITER AS MAP MAKER

## VOLUME TWO:

## MAPPING A POSTMODERN WORLD

## BEN CRISP

Thesis submitted for the degree of
Doctor of Philosophy in Creative Writing
Discipline of English and Creative Writing
School of the Humanities

The University of Adelaide

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#### Abstract

The Journeyman Years is a postmodern historical conspiracy fiction novel chronicling the life and travels of John Riven, a sixteenth-century apprentice alchemist and mapmaker, on a quest to find a mysterious religious relic which he believes holds the secret to the meaning of life.

The exegesis situates my writing within the context of postmodern literature and demonstrates how the postmodern author might narrate the journey of selfdiscovery through an interweaving of three recurring motifs of both historical conspiracy fiction and the critical field of semiotics: codes, maps and symbols. Through an analysis of the critical and creative works of semiotician and postmodern fiction author Umberto Eco - in particular his novel Foucault's Pendulum - the thesis explores how the interplay of these three motifs serves an examination of the question of the limit of interpretation, and how they might combine to offer a framework for responding to this question within a postmodern work of historical conspiracy fiction.


## Declaration

I certify that this work contains no material which has been accepted for the award of any other degree or diploma in my name, in any university or other tertiary institution and, to the best of my knowledge and belief, contains no material previously published or written by another person, except where due reference has been made in the text. In addition, I certify that no part of this work will, in the future, be used in a submission in my name, for any other degree or diploma in any university or other tertiary institution without the prior approval of the University of Adelaide and where applicable, any partner institution responsible for the joint-award of this degree.

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### 2.1 Introduction

A faithful young man, unredeemed of the guilt of his lover's death, fears the Hell he believes awaits him. With a brilliant mentor, he sets out on a quest to find a lost relic that will grant him eternal life and safety from Hell. To find the relic, and with it eternal life, the young man acquires all the wisdom of the world but in doing so loses his faith, to finally realise that Hell is a life of unredeemed guilt. Summarised this way, The Journeyman Years can be viewed as a postmodern cautionary tale: when we set out to interpret the myriad signs and symbols that we believe hold the objective meanings of our experiences of the world - the process of semiosis - we begin a limitless journey that ends only when we choose to accept the subjectivity of our own experiences.

In this exegesis I will demonstrate how the postmodern novel might itself be viewed as a union of three elements that recur within the narrative - code, map and symbol - to lure readers into the labyrinth of infinite semiosis, setting them free only through ironic acknowledgement of the subjectivity of human experience, and perhaps, in doing so, offering readers the chance to more deeply understand and appreciate their own experiences.

My analysis of the postmodern novel through the lens of semiotics draws heavily from the works of semiotician and postmodern author Umberto Eco, in particular his 1989 bestselling novel Foucault's Pendulum - a postmodern conspiracy thriller that explores the dangerously seductive nature of the Peircean ${ }^{1}$ spiral of

[^0]unlimited semiosis as it applies to the esoteric interpretation of historical events and artefacts.

I have organised this exegesis into five chapters, including this introduction. In chapter two, "The Code", I explore the way in which the appearance of ultimately meaningless secret codes leads the characters of both Foucault's Pendulum and The Journeyman Years on journeys that demand an increasingly obsessive gathering and ordering of encyclopaedic wisdom. In chapter three, "The Map", I examine how the challenge of gathering and ordering of wisdom is illustrated in each work by the limits of maps and mapmaking, necessitating some symbol by which the ultimately meaningless code and the imperfect map might be oriented in order to conjure a sense of objective meaning.

Chapter four identifies as such symbols the eponymous scientific instrument of Foucault's Pendulum and the "double cross" in The Journeyman Years - one a metaphor for the elusive fixed point from which to objectively interpret a world
scientific method, particularly the reliance on an ongoing community of inquiry to establish a notion of truth beyond individualistic and purely subjective interpretations. He identified the paradoxically cyclical nature of the search for meaning in his foundational theories of signs:

A sign stands for something to the idea which it produces, or modifies. Or, it is a vehicle conveying into the mind something from without. That for which it stands is called its object; that which it conveys, its meaning; and the idea to which it gives rise, its interpretant. The object of representation can be nothing but a representation of which the first representation is the interpretant. In fact, it is nothing but the representation itself conceived as stripped of irrelevant clothing. But this clothing can never be completely stripped off; it is only changed for something more diaphanous. So there is an infinite regression here. Finally, the interpretant is nothing but another representation to which the torch of truth is handed along; and as representation, it has its interpretant again. Lo, another infinite series. (Peirce 171)
defined by pendular movement between binary opposites, the other a paradoxical compound of religious and scientific iconography, and an impossible union of the intersections and inequalities between opposites. Finally, in chapter five, I reflect on the way in which the code-map-symbol framework arose from my historical and critical research to influence the writing of The Journeyman Years.

My analysis focuses on an understanding of Eco's theories of semiotics and his comparisons between postmodernism and the Hermetic tradition throughout the history of Western thought. Postmodernism, as Eco positions it, is not a recent movement but a mode of thought that shares with Hermeticism a fascination by the notion of unattainable truth - the idea that all the world comprises a labyrinth of interconnected signs and symbols, each related to one another via the notion of similitude. The recognition and description of similitude is a focus of semiotics, but is also a feature of natural learning and growth throughout life, in which a person comes to understand their own experiences through comparisons to the real and imagined experiences of others.

The idea of a secret order to the world and its history, often hinted at by religions or philosophies that centre on hidden truths or occult wisdom, is often explored in narratives that transition from a focus on codes to a focus on maps or mapmaking. Secret codes offer the promise of hidden meaning unlocked by a "key", only attainable by the acquisition of sufficient knowledge to interpret such meaning. Mapmaking then serves as a metaphor for the acquisition and ordering of knowledge to accurately describe the world, because cartography is fundamentally motivated by the aim to ever more perfectly represent the external world whilst negotiating the limitations (subjectivities) of map projections, scales, sources, and the other compromises of the science.

A message is encoded either deliberately, to withhold its meaning from anyone other than the intended recipient, or naturally, by the decontextualisation that occurs when information is transmitted between incompatible periods of history, languages, cultures or modes of thought. In either case, a code can never disguise within it more information than the encyclopaedia of knowledge required by the interpreter to understand it. But if the interpreter has been tempted by a code to expect - after decoding it - some final truth beyond the necessity for interpretation, they are destined for disappointment.

For Eco, the game of comparing one thing to another in order to create new meaning is a potentially limitless one; for the protagonists of Foucault's Pendulum, it is fatal. It is a game that finds its roots in the esoteric philosophies of the Renaissance, when the encyclopaedic acquisition of knowledge was motivated by a compulsion to understand the entirety and the unity of the cosmos - a compulsion that gives rise to what Eco calls the "Hermetic drift":

Hermetic drift is the name I shall give the interpretative habit that dominated Renaissance Hermeticism and is based on the principles of universal analogy and sympathy, according to which every item of the furniture of the world is linked to every other element (or to many) of this sublunar world and to every other element (or to many) of the superior world by means of similitudes or resemblances. It is through similitudes that the otherwise occult parenthood between things is manifested, and every sublunar body bears the traces of that parenthood impressed upon it as a signature. The basic principle is not only that the similar can be known through the similar but also that from similarity to similarity everything can be connected with everything else so that everything can be seen as a sign standing for something else and every thing is the sign of another. (Eco The Limits of Interpretation 24)

Eco's engagement with the challenges of interpretation contributed to early criticisms of structuralism, and the development of the field of post-structuralism, closely related to postmodernism in its rejection of proposed formal concrete structures by which reality might be accurately modelled.

For critics of structuralism, such as Jacques Derrida, the "interpretation of interpretations" of signs is divided between those that seek to decipher an origin of truth, and those that reject any such "end of the game". For Derrida, the rejection of any hope for the endgame welcomes the focus instead on "freeplay, that is to say, a field of infinite substitutions in the closure of a finite ensemble":

As a turning toward the presence, lost or impossible, of the absent origin, this structuralist thematic of broken immediateness is thus the sad, negative, nostalgic, guilty, Rousseauist facet of the thinking of freeplay of which the Nietzschean affirmation-the joyous affirmation of the freeplay of the world and without truth, without origin, offered to an active interpretation-would be the other side. This affirmation then determines the non-center otherwise than as loss of the center. And it plays the game without security. For there is a sure freeplay: that which is limited to the substitution of given and existing, present, pieces. In absolute chance, affirmation also surrenders itself to genetic indetermination, to the seminal adventure of the trace. (Derrida 27894)

The language of adventure, and the separation of the negative (nostalgic, guilty) structuralist and affirmative (joyous, free) post-structuralist movement introduces hints of the aesthetic qualities of postmodern philosophy: playful, unbound, irreverent. Derrida's association of the nostalgic with the negative and the guilty suggests an aversion to the overly sentimental, or the longing for the comforting certainties of the past, in favour of a discomfort perhaps pleasurable in itself.

If a mind caught in the Hermetic drift finds no pleasure in the adventure, it is doomed to wander from room to room in the labyrinth of knowledge forever, drafting or seeking the impossible map of every possible link between every possible room, hoping still to find not a temporary resting place, but a conclusion. When this happens, the Hermetic drifter must focus on symbols for their mysterious semiotic power to connect an interpreter to the world he or she wishes to understand. Eco's work suggests that the ultimate meaning which the interpreter ascribes to symbols is the result of their own most personal experiences; in Foucault's Pendulum the pendulum becomes a symbol for a moment of perfect, non-referential clarity lost in youth; for the visibility of scientific rationality in the face of superstition and the occult.

In The Journeyman Years the symbol that links the secret code to mapmaking is a double cross: a symbol that oscillates between simplicity and complexity in its association and referral to a multitude of objects and ideas: religious faith and self-sacrifice; the bridge between non-intersecting philosophies, and, finally; the early mathematical symbol for inequality - the end of similitude, thus the only end to the Hermetic drift. The hero of the work comes ultimately to accept that the symbol will haunt him so long as he searches for a finite, unique, objective and comprehensible meaning to the events that shape his existence - most deeply the death of his lover - and only by accepting the subjectivity of his experiences does he find peace and an end to his story.

[^1]I wrote The Journeyman Years after discovering Eco's works in order to narrate my experience as a growing, learning and maturing young man, transitioning out of a youth in which religion had been presented to offer strange and secret answers to questions that would later seem unanswerable. The theatres of religious history, scientific revolution and occult conspiracy were all fertile grounds for a story that I felt would best express the conflicts within me that, like Eco, I could not theorise about, only narrate.

Moreover, historical and religious themes for conspiracy novels have become increasingly popular in recent years, as demonstrated by the unprecedented success of Dan Brown's The Da Vinci Code. In fact, the massive popularity of a work such as The Da Vinci Code was predicted over a decade before its publication, in a passage of Foucault's Pendulum, in which a character outlines the entire conceit of Brown's as-yet-unwritten novel with a lamentation as to how readily such a story would capture the attention of the general public (377).

Where The Da Vinci Code exposed the widespread appeal of the theme of religious mythology as conspiracy theory, Foucault's Pendulum demonstrates the potential for a postmodern novel to creatively illustrate the danger that arises when even cynical, rational minds become seduced by the promise of supernatural received wisdom. As a young academic raised within a religion founded upon this concept of supernatural wisdom, I was aware of the space in the field of English literature for a creative work that employed Eco's theories of semiotics with the conspiracy themes of Foucault's Pendulum, to explore the transition from youth to maturity of an atheist tormented by the lure of received wisdom forged during his religious upbringing.

In the field of literary analysis, Eco is a proponent of the concept that texts create their own "Model Readers", a reaction to the reader-response theories of literary interpretation. In rejecting structuralism, Eco rejected the notion that texts were constructed with only one privileged interpretation, as intended by the author. Instead, the Empirical reader (you or I) is encouraged to position themselves as a text's Model Reader - i.e. one who might maximise the breadth and scope of their interpretations through an interaction "with a social and cultural treasury" (Eco and Collini 68): an encyclopaedic knowledge of literature, language and history. In his first novel, The Name of the Rose, Eco drew upon his extensive knowledge of the medieval period to narrate the story of a Franciscan monk who investigates a series of murders in a Benedictine monastery. The novel is a rich tapestry of literary and historical allusions - a pattern that has characterised each of Eco's subsequent works - and focuses on the conflict between reason and superstition. The novel ends with the Franciscan-cum-detective, William of Baskerville, once taught to "idolise reason", discovering that his reasoning of the solution to the mystery was, though sound, simply incorrect.

The novel was hugely successful, and established Eco as a writer of "postmodern fiction", an identification with which Eco concurred (Eco Reflections on the Name of the Rose). Many tenets of postmodernism characterise the work, particularly those that emphasise the undermined role of the author in the reader's interpretation of the text; meta-narrative (the whole work is introduced as a real manuscript found and translated by the author); intertextuality (the name Baskerville evokes the Sherlock Holmes novel The Hound of the Baskervilles, just
one of many literary allusions); and the subversion of the possible expectations of what Eco refers to as the "naive" reader:
[...] it is no accident that the book begins like a detective novel (and continues to trick the naive reader until the very end, so that the naive reader may even fail to realize that it is a detective novel where precious little is discovered, and where the detective is beaten in the end). Now the choice of the detective novel was not accidental. I believe that people like detective novels not because they are full of dead bodies, and not because (as has so often been said) detective novels celebrate the triumph of the final order (intellectual, social, legal, and moral) over the disorder of guilt. It is rather that the detective novel represents a story of pure conjecture. But even a medical detection, a scientific experiment, a metaphysical interrogation are cases of conjecture. After all, the basic question of philosophy (like that of psychoanalysis) is the same one posed by the detective novel: who is guilty? (Rosso and Springer 6-7)

Eco's assertion that readers enjoy detective stories primarily for the purity of their conjecture is hardly objective. Indeed, it risks missing the point that such enjoyment surely draws from the promise of an empirical conclusion to conjecture - even more so for medical detection and scientific experiments. This does not have to be a 'triumph of the final order', even a moral one, but it does surely desire some distinction between the sensible and insensible. The book in the reader's hand is a finite object; there is a final page number, a final word, a fullstop beyond which there are no more words; no more conjectures. But where a story asks more questions than it answers, as in the case of a work that offers itself to multiple interpretations - such as a postmodern work - the reader may find pleasure in seeking answers in a world outside the story.

The postmodern perspective, as we shall see later in this introduction, rejects any celebration of the triumph of the final order over disorder, and often seeks instead to emphasise the triumph of chaos over any supposed order wherever possible. Eco's writing emphasises this notion, whilst at the same time delighting in the richness of the world: the acquisition of knowledge, through conjecture, as a pleasure in and of itself (Dutton 437).

After The Name of the Rose, Eco's inspiration for a second novel came from two images: one Leon Foucault's pendulum in Paris, and the other a memory from his youth of playing a trumpet at a funeral for members of the Italian Resistance which deeply impacted him:


#### Abstract

A true story which I have never stopped telling, because I found it beautiful and also because, when I later read Joyce, I realised that I had experienced what he calls (in Stephen Hero) an epiphany. Thus, I decided to tell a story starting with the pendulum and ending with a little trumpeter in a cemetery on a sunny morning. But how to get from the pendulum to the trumpet? To answer this question took me eight years, and the answer was the novel. (Eco Confessions of a Young Novelist 17-18)


Foucault's Pendulum is the story of three publishers, bored and offended by the popularity of publications in the occult and historical conspiracy, who - at first as a game - conspire to invent the largest, most all-encompassing historical conspiracy theory ever imagined. What begins as an intellectual exercise soon consumes the lives of the protagonists as "the Plan", so they call it, intersects violently with the real world, evolving out of their control, and culminating in a real Secret Society (existing only, it would seem, as a consequence of the Plan)
threatening their lives if the trio does not cooperate in bringing the Plan to fulfilment.

It is not hard to see the familiar themes of Eco's academic work at play in the novel. Robert Phiddian notes the duality at work, as "under cover of irony, the novel criticises hermetic drift, even while it lives off its mad discursive energies" (Phiddian 556)

Commentaries on the challenge of interpretation and the dangers of careless interpretation and hermetic drift fill not only the pages but the titles of many of Eco's publications in the field: The Role of the Reader, Misreadings, The Limits of Interpretation and Interpretation and Overinterpretation, to name a few. But any attempt to interpret the novel falls victim to the very challenges that Eco has explored his entire career. Linda Hutcheon, who coined the term "historiographic metafiction" to describe postmodern literature that aims to decentralise traditional concepts of historical progress, notes:

> He has also made it difficult for reviewers and critics to engage with those novels, despite the tantalizing lures, because he self-reflexively ironizes the position not only of author but also of reader, thus reminding critical commentators of their secondary, even parasitic role. (Hutcheon "Eco's Echoes: Ironizing the (Post)Modern" 2)

Eco characterises his own dual position - as both author and critic - by emphasising a necessary divide between the free act of creation and the serious act of critique. He likens the role of the essayist to "reducing the labyrinth" of understanding, so created by a kind of Ariadne's web of the interconnected signs and symbols that serve as representations of reality (Eco Semiotics and the

Philosophy of Language 80). In doing so the essayist must "impoverish the wealth of the real in order to permit definitions", whilst the writer of fiction is doing something quite different:


#### Abstract

When theoreticians behave like writers of fiction, I do not like it (even though I might admire what they write as if it were a novel). Our brain is divided into two parts: we can use one or the other, but we always need to know which half we are using. (Rosso and Springer 9)


It is this division of the mind - of both the reader and the author - that creates the friction evident in the work of postmodern fiction. It is present in what might be called the "negative space" of the text: a knowing interplay between what is written and what is left unwritten. For Linda Hutcheon, it is this "rubbing together of [...]the said and the plural unsaid with a critical edge created by a difference of context that makes irony happen" (Hutcheon Irony's Edge the Theory and Politics of Irony 18-19).

As Hutcheon identifies in her expansive work, irony is a problematic discourse to define comprehensively, but it is certainly present in the postmodern. It is a term that suggests a simultaneous awareness of both the present and the absent, and in this way recalls Derrida's notion of différance. Différance is, broadly defined, Derrida's attempt to locate the interplay between the differing characteristics of signs and the infinite deferral of their meaning.

Irony, further, denotes some relational assumptions between the addressor and addressee. For Eco, "irony consists in saying not the opposite of the truth but the opposite of what one presumes the interlocutor thinks is true" (Eco and

McLaughlin 233). Furthermore, the "ironic" is the defensive posture against the "serious"; it is the point of the postmodern game:

> With the postmodern it is possible to misunderstand the game, by taking things seriously. I think this happened with my novel: those who did not catch the citations, the play on narrative itself, read it as if it were an innocent story. Which is of course the nature of the risk of irony. There is always someone who takes ironic discourse seriously. (Rosso and Springer 3)

Despite its name suggesting a chronological succession to modernism, Eco, like its first champion Lyotard, rejects the notion of postmodernism as a movement, believing it to be "not a chronologically circumscribed tendency but a spiritual category" (Rosso and Springer). Whilst there are competing theories as to what postmodernism is, most approaches centre on the rejection of truly objective descriptions of reality:


#### Abstract

That postmodernism is indefinable is a truism. However, it can be described as a set of critical, strategic and rhetorical practices employing concepts such as difference, repetition, the trace, the simulacrum, and hyperreality to destabilize other concepts such as presence, identity, historical progress, epistemic certainty, and the univocity of meaning. (Aylesworth)


Throughout their story, the characters of Foucault's Pendulum are constantly searching for final meaning, a conclusion to their game, or some fixed locus from which to observe their reality and orient themselves in a world that is rapidly evolving beyond their understanding. Their attempts to understand consume them, eventually killing them; and Casaubon's ultimate conclusion is that the only certainty is uncertainty itself: "I have understood. And the certainty that there is nothing to understand should be my peace, my triumph" (640).

The conflict between Casaubon and Belbo is a conflict over contrasting attitudes towards certainty: Casaubon at first admires Belbo's seeming contempt for "other people's truth" - a truly postmodern position - only to discover that "his intellectual disrespect concealed a desperate thirst for the Absolute" (56).

The pendulum swing from cautious suspicion to indulgent delight at modes of thought in art and culture characterises both Eco's fiction and his essays. His famous definition of postmodernism is an example: the postmodern man can no longer say "I love you madly" to a cultivated woman, because they are mutually aware of that phrase's invention by Barbara Cartland, but must instead say "As Barbara Cartland would put it, I love you madly" (Eco Postscript to the Name of the Rose 67-8). In postmodernism, truth and meaning become accessible only by reference to that which has come before - as in Eco's semiotics:


#### Abstract

His semiotic theory is based on a metaphor: what we know of as culture is the signs that make it up; we can't know anything outside that. Eco takes a questioning view of truth that might be playful or despairing, pointing to a void. (Caesar 10)


Postmodernism also takes this sceptical approach to prioritised truth, though I would argue that it tends to point to the labyrinth rather than a void. Postmodern scepticism necessitates a Nietzschean rejection of a privileged centre from which to assess truths, but whether the view is playful or despairing depends on whether an individual's relationship to the past is nostalgic and guilty or playful and ironic.

Eco's academic history begins with medieval studies and literature, including a doctoral thesis on Thomas Aquinas, transitioning into an interest via Peirce's work in semiotics and literary interpretation, beginning with The Open Work in
1962. In contrast to medieval notions of interpretation (such as Augustine's circular pathway from initial perception through inference, meaning and understanding into full perception grounded in faith) Eco's theory of semiotics has located the individual as the creator of meaning, and signs as the shapers of reality through culture (Collette 133). By his 1997 book Kant and The Platypus, Eco's conception of meaning and interpretation has evolved to a highly complex interplay between individuals and their societies, in which meaning is made from socially contractual understanding of private identifications and distinctions, public contextualisation, and an oscillation from dictionary to encyclopaedia in the cultural definition and organisation of knowledge (Eco Kant and the Platypus : Essays on Language and Cognition 14).

It seems to be no coincidence that Eco's digression from semiotician to postmodern novelist was inspired by an exploration of his academic roots in the medieval. After the fall of Constantinople, the reintroduction of classical Hellenistic texts to Western Europe gave rise to occult philosophies which, according to Eco, share an important premise with the postmodern:

In his Tanner Lectures, Eco compared the philosophies of post-modernism with those of Gnosticism and Hermeticism, identifying in both the conception that truth is always and by definition beyond the horizon of human understanding. (Eco "Interpretation and History")

By contrast, however, postmodern philosophy invites multiple interpretations where traditional philosophies pursued one (or The One). Derrida refers to a hypothetical "event" in history, after which time it was impossible to orient any notion of truth against a privileged centre (Derrida 278). It is this transition that
marks the lens through which the past can be viewed, either with nostalgia or irony.

Certain critics, like Carole Cusack, identify in Foucault's Pendulum not merely a cautionary tale about Hermetic drift, but a eulogy for the comforting sense of meaning and authority that religion once offered, and the increasing public fascination with the esoteric:


#### Abstract

The process of distinguishing truth from error, working toward the building of the communally-negotiated and publicly evaluated truth, is a moral duty

Solipsistic indulgence in private worlds, cut off from this public evaluation, can only end in irrelevance and isolation, the solipsist labouring under the burden of paranoia that inevitably accompanies the perceived possession of 'secret knowledge'. Moreover, the widespread dissemination of the esoteric or Hermetic interpretive paradigm through the twin promotions of popular New Age spirituality and chain-store postmodernism is a real cause for alarm. (Cusack 81)


 Writing The Journeyman Years became, for me, an exercise in such solipsism: like Eco's protagonists, cynical of the credulity I had once found comfort in, I began a game that indulged my fantasy for hidden meaning in imagined connections between historical novelties... only to find myself convinced, at times, that there was some real meaning behind it all.By wading in the dangerous waters of the Hermetic drift, I discovered for myself what Eco's protagonists perhaps did not: that narratives by their very nature offer an alternative comfort to that lost in the crisis of faith. A narrative does not merely conjecture that the events it describes did happen, but that they must have happened as written. A plot offers an explanation of events, not merely an
assertion, with an authority not subject to the socially-negotiated scientific or the supernaturally-bestowed religious:


#### Abstract

A plot proposes causal connections and thus explanations; it states that fact B happens because of fact A . When one tells a story using this narrative convention, one pretends to tame history. According to Aristotle, it is a question of eliminating the fortuitousness of "history" (The mere presence of res gestae) and joining it to the perspective of "poetry" (the organisation of a historia rerum gestarum). (Eco The Middle Ages of James Joyce : The Aesthetics of Chaosmos


 39)The taming of history has been of some concern to postmodern thinkers, particularly those like Lyotard who are sceptical of such taming by overarching 'grand narratives' that seek to encompass all other narratives (Lyotard xxiv). For Eco, pretending to tame history is a far safer game, and his narratives offer his readers a chance to play the game with him.

In this way, a narrative serves to offer the reader a map: a fixed explanation of how a person might move from one experience to another. At the same time, paradoxically, a narrative is open to interpretation. It has meaning beyond the literal, often requiring the reader to decode it according to their own personal, internal codebook, compiled from their experiences and interactions with the Universe. Thirdly, and most intriguingly, a narrative can contribute to the reader's understanding of the world when, through poetical devices such as metaphor, it creates connections hitherto unnoticed.

The Journeyman Years is the narration of a young man's journey from youth to maturity; though, like history itself, such a "journey" does not always have a clear divide between beginning, middle and end. The challenge, as stated earlier in this
introduction, is to construct a framework that symbolises and reflects the relationship between conflicting influences on the character's own philosophies, as Foucault's Pendulum does for its characters through a pendular swing from ironic detachment to conspiratorial obsession.

Through a study of Foucault's Pendulum and Eco's semiotics I found myself establishing a framework in three parts that illustrated (1) the promise of a secret, otherworldly truth; (2) the obsessive accrual of all worldly knowledge with the aim of discovering this otherworldly secret, and; (3) the symbolic surrender to the emptiness of the secret and the impossibility of accruing all worldly knowledge.

In Foucault's Pendulum these three parts of the framework are illustrated by three plot elements: the appearance in the protagonists' world of a secret code, the search for a map that will make sense of the code's meaning, and the symbol of the pendulum itself as the key to the map. All three elements form part of a circular quest that is impossible to fulfil - a postmodern quest in which the code is never properly solved, the correct map is never actually discovered, and Foucault's pendulum is transformed from a symbol of scientific rationality to the gallows upon which a man is martyred to protect a paradoxical occult secret.

Whilst the code and the map would work similarly as metaphors for secret wisdom and the quest for well-ordered knowledge in The Journeyman Years, I identified the symbol of a "double cross" (one representation sometimes called the Cross of Lorraine) as signifier of a mythological relic to form my link between code and map. The image of intersections and parallel lines would become a significant one in a world defined by religious schism, cartography and
mathematically rigorous science - as would the expression "double cross" for the story of a young man haunted by guilt and betrayal.

### 2.2 The Code

All language presents a code to the reader, promising a meaning beyond the literal. The appearance of that particular artefact, the secret code, alerts the reader to the existence of a hidden message, waiting to be discovered. As long as the reader is not in possession of the key the secret code tantalises, with just enough symbolism to signify meaning, whilst remaining at the same time incomprehensible. Until it is understood, it stands as a symbol of the knowable unknown: the Plan. This chapter will examine the codes in The Journeyman Years and Foucault's Pendulum within the context of semiotic analyses of codes and codification, demonstrating that such a signifier of hidden meaning motivates the referral to and compiling of an encyclopaedia of knowledge, even if the code is discovered to be ultimately meaningless.

After deciding on a story that would pair my fictional character with John Dee during his 1563 tour of Europe, I began researching Dee's biography and works. Of particular interest was a letter to William Cecil in which Dee reports with excitement his discovery of a mysterious manuscript written by an abbot named Trithemius around the turn of the previous century.

Despite a preface by the author suggesting this to be a disguise, the Steganographia (literally "Secret Writing") appeared to be a manual for summoning supernatural spirits in order to secretly communicate messages over distances, according to astrological rules and incantations. In fact, when the manuscript was finally published in 1606, accompanying the original text was an explanation of how the incantations of Books I and II of the work were simply cryptic instructions for entirely natural cipher systems, where letters are selected
or arranged according to simple arithmetical rules. The third book, however, remained unexplained, and for five hundred years the entire work remained the focus of countless Hermetic and occult conspiracy theories, until twentieth century codebreakers identified the natural ciphers and encoded plaintexts of the third book and concluded that the whole work was a manual of cryptography simply disguised as occultism (Reeds 291).

Dee, as has been well documented, spent the latter half of his life engrossed in occult research and practise. I was fascinated by the transformation of this highly intelligent, often rational thinker, whose early works in cartography, mathematics and astronomy were eclipsed on the dawn of the scientific revolution by a damning obsession with the supernatural. The Steganographia provided a pivot for a quintessential postmodern tragedy: a scientist fuelled by political and personal desire to know the secret machinations of the Universe spirals from the natural to the supernatural, convinced there must be some final, certain, conclusive secret known to the angels but not to him:

> The Portuguese, Spanish and French, the Muscovite Tsar, the Turkish Sultan, Rome itself: everywhere men and women claim to rule by the will of God. They cannot all be right! Soon a new empire will rise. I intend to know God's will this time. (32)

Similarly, in Foucault's Pendulum, the first tangible contact with the "Plan" occurs in Chapter 19, when Colonel Ardenti presents the publishers with a copy of a copy of a parchment, found in a notebook belonging to a dragoon, which contains a fragmentary coded message. Ardenti presumes, based on a newspaper article he stumbled upon whilst researching the Templars, that the original
parchment was discovered by the dragoon during his exploration of a tunnel beneath a tithe in Provins.

As the publishers humour him Ardenti demonstrates that the message, when decoded according to a key in the Steganographia, then translated by Ardenti himself, the gaps filled in by conjecture, and the resultant plaintext interpreted according to the rules of the Plan, outlines the whereabouts of the Holy Grail.

Of course, there is irony in the tenuousness of each link in the chain: the object at hand appears to be the definitive culmination of the examples that Eco describes in his semiotics concerning the transformation of information through communication. It is a photocopy - already a mechanically imperfect duplication - of a handwritten copy by a deceased transcriber, with all the unverifiable human error this can imply. Furthermore it is incomplete, and encoded by some unknown cipher, it must be translated, and finally - and most broadly interpreted.

Yet, in both The Journeyman Years and Foucault's Pendulum, it is these confounding characteristics that create the tantalising sense that the object conceals some hidden truth just behind a veil of a wisdom lacking in the observer. It is precisely the lack of context of the secret code, the inability to interpret without traversing some distance beyond the immediate, which suggests an occluded or ineffable meaning below the surface, waiting to be known.

The concept of codes is at the heart of semiotics. In his Selected Writings, Roman Jakobson argues for the importance of codes as the systems that contextualise signs in language and communication. He identifies two modes of arrangement of linguistic signs that inform interpretation: combination, the contextualisation of
signs and their constituents within a more complex unit, and; selection, or the analysis of a sign as compared to its alternatives (Jakobson 243). In natural languages these processes of contextualisation and comparison are made possible by the acquisition of knowledge of the myriad alternative signs and the rules that govern their collocation with one another.

In Semiotics and the Philosophy of Language, Eco devotes a chapter to the definition of the word "code". In a description of "ciphers", Eco notes that the notion of code as a mere correlation device reduces the concept to that of "dictionary" - a set of rules of relating expression to expression. When the code is elaborated to the more complex "cloaks", relating expressions to content, it becomes clear that decoding becomes a system of both correlation and inference:

> A code is not only a rule which closes but also a rule which opens. It not only says 'you must' but says also 'you may' or 'it would be possible to do that'. If it is a matrix, it is a matrix allowing for infinite occurrences, some of them still unpredictable, the source of a game. (Eco Semiotics and the Philosophy of Language 187)

It is this game that Eco explores in Foucault's Pendulum: once Ingolf's parchment is added to the Plan as a code to be interpreted, a chain of infinite semiosis is set in motion. Similarly, in The Journeyman Years, the astrological tables of the Steganographia lead Dee and Riven through Europe searching for more books with which to connect the imagined angels to the real planets, planets to metals, metals to bodily organs, and so on, with each new experience offering a new interpretation of the last.

In The Open Work Eco first began his quest to answer the question posed by Peirce of the limits of interpretation, including the interpretation of language itself - a quest that would lead him to visualise the spaces and movements of interpretation as physical spaces and movements. For Eco, natural language is different from other codes, in the sense that language serves to correlate units from a plane of expressions to units from a plane of content, within which planes the units are arranged by their own sets of rules of similarity and analogy (or "scodes") (Eco Semiotics and the Philosophy of Language 171). Furthermore, Eco refines Saussure's theory by determining that we perceive the universe not as made up only of signs, but of the mutual and inextricable correlations between the dual functions of the content and expression planes of signs known as signfunctions (a definition inherited from Louis Hjelmslev's Prolegomena to a Theory of Language) (Eco Semiotics and the Philosophy of Language 14). A description of these codes, for Eco, are as close to a description of reality as we can ever hope to achieve:

> Within the framework of a theory of codes it is unnecessary to resort to the notion of extension, nor to that of possible worlds; the codes, insofar as they are accepted by a society, set up a cultural world which is neither actual or possible in the ontological sense; its existence is linked to a cultural order, which is the way in which a society, thinks and speaks and, while speaking, explains the purport of its thoughts through other thoughts. (Eco A Theory of Semiotics 61)

John Deely rightly points out that Eco's theory of sign-functions fails to distinguish between those signs that connect with what they signify wholly through their social or historical inheritance of such connection, and those signs
that connect independently of our experience of the codes of their conjunction (Capozzi 102).

What kind of ontological actuality is Eco suggesting could be possible for a world of thoughts as described by signs? It seems that Eco may be hinting at the ontological arbitrariness ${ }^{2}$ that Saussure and Levi-Strauss stress when identifying the purely symbolic or conventional learned relationships between signifiers and signifieds such as in natural language; such ontological arbitrariness does not, however, deny the a posteriori non-arbitrariness of such signs after they have become established within their social or historical contexts (Lévi-Strauss 91).

Deely identifies somewhat confusingly that what is lacking in Eco's theory is 'an account of the manner in which what depends upon my experience incorporates into my experience some things which as such do not depend upon my experience', or, in other words, those signs (symptoms, clues and imprints) that refer to correlations beyond the merely socially constructed (Capozzi 102).

While I believe Eco's literature explores the void left by this omission through his exploration of meaning-making through 'epiphany' and personal experience, which I will discuss further in Chapter 2.4, I find that from Eco's attempts to describe the structure of these codes of cultural rules comes an image that serves to illuminate the shift from Enlightenment-era knowledge-building and the postmodern condition.

[^2]In both A Theory of Semiotics and Semiotics and the Philosophy of Language Eco analogises the set of cultural rules to an encyclopaedia, as opposed to a dictionary, and it is this distinction that characterises Eco's revision of traditional semiotics. For Eco, dictionary-semiotics is essentialist and realist "strong thought", epitomised by the model of the Porphyrian tree ${ }^{3}$; encyclopaedic-semiotics, by contrast, is a labyrinthine "weak thought", epitomised by Deleuze and Guattari's rhizomes ${ }^{4}$ (Cornea 303).

According to Eco there are three types of labyrinths: the first is merely a single winding path; the second is the maze, such as the library in The Name of the Rose; the third is the rhizome, a net of interconnected nodes, in which every node is connected by some path to every other node:

> What each of these rhizomes demonstrate is that it is possible to get from one opinion to its polar opposite through a continuous chain of interpretation, making the rhizome a dangerous system for the uninitiated. (Ross and Sibley 29)

The "weak thought" of the rhizomatic labyrinth is postmodern in nature: it rejects any ideas of absolute truth and relegates all knowledge to the subjective - there is no centre to the labyrinth. However, whilst reacting to the realist approach, Eco was still seeking stable ground between strict interpretations and unlimited semiosis:

[^3]In accordance with the bulwarks he is erecting against semiotic drift in the mid1980s, Eco argues here that the 'anti-codism' of post-structuralism is a return to the orgy of ineffability. To speak of codes means accepting that we are not gods and that we are moved by rules - whether these are social and historical, produced by us, or imposed on us from outside remains to be decided (Caesar 116).

If Eco is erecting a bulwark against semiotic drift, his postmodern literature (in contrast to his academic work) is content to wade in its waters rather than make such a decision about the origin of semiotic rules.

In The Journeyman Years, both Dee and Mercator are great collectors of knowledge, but where Dee is the doomed reductionist, building his library to distil all wisdom down to a single, unified theory, Mercator is the equally doomed encyclopaedist:

No two things are alike, Riven. Everything must be studied in detail, recorded, collated. You cannot map a territory simply by having mapped another! No.

Dee believes that one thing may contain the secret to knowing all things. I believe knowing all things is the secret to knowing any thing at all (186).

Where Mercator invests in his atlas and cosmography, Dee creates the Monas Heiroglyphica, a magical symbol and accompanying exegesis that connects so many of his thoughts via so many disciplines that the result is meaningless to all but its author.

In Foucault's Pendulum, Colonel Ardenti's aim is in some ways that of Mercator's - and that of the scientist's: he wishes to reduce the labyrinth, to share his knowledge and expand his encyclopaedia. Whilst his methods of inference are
questionable, he seeks to communicate his ideas and invite others to join in his search for illumination:

> I want to tell the world what I know, hoping that there may be somebody out there who can fit the rest of the puzzle together-somebody who might read the book and come forward. (121)

Belbo does not take Ardenti's work seriously; rather, he detects an opportunity to lure him into Manutius - the vanity publishing scam within the respectable Garamond publishing company. It involves convincing self-financing authors (SFAs) to part with large sums of money, whilst never actually publishing their works in any significant number. Casaubon notes the dichotomy of Belbo's position between Manutius and Garamond - between the worlds of foolishness and respectability (251); he believes he understands when he finds Belbo's essay Vendetta, in which he reveals that he collaborates "in the exploitation of those who, lacking my courage, have been unable to confine themselves to the role of spectator" (252).

Furthermore, by the end of the story, Casaubon has equated the lure of the Manutius plan, for the vain but foolish scholar wishing to be a part of the encyclopaedia, with the Plan that had lured the Diabolicals wishing to know the unknowable:

How can I become a published poet whose name appears in an encyclopedia?
Garamond explains: It's simple, you pay. The SFA never thought of that before, but since the Manutius plan exists, he identifies with it, is convinced he's been waiting for Manutius all his life; he just didn't know it was there. We invented a nonexistent Plan, and They not only believed it was real but convinced themselves that They had been part of it for ages, or rather, They identified the
fragments of their muddled mythology as moments of our Plan, moments joined in a logical, irrefutable web of analogy, semblance, suspicion. But if you invent a plan and others carry it out, it's as if the Plan exists. At that point it does exist.

Of course, before Belbo ever gets the chance to lure Ardenti further, the Colonel goes missing - widening the distance even further between the protagonists and the correct interpretation of the code. The more the distance grows, the more desperately they seek to close it, unaware that their own encyclopaedias are now flooded with historical esoterica.

Lia's explanation, by contrast, is that the code is simply a laundry list. Using equally coherent inferences, drawn from her more grounded encyclopaedia, she demonstrates that the same blanks could be filled to result in a list written in haste by a merchant. Finally, she uses the same codewheel as Ardenti, aligned differently, applied to different letters, to reveal a plaintext composed by an imagined author playfully expressing a lack of any further meaning at all: "Shit, I'm sick of this hermetic writing" (540).

Beware of faking: people will believe you. People believe those who sell lotions that make lost hair grow back. They sense instinctively that the salesman is putting together truths that don't go together, that he's not being logical, that he's not speaking in good faith. But they've been told that God is mysterious, unfathomable, so to them incoherence is the closest thing to God. The farfetched is the closest thing to a miracle. (541)

Lia's criticism of the Plan is in a sense another criticism of the postmodern view of the world: where there is a lack of explanation, people are not satisfied to leave well enough alone - they will fill the void with any number of interpretations.

In The Journeyman Years, Riven cracks the Steganographia through a synthesis of methods drawn from his experiences, including letter manipulation inspired by the processes of Kabbalah and a simple form of frequency analysis inspired by the ramblings of the gambling addict Cardan. He summarises his efforts as a kind of madness driven by the desire for meaning:

> Like the astrologers who conjured models of numbers to predict the motion of the planets I had plucked a pattern of numbers, formed only by hopeless counting, to find some order in a work of mystery. (132)

While Riven cracks the code and discovers a Latin plaintext, his own encyclopaedia leads him to identify it as a meaningless phrase of the kind he was once instructed to use to practise his handwriting. Dee is unwilling to accept this, and so interprets the plaintext further - but it is this realisation that causes Riven to decide it is time he found a way out of the labyrinth ${ }^{5}$.

In a further attempt to rein in infinite semiosis through the visualisation of physical spaces, Eco conceived a "Model Q" (named for M. Ross Quillian’s 1968 theory of semantic memory) which models similarity between signs as displacements and attractions within an imaginary $n$-dimensional topographic space. The Model Q maps the encyclopaedia of human knowledge to its rhizomatic labyrinth, including on its topography not only all that has been believed to be true, but all that has ever been believed to be false or legendary (Eco Semiotics and the Philosophy of Language 83).

[^4]In defending his encyclopaedic model over the Porphyrian tree, Eco cites D'Alembert's metaphor of the encyclopaedia as a map:


#### Abstract

However, the same thing does not occur in the encyclopedic order of our knowledge which consists in reuniting this knowledge in the smallest possible space and in placing the philosopher above this vast labyrinth in a very elevated point of perspective which would enable him to view with a single glance his object of speculation and those operations which he can perform on those objects to distinguish the general branches of human knowledge and the points dividing it and uniting it and even to detect at times the secret paths which unite it. It is a kind of world map [...] Yet like overall maps of the world on which we live, the objects are more or less adjacent to one another and they present different perspectives according to the point of view of the geographer composing the map. In a similar way, the form of the encyclopedic tree will depend on the perspective we impose on it to examine the cultural universe. One can therefore imagine as many different systems of human knowledge as there are cartographical projections. (Eco Semiotics and the Philosophy of Language 83)


D'Alembert relegates the encyclopaedia's entries to local maps, and Eco concludes his discussion by asserting that structured knowledge can only ever be local, and therefore contradictable by alternative ideologies; there is no privileged centre to the encyclopaedia, the Model Q , or the map.

Andrei Cornea believes this conclusion is too hasty, arguing that D'Alembert, and other philosophers to whom Eco refers for support, actually promote a maze-like structure to semiosis - still complex, but navigable, with preferred routes, and able to be unravelled and mapped like in a hierarchy akin to the Porphyrian tree. He goes on to argue that Eco may be promoting this model himself, by considering the second kind of labyrinth as mannerist, and postmodernism perhaps to be the
"modern name for mannerism as metahistorical category" (Eco Postscript to the Name of the Rose):


#### Abstract

Therefore, if the labyrinth of the 2nd type, the Irrweg, or the maze are representative of mannerism, which, in turn, is but a metahistorical postmodernism, then the labyrinth of the 2nd type, and not that of the 3rd type, must be also representative of postmodernism, or at least need not contradict it. So, even according to Eco, postmodernism is not necessarily bound to the relativism of the rhizome, since it can make a more sensible choice: an oriented rationality, still sufficient to privilege some alternatives over others, to accept a certain hierarchy, to look for a center without neglecting the peripheries. (Cornea


 319)It would appear true that Eco does not believe postmodern philosophy to be bound to relativism. In a recent lecture, Eco expressed such suspicions in expounding a 'negative realism', by which while some paths on the continuum of interpretation are not compulsory, some are certainly blocked by a resistance:


#### Abstract

I do not think that even the most fundamentalist among postmodern thinkers really thinks that there are no facts [...] since to carry out an interpretation one must have something to interpret, and if the series of interpretations has no final terminus ad quem it must have at least a terminus a quo - a starting point that, however matters stand, we can call a fact. (Eco "On the Ashes of Post-

Modernism")


In writing The Journeyman Years I at first found myself attempting, perhaps like Dee, to condense the entirety of my research and personal experience into a single, self-contained, unified work, without wishing to acknowledge the impossibility of such a task. The result was feelings of frustration at the ambiguity and incompleteness of aspects of the story. Instead, by the time the
work was finished, I had come to understand that the opaqueness, the limitations and the ultimate emptiness of the novel (like those of Eco's novel) makes it a code itself, inviting interpretation, and pointing the reader to an enormous number of other rooms in the labyrinth through its intertextuality, ambiguity and historicity. Would the reader become lost in the labyrinth? Perhaps. But in Foucault's Pendulum, as in The Journeyman Years, the appearance of the code creates the compulsion to find a map with which to navigate the uncertain terrain of interpretation and, upon this map, to perhaps locate a centre. It is to maps, therefore, that this exegesis must now turn.

### 2.3 The Map

The previous chapter demonstrated how a code is a representation of a hidden meaning that can be understood better by recourse to the encyclopaedia than the dictionary; now I will demonstrate how a map represents the promise of location and orientation between points on the journey to understanding. Maps, the ultimate limited metaphors, imperfect attempts at perfect representation, are often cited as evidence of the dominant postmodern suspicion of cultural and political bias in human culture (Harley, Laxton and Andrews 85). The motif of maps is used in Foucault's Pendulum to illustrate this perspective; but, by denying the existence of a universal map, Eco's protagonists, like John Riven in The Journeyman Years, suggest an escape to the postmodern labyrinth.

The problem with a labyrinth, or at least a rhizome, of the signs that make up our understanding of our world is that if one believes that each node is connected to (and is therefore in some way defined by) every other node, including necessarily its opposite, by some pathway, an important factor in understanding the world becomes navigation. Interpreters need some tool by which to determine their choice of paths, to know when they have strayed too far, to gauge the proximity of their experiences to reality - and to each other.

As we have seen, the analogy between map and encyclopaedia has been the subject of much discussion in semiotics. Maps are not truly objective. They are at once an attempt at perfect representation of the world as it appears, and at the same time a compromise between scales, levels of detail and cartographic projections:


#### Abstract

Maps made by different people present subjective semiotic expression of the objective reality. A man reading a map understands it in his own way, he interprets its contents, compares map signs with the objects they denote in accordance with his social and cultural experience and skills of working with maps. That is why every person reads a map in his own way depending on his experience which can not be totally the same as that of another person. There is no common reading and perception of a map. The vision of the reality and its semiotic perception is individual for each person. (Komedchikov 4)


Where common reading and perceptions of maps do occur, the postmodernists warn, it is in accordance with the intentional and unintentional biases of the mapmaker (Harley 12). These biases are due to the nature of mapmaking itself no map can ever truly represent the detail of the reality to which it refers; as Alfred Korzybski famously asserted, a map is not the territory.

> Maps are really "scientific caricatures" of the phenomena they represent. The detail and complexity of reality is selected, simplified, and then emphasized, so as to portray only what the map maker believes to be the essence of the map referent space, as defined by the purpose of the map. In the process of generalizing, cartographers have tended to emphasize facets of objective earth geometry, which are relatively static, rather than the more dynamic and subjective functional aspects of earth-related features. (Muehrcke and Muehrcke 333)

The lure of the map is this illusion of the static; a map, like a plot, does not change until it is consciously rewritten. In a dynamic world it is the stable and the unchanging that provides a point-of-reference from which to make decisions. As Riven ponders in The Journeyman Years, "in a world where maps existed [...] how could one wander or be lost?" (181).Throughout Foucault's Pendulum, the Plan begins to converge on "telluric currents", the mysterious energy sources that
flow through the Earth, controlling everything. These currents are presumed to be known to every secret society throughout history, but Casaubon decides that the currents as a whole are too abstract, and so conceives of a mechanism by which they might converge to a single location:


#### Abstract

The earth is a great magnet, and the force and direction of its currents are influenced by the celestial spheres, the cycle of the seasons, the precession of the equinoxes, the cosmic cycles. Thus the pattern of the currents changes. But it must change like hair, which, though it grows everywhere on the top and sides of the skull, nevertheless spirals out from a point toward the back, where it rebels most against the comb ${ }^{6}$. When that point has been identified, when the most powerful station has been established there, it will be possible to control, direct, command all the telluric currents of the planet. The Templars realized that the secret lay not only in possessing the global map of the currents, but also in knowing the critical point, the Omphalos, the Umbilicus Telluris, the Navel of the World, the Source of the Command. (451)


The treasure, then, is imaginary - an "assumed" centre of power, based on nothing more than the fancy that such a centre might exist. But once that thought has taken root, it becomes too important a possibility to ignore. The Plan, which must necessarily encompass every fragment of esotericism from history, winds its way soon enough to John Dee, identified as the grand master of the English Templars by Casaubon via his connection to alchemy, cabala, calendar reform... and cartography:

[^5]
#### Abstract

Dee, I think, isn't really interested so much in the actual discovery of places, as in their cartographic depiction, and for this reason he consults Mercator and Ortelius, the great cartographers. It's as if the fragments of the message in his possession have convinced him that the final whole will be a map, and he is attempting to discover it on his own. (404)


So begins the publishers' search for a map of their own. Considering Eco's image of culture as a rhizome, it is no surprise that their first instinct is an illustration of a labyrinth, but this is quickly dismissed as merely "an abstract scheme" (454). Instead, a map of the world is sought, one upon which the centre of power might be found.

The constant obsession with a lost knowledge, known only to others, is exemplified by the quest for the map. Ever cynical, the Planners know they live in a postmodern world resting tentatively upon a history of documents, including maps. All maps are encyclopaedia of a kind; the culmination of a collaboration of knowledge.

In The Journeyman Years, Riven's fascination with maps mirrors my own. A map promises a god's-eye view of the world; the schemata necessary for moving with purpose through the world towards any intentional destination. Once the relationship between the pure mathematical geometry and cartography is understood, maps seem to offer the positivist promise that science does: an objective, verifiable, trustworthy blueprint by which to observe what is, and to arrive at what is desired.

Suddenly, the very concept of a map appears to embody the ultimate goal: to chart every experience, every possible location of being, on some geometric graph.

Casaubon himself recognizes that the Code must therefore be referring to such an instrument:

A map? But a map would be marked with an X at the point of the Umbilicus.
Whoever held the piece with the X would know everything and not need the other pieces. No; it had to be more involved. We racked our brains for several days, until Belbo decided to resort to Abulafia. And the reply was:

Guillaume Postel dies in 1581.

Bacon is Viscount St. Albans.

In the Conservatoire is Foucault's Pendulum.

The time had come to find a function for the Pendulum. (453)

The Pendulum, of course, becomes the key to reading the map - the legend, in a sense; but which map is still uncertain. The Code is assumed to determine which map determines the correct location of the centre. After discussing a variety of maps, Casaubon realises that it would be simpler to determine the correct map by simply choosing the correct location.

It's not the Pendulum that's calibrated according to the map; it's the map that's calibrated according to the Pendulum. You follow me? It could be the craziest map in the world, as long as, when placed beneath the Pendulum at the crack of dawn on the twenty-fourth of June, it shows the one and only spot that is Jerusalem. (456)

In so describing the nature of the Map to which the Code refers, Casaubon highlights the irony of the semiotic analysis of maps as symbols: designed to be an objective description of reality, maps are not immune to the subjectivity of their reader's choice of interpretation.

A poststructuralist model of cartography on the contrary reveals the extent to which the projection of all kinds of maps is inextricably bound up with the rules,
> codes, and conventions defining what Peirce calls a "symbol". Between "map" and "territory" poststructuralism not only finds a relation of arbitrariness rather than of natural resemblance but, over and against Saussure, this arbitrariness works itself out only through an unlimited play of differences. (Barker 118)

It would seem natural to conclude that maps have no power to create or reveal new information, merely to plot subjectively the image of the world as seen by the cartographer. Not only is the map not the territory, but the postmodern view of the world would assert that there is no truly reliable bridge between map and territory:

> We say the map is different from the territory. But what is the territory? Operationally, somebody went out with a retina or a measuring stick and made representations which were then put on paper. What is on the paper map is a representation of what was in the retinal representation of the man who made the map; and as you push the question back, what you find is an infinite regress, an infinite series of maps. The territory never gets in at all. [...] Always, the process of representation will filter it out so that the mental world is only maps of maps, ad infinitum. (Bateson 429)

Eco's theoretical work has often been an attempt to counter infinite regresses in semiotic interpretation, chiefly by considering that in a world of infinite possible interpretations, there are tools available to determine that some are better than others. Consistency across representations is an important part of this. Explanations in science are similarly motivated by an attempt to describe observed phenomena in a way that does not contradict other observed phenomena. Indeed, any observed contradiction is justifiable grounds for rejecting a traditional explanation.

Any individual map is therefore, indeed, like any individual projection, or any local piece of the world map: it is incomplete, telling only a part of the story. But by identifying the incompleteness of actual maps, the qualities and characteristics of an ideal map can be imagined. When Casuabon identifies the purpose for which their map will be used, he identifies an unorthodox cartographic projection that he interprets as a tool for creating other projections:

> You recognize the design. It's a mobile rotula, like the ones Trithemius used for his coded messages. This isn't a map, then; it's a design for a machine to produce variations of maps, until the right map is found! (459)

Ultimately Casaubon concludes that there is no right map, chiefly because, just as there is no privileged perspective from which all perspectives of reality can be described, there is no unified goal or objective that all of humanity strives for. The belief that such a map could exist merely provides a comfort in the lives of those who strive for their own individual, unnamed goals:

But if you invent a plan and others carry it out, it's as if the Plan exists. At that point it does exist.

Hereafter, hordes of Diabolicals will swarm through the world in search of the map.

We offered a map to people who were trying to overcome a deep, private frustration. What frustration? Belbo's first file suggested it to me: There can be no failure if there really is a Plan. Defeated you may be, but never through any fault of your own. To bow to a cosmic will is no shame. You are not a coward; you are a martyr. (619)

Victory for Belbo ultimately comes when he refuses to reveal to the Diabolicals that there is no map - suffering death instead. Diatollevi succumbs to cancer,
believing his disease to be a cosmic punishment for indulging in the game in the first place. Upon reading Belbo's files, Casaubon decides to await his fate with the vow never to reveal that there is no map - that there is, by extension, no order to the Universe (Farronato 159).

> Casaubon is driven by a wistful longing for some centre of meaning, but he betrays his own rules, as often happens with experienced readers (including scholars, professors, and students). Because Casaubon is lacking a direction, the reader is left in an ambiguous realm in which everything is decentralized. The only fixed point in the universe seems to be the pendulum, as Casaubon says at the beginning of the novel, but in fact there are many similar pendulums throughout the world. (Farronato 156)

In The Journeyman Years, maps are similarly used as motifs for Riven's understanding of the world around him. Riven admires Mercator as the greatest cartographer in the world, not for his mastering of an academic art, but for the mistaken belief that he holds some privileged perspective of the world from which he is able to make his maps.

Just as Casaubon is disillusioned by Lia's interpretation of the Code, so is Riven by the apparent meaninglessness of the Steganographia's hidden messages. Where Dee regresses into reductionism, and Mercator exemplifies the collation of encyclopaedic knowledge about the world, Riven seeks wisdom through an understanding of maps and mapmaking, only to be constantly faced with the contradictions between the world as it appears on his beloved maps and the real and changing world around him throughout his adventures. Through his interactions with the characters he meets along his journey, Riven is challenged to
consider the opposing perspectives of the different groups and individuals that populate his world and to constantly revise his own internal map.

But it is not just the characters within these novels that are drawn to maps to make sense of their experiences. If the novel offers itself to the reader as an object of interpretation, like a code, it causes the reader to create their own map. In the most literal sense, the reader may mentally map the journey of the hero from location to location, but more generally the reader will place each character and event in an internally mapped context that becomes richer and more detailed as they read. Connections will be drawn: master-to-apprentice, ally-to-foe, familiar-to-strange, as the reader places each new element against those that came before. Perhaps the reader will place on their map those names or words or details that are as yet unfamiliar to them: references they may or may not choose to research themselves when they put the novel down and return to the world outside it. To interpret the novel, to understand its "meaning", the reader will draw upon their entire encyclopaedia of experience and knowledge to make sense not just of the story, but of the entire object of the novel - its division into chapters with cryptic titles, the quotations that preface each chapter, the order and detail of each description that draws from history but is also a work of fiction, crafted intentionally and imaginatively.

Perhaps even the reader will read the novel again, and again, and may publish their own interpretation - as countless have done of Foucault's Pendulum, including now this very exegesis - contributing to the encyclopaedia, offering pathways on the journey of interpretation. Limitless interpretations of codes give
rise to limitless maps of limitless territories, and we find ourselves no closer to the truth, unless some privileged perspective can be chosen.

What becomes necessary then, for the characters and the reader, is some centre from which to orient themselves, from which to read the map and make sense of the code. Riven desires this, just as the protagonists of Foucault's Pendulum do. Where Riven's desire originates in his religious upbringing, with its conceit of an absolute watcher with absolute objectivity, Eco's protagonists conceive of the idea as a game; for Riven the symbolism of religious iconography becomes the symbol for a centre of meaning in the form of the double cross - for Eco's protagonists it is the intersection of a shaft of light (symbolically, illumination from without) and the swing of Foucault's pendulum that becomes the X that will mark their spot.

### 2.4 The Cross and the Pendulum

The previous chapters have demonstrated how the presence of a secret code motivates the compilation of encyclopaedic knowledge, analogised in the science of mapmaking. An analysis of maps and mapmaking in both semiotics and Eco's novel Foucault's Pendulum illustrates how, once a code's significance by virtue of its secrecy is rendered meaningless, the natural limitations of maps presents a problem for the character caught in the Hermetic drift of unlimited semiosis. This chapter will offer an analysis of the image of the Pendulum in Foucault's Pendulum, and the double cross of The Journeyman Years, and demonstrate how a symbol can provide the recursive link between code and map in the postmodern conspiracy novel.

Riven is a character haunted by symbols and their meanings, from the opening line of The Journeyman Years:

> When I first saw the double cross, cut into the night sky, I knew it meant my death (7).

It is also clear from this first line that the character is a man who interprets signs personally, within the context of his own life experience. The quote by Aristotle that precedes this line offers the reader a clue: that what Riven has seen is the northern lights, or Aurora Borealis - but does this change the meaning that Riven takes from it?

For Riven the vision in the sky coincides with his guilt about the death of a girl he loved, Anael - a Hebraic angelic name that appears in the Steganographia, and so draws the attention of Dee. This coincidence forms the catalyst for their
adventure, but, as coincidence is unacceptable to the semiotic drifter, each character fuels the other's obsession for meaning within the events that have led them to their quest. So powerful is the desire to know that which the symbol refers to - the concrete, the real - that the characters endlessly transfer their attentions from physical object to physical object: the crucifix of Christ, the lance that pierced his side, the branches of the Tree of Knowledge in Eden, the Rod of Moses, and on and on, finding potential connections between every physical line and intersection in the history of the world.

In Foucault's Pendulum, the eponymous pendulum is the object of attention; as Eco himself admits, a novel's title is a key to its interpretation (Eco Reflections on the Name of the Rose). The titular object is both a kind of scientific demonstration and the specific example of such as demonstration that existed in the Musée des Arts et Métiers in Paris since 1851: a copper orb suspended from a wire that, through the observation of the precession of its arc and a comprehension of the physics that governs such motion, demonstrates the rotation of the Earth.

When Casaubon first describes it to the reader he is nearing the end of his story, and so is awed by the symbol of certitude that the pendulum represents. He is disgusted by the bored and ineffective conversation of a nearby couple: "he, trained on some textbook that had blunted his capacity for wonder, she, inert and insensitive to the thrill of the infinite, both oblivious of the awesomeness of their encounter" (6). This couple seems to personify the two negative sides of a conflict between a scientific rationalism and postmodern nihilism; but Casaubon, thrilled by the infinity through and beyond the pages of his textbooks, is caught in a chaos between both worlds. The surety of the pendulum cannot fail to tantalise
and to mesmerise him, and unnerved, he forces himself to "play this ironically [...] not letting myself get involved" (10).

In The Journeyman Years, Dee is similarly torn between ironic cynicism at the credulity of others and his own personal investment in the promise of supernatural certainty. He claims to "see the patterns" (18) that other men do not see - a solipsistic arrogance echoed later by the tragic figure of his former teacher, Cardan, for whom it has transformed into near-suicidal paranoia (98). Both Dee and Riven find themselves caught at the dawn of the scientific revolution between the unending labour of scientific rationalism and the empty promise of religious revelation, which lures each of them into a fool's errand to arrive at a god's-eye view of the world.

Casaubon hides in a periscope which he notes is out of place as a "positivistscientific" instrument amidst the "emblematic lion and serpent" (16) - until he makes the portentous observation that it gives him the same view as would have a man hanged in place of the pendulum. So begins the character's and the reader's hunt: for the view from the pendulum. For Casaubon it begins literally inside a positivist-scientific space, envying the privileged perspective of the fixed point around which the universe moves.

Soon this detached objectivity begins to show cracks, the first of which is when Casaubon sojourns to Brazil with Amparo. It is here that he begins to be lured into the dangerous waters of the hermeneutic whirlpool:

That was the day I decided to save some money to venture a trip to Bahia. It was also the day I began to let myself be lulled by feelings of resemblance: the notion that everything might be mysteriously related to everything else. (164)

Despite her commitment to empiricism, and the Marxist revulsion of religion, Casaubon detects a contradiction between Amparo's politics and her ties to the traditions of her native country. He believes her to "[cling] to that world with the muscles of her belly, her heart, her head, her nostrils" (162-3), and when they are invited to a mystical ritual, where the participants fall into a trance and are possessed by the spirits of the dead, Amparo is horrified to find herself experiencing the very phenomena she refuses to believe in: horrified when irony fails her and she gets involved. As Aglie notes, Amparo was "guarding her mind tenaciously, but she was not on guard against her body" (215).

Amparo, like the other female characters in the novel, seems to feature only to "underscore aspects of Casaubon's personality" (Francese 111). In fact, Eco recalls that the Brazil sequences were originally conceived merely to bridge the story's chronological void between two events that Eco believed necessary to background the story: the Italian revolts of $1968^{7}$ and the release in Italy of the programmable personal computer in 1983 (Eco and McLaughlin 323-4). Eco observes that the sequence, whilst a digression from the main line of the story, serves to foreshadow through Amparo the experience that the other characters of the novel will undergo (Eco and McLaughlin 324).

In The Journeyman Years many events that appear magical to the narrator are left partially or wholly unexplained. Some can be rationalised: the explosion in Granvelle's palace is explained if Dee's alchemical concoctions are recognised as recipes for a variety of natural incendiaries, and Dee's success in multiple

[^6]blindfolded chess games seems less fortuitous if it is reasoned he may simply have played his opponents moves against one another. But when Riven - after a narrative filled with stories of magical staffs and the power over life and death finds a staff in a cave beneath a mountain, and this same staff breaks at the exact moment of his death, how can the reader (or Riven) conclude it is mere coincidence?

Though Amparo vanishes from Foucault's Pendulum after her experience, later, when Casaubon witnesses the attempted culmination of The Plan beneath the pendulum, he questions his reliability as narrator of his own story by comparing his experience to hers:

> Now, let's assume that what I saw Saturday night in Saint-Martin-des-Champs really happened. Perhaps not the way I saw it, befuddled as I was by the music and the incense; but something did happen. It's like that time with Amparo. Afterward, she didn't believe she had been possessed by Pomba Gira, but she knew that in the tenda de umbanda something had possessed her. (617)

Casaubon, still the positivist, acknowledges that his senses can be "befuddled"; but that, befuddled or not, something happened. What happened, of course, was at least murder, in the form of one of the most ancient and primitive of mystic rituals: human sacrifice. In Brazil, Casaubon reflects on his own submission to the rhythm and the ritual of the tenda de umbanda by likening it to the academic, detached from his subject by theory, now faced with the reality of its practice:

What happened to me was like what might happen to a pedantic ethnologist who has spent years studying cannibalism. He challenges the smugness of the whites by assuring everybody that actually human flesh is delicious. Then one day a doubter decides to see for himself and performs the experiment-on him. As the
ethnologist is devoured piece by piece, he hopes, for he will never know who was right, that at least he is delicious, which will justify the ritual and his death.

The ritualised death of Belbo occurs when he is hanged from the pendulum by the Diabolicals, thus disrupting its arc and any chance of it fulfilling its role in The Plan. Before this, Casaubon observes the pendulum - not the original, but a larger re-creation - now hanging in a different place, the magnetic regulator replaced by a man described as a magician who pushes it with his fingers to ensure its movement. It is interesting to note the emphasis placed on the human interruption of the pendulum: the replacement of rhythmic, predictable certainty by the intuitions of the magician and the physical disturbance of Belbo. Perhaps this is why, in the moment of brutal realisation of the ritual, as Belbo becomes like the ethnographer consumed by doubters, he seems to observe the absurdity of the situation:

> Until that moment, Belbo had trembled. But now I saw him relax. He looked at the audience, I will not say with confidence, but with curiosity. I believe that, hearing the argument between the two adversaries, seeing before him the contorted bodies of the mediums, the dervishes still jerking and moaning to the side, the rumpled vestments of the dignitaries, Belbo recovered his most genuine gift: his sense of the ridiculous. (594)

From his perspective, noosed by the pendulum's cable, Belbo is able to recognise the lunacy of those who - as Eco warns against - took a postmodern discourse too seriously, without irony. Instead, perhaps in the ultimate irony, Belbo becomes the fixed point from which the pendulum swings, and from there is able see the truth that Casaubon desires.

Riven sees no humour in the irony that he has transformed from a condemned boy frightened of Hell in death to an immortal man destined for eternal torture on Earth; a tragic character, he believes himself to deserve his torments because he has been unable to shed the guilt of his lover's death. It is unclear whether the appearance of Dee and the breaking of the staff is a hallucination, but what seems certain is that Riven is unable to end his life until he receives some forgiveness from outside himself. When this happens he sees two pairs of buds - two transoms - on the staff, identifying it as a double cross, and it is then symbolically broken, ending the story.

In Foucault's Pendulum, it is not until Casaubon travels to Belbo's home town, the name of which is censored to "***", perhaps so as to avoid unwanted interpretation, that he discovers a text written by the teenage Belbo that holds the key.

It is the story of the trumpet - Eco's own story, from his own childhood. For Belbo, the final moment playing trumpet at the funeral of two partisan soldiers, killed during the liberation of Milan, was the one moment in his life free from fear, from confusion, from desire and from shame. For Belbo, that moment was the escape from the hermeneutic circle, the meaning to which all symbols pointed - including, most importantly, the pendulum:

[^7]did not stand for anything else. At that moment there was no longer any
deferment, and the score was settled. (633)

It is Belbo who introduces Casaubon to the concept of the pendulum in the first place. He claims that he understood everything when he realised that every point in the universe is a fixed point, and that life is spent trying to find the special places in the universe where hanging the pendulum "works" (236). For Casaubon, the pendulum is a link from Belbo to the secret, unspoken, unspeakable truth of existence.

Throughout the novel the pendulum comes to symbolise everything - as Eco warns that all symbols, to the unlimited interpreter, inevitably will. But it is not only the fixed point of the pendulum that is symbolic. Pendula are markers of time, dividing infinity into regular, countable, consumable moments. A pendulum's swing may show us not only that the world is moving, but that we are too; irresistibly, forward in time, swing by swing, towards the end of our own stories.

The binary nature of pendular motion cannot fail to evoke the endless bouncing between oppositions that characterises postmodern discourse. In his 1983 paper "The Scandal of Metaphor: Metaphorology and Semiotics", in an attempt to dismantle the mechanism of metaphor, Eco analyses a poem concerning an ocean voyage in which the swaying of the mast is compared to the movement of a pendulum ${ }^{8}$. After delineating the characteristics shared by both objects he identifies the action of "oscillation" as the important comparative factor between

[^8]mast and pendulum - the evocation of the deliberately regular movement of the pendulum as timing instrument, on the one hand, and the casual, accidental rocking of the ship's mast on the other. It is the difference between the kinds of oscillation - one measured, the other incidental - that is of interest in this analysis.

He concludes with the appropriately pendular argument that it is not knowledge of the world that contributes to the interpretation of a metaphor, but interpretation of a metaphor that contributes to knowledge of the world:

> Even the most ingenuous metaphors are made from the detritus of other metaphors - language speaking itself, then - and the line between first and last tropes is very thin, not so much a question of semantics as of the pragmatics of interpretation. At any rate, for too long it has been thought that in order to understand metaphors it is necessary to know the code (or the encyclopedia). The truth is that metaphor is the tool that permits us to understand the encyclopedia better. (Eco and Paci 256)

It is clear that Eco himself is unable to escape the tension between signifiers and signifieds, a tension at the heart of his semiotic theory.

If we interpret Foucault's pendulum as the metaphor for unbiased perspective of the world, it is interesting to note that the binary movement is interrupted by the insertion of Belbo as a fulcrum. When Belbo is hanged, Casaubon imagines that the bob traces a pattern of the Sephirot, an arrangement of the ten emanations of Kabbalah that represent the ten stages of spiritual development in life -which, in their order as section titles of the novel, begins with Keter (Crown) and ends with Malkhut (Kingdom). Later he finds a letter in Belbo's house explaining the physics of a double weighted pendulum; a letter that exists paradoxically not
merely inside but outside the story, as the prefacing quotation of Chapter 114, a letter to the author himself.

This adds to the sense that, in many ways, Belbo is Eco, as the reader is Casaubon, watching another in the search for meaning and having it narrated in this strange story from pendulum to trumpet; from Crown to Kingdom. Casaubon concludes that for Belbo the pendulum was "both a Sinai and a Calvary" (600); from where revelation is bestowed and upon which he is martyred in the name of something, which the author can only describe in terms of a trumpet.

The experience I ultimately described in The Journeyman Years turned out not to be the darkly regained joy of epiphany, but the strangely existential tragedy of a guilty man who had been taught since birth that forgiveness was God's dominion, only to discover that God does not exist. Throughout my upbringing I explored religion and reason as two parallel paths that never intersected. As I researched the novel I envisioned a line drawn between these two parallels, forming two intersections: a double cross, or the Cross of Lorraine. I discovered that crosses, like Eco's rose, were symbols so overwhelmed with meanings they ceased to have any meaning at all.

We cannot experience Eco's epiphany, just as Casaubon cannot experience Belbo's, but we can appreciate, having recognised it for what it was, his refusal to "bow to nonmeaning" (623). Casaubon compares the Diabolicals and their kind to the sex maniac, who would be defeated were he offered sex willingly, his sport ruined, for the maniac desires not sex but resistance and despair (622). Thus, his sport ruined, Aglie's only option is the melodramatic; to inspire Belbo's sense of
irony, the only sure bait for a definitive and damning refusal to reveal the nonexistent secret.

In that moment Belbo transcends Eco's postmodern man, who cannot bear to utter "I love you madly", for fear of summoning the ghost of Barbara Cartland who will point the finger of false innocence. Instead he has found the authenticity in the feelings that give rise to the words themselves, and thus becomes that man whom Cartland perhaps imagined - not falsely innocent, but truly wise, and of a certainty only allowed in fiction in the postmodern world.

Perhaps it is because archetypes are appealing in their certainty; after all, even Amparo, feminist and socialist, prefers the caricatured Aglie, "a consistent reactionary, with the courage to be decadent", over "bourgeois democrats" (113). And why not? How much more interesting is either end of the pendulum's swing than the dreaded bourgeoisie, neither slave nor patrician, servant nor aristocrat, crown nor kingdom, but somewhere in the middle: the middle class, not only politically, but spiritually, and intellectually.

### 2.5 Decoding, Mapping and Crossing The Journeyman Years

In the previous chapters I have shown how three separate elements from the critical field of semiotics - code, map and symbol - combine to create the framework for the postmodern novel, which itself serves as a code, necessitating the reader to create a map and, finally, a symbolic point of reference from which to create an interpretation. In this chapter I will show how the formulation of this framework shaped the writing of The Journeyman Years.

The Journeyman Years is a novel that chronicles the adventures of a young sixteenth-century seminarian, John Riven, as he accompanies the occultist John Dee on a tour through Europe after being rescued from execution upon accusation of heresy.

For me, the trumpet is evidence of the sort of young man I was. (Eco and
Zanganeh)

If Foucault's Pendulum was Eco's journey from pendulum to trumpet, expressing the yearning of an author in his fifties for a perspective irretrievably lost in youth, then The Journeyman Years, written by an author in his twenties, is the journey from cross to compass rose, expressing a yearning for a certainty and clarity of purpose in maturity that can never quite be reached if one is committed to a continued, lifelong learning.

As a young academic brought up in the Catholic faith, my experience was one of inner conflict as I entered my own "journeyman years" and travelled between different academic fields, different jobs and different cities.

I was curious about the idea of writing a story about a young man split between two conflicting methods of understanding the world: through the promise of a secret, supernatural, revealed wisdom, on the one hand, and the study of science, history and philosophy on the other. This inspired the creation of John Riven, a man who would be apprenticed to two masters - one devoted to reductionism, the other devoted to holism. I wanted to set the character against a historical backdrop that symbolised the conflict I was exploring, and so chose the doublecross intersections of European scientific revolution, Christian reformation and Age of Discovery.

The discovery of the three elements - code, map and symbol - came initially from my research into the historical period. I was already interested in maps, and knew that Gerard Mercator was one of the most famous cartographers of the era. A study of his life revealed his interest in compiling not only a comprehensive atlas of the world, but a complete encyclopaedia and cosmography too. Mercator was truly interested in collecting every piece of information about the world, and his work seemed to reflect the burgeoning humanist philosophy that would pave the way for the Enlightenment in Europe.

At the same time, two elements of Mercator's cartography fascinated me. The first was a controversial map of Britain, most likely published for Cardinal Charles de Lorraine, brother of the Duc de Guise. That a man like Mercator, so committed to the art of mapping and the unbiased representation of the world, would accept so clearly a political commission made me curious as to how such a decision might influence his apprentice, particularly as it preceded a mysterious episode in the forests of Lorraine that left a dark and profound effect on the famed
cartographer. The second was the Mercator projection, the mathematical principle for depicting the curved surface of the globe on a flat map that is still the most commonly used today: a Eurocentric projection that served to improve nautical navigation in Mercator's day but which, ultimately, offers an incorrect image of the relative sizes of the continents.
> ...with the first globe (1490) and the invention of the Mercator projection at about the same time, yet a third dimension of cartography emerges, which at once involves what we would today call the nature of representational codes, the intrinsic structures of the various media, the intervention, into more naive mimetic conceptions of mapping, of the whole new fundamental question of the languages of representation itself, in particular the unresolvable (well-nigh Heisenbergian) dilemma of the transfer of curved space to flat charts. At this point it becomes clear that there can be no true maps (at the same time it also becomes clear that there can be scientific progress, or better still, a dialectical advance, in the various historical moments of map-making). (Jameson 91)

Initially I had thought that Riven might set out to create a truly perfect map, and in some ways this is what he attempts to do when he begins his apprenticeship with Mercator. He soon discovers, however, as I did through Frederic Jameson, that there can be no true maps. Instead, I determined that maps and cartography would be a focus for the main character though, as in Foucault's Pendulum, no particular map should ever become the final object of interest - rather the concept of mapmaking itself would recur to represent the character's own attempts to chart his experiences and navigate his way through life.

Throughout the novel Riven expresses his fascination with mapmaking and its goal of ordering the world in some rigorous, empirical fashion; yet, in his first encounter with Dee, he blames a map for his own misreading:

> I can read maps [...] it was the projection that was wrong. The paradoxical compass, they called it; a new projection for finding latitudes on the northern seas - but all it does is turn you back upon yourself. It was the map that was wrong, not me. (10)

Riven's failing is, of course, his own lack of discipline - a characteristic he shares with the rambunctious John Dee. Unlike Dee, however, Riven lacks worldly experience, and so is less equipped than Dee to deal with the catastrophes that befall the pair on their adventures. When Riven finally meets Mercator, he is dismayed by the old man's lack of worldly experience and dedication to discipline. Riven is made to sweep floors, clean the printing presses and practise cursive - repetitive, menial tasks in which Riven at first can find no meaning. This changes when Riven makes a discovery: that the careless writing of words and letters result in the mysterious alchemical symbols that obsess Dee - and that, in a broader sense, a lack of understanding can lead to misinterpretation.

This idea was a theory originally put forward by the biologist H.W. Renkema in 1942 concerning the possible origins of botanical symbols (figure reprinted from (Stearn 112)):


This idea had a profound effect on me, as it exemplified the way in which carelessness or a lack of knowledge about the world could give rise to symbols that eventually become disconnected from their source, and that come to have a
power of their own: just as I suspected the Christian symbol of the cross had throughout my youth.

In order to set Riven out on the journey that would lead him to this point, I wished to apprentice the character at first to a mentor who would contrast with Mercator's discipline, and who would provide the first promise of some secret to be discovered.

To bring my Englishman (Riven) to the door of Mercator, who never travelled further than Paris from Duisburg in his life, I sought some link between the cartographer and England - and found it in the character of John Dee. Dee has appeared as an occultist, mystic, sorcerer and alchemist in countless historical novels, as well as fantasy and horror stories, but a study of his life revealed that he and Mercator had not only studied at university together, but kept up a correspondence throughout their lives. What, I wondered, could have set the two men, who both so clearly recognised the value of study in the acquisition of wisdom, on such different paths?

I discovered that in 1562, the nineteenth year of the fictional Riven's life, Dee was granted leave to travel through Europe collecting books for his library - one of which would be the mysterious Steganographia (The Secret Writing) of Abbot Trithemius. This book, purporting to be a manual for communicating with angels and demons, was eventually discovered to be a manual of cryptography disguised as an occult work, most likely to scare off the more superstitious of prying eyes (Reeds 292).

Dee's tour through Europe therefore became the map of Riven's journey prior to his apprenticeship with Mercator: at each location the pair would discover a 64 of 87
further clue to some secret behind the book - a secret that would ultimately be discovered arbitrarily, and prove meaningless, at least to the protagonist. Such a structure suggested a blending of the (non-Hispanic) 'picaresque' style, with its satirically episodic disorder narrated by an out-of-his-depth protagonist (Wicks 243-44), and the 'bildungsroman', in which a young character learns lessons about life through a series of adventures.

The historical novel, when appropriated by the postmodern author, has often been seen as a 'strategy for unmasking the fictional construction of the past'(Wesseling 5). It is certainly far from the 'genuine historicity' that Frederic Jameson nostalgically desires (Jameson 19-21). Yet the attraction to the genre, for me, was not for its political opportunities but for the potential to create an aesthetic not merely of a historical period but of a - if not genuine - at least pretended historicity. There would be historical characters whose names could be found in historical records. There would be real historical events whose dates corresponded to works of non-fiction. There would be a backdrop of as much verifiable historical texture that the reader would be invited to suspend their disbelief as much as possible in a work that, at its heart, would ask questions about the possibility of knowing the difference between the real and the imagined. Eco recognises the natural connection between bildungsroman and the historical novel:

The historical novel for me is not so much a fictionalized version of real events as a fiction that will actually enable us to better understand the real history. I also like to combine the historical novel with elements of the bildungsroman. In all my novels, there is always a young character who grows up and learns and suffers through a series of experiences. (Eco and Zanganeh)

Eco is presumably referring to the historical novels of other writers; his own historical novels are clearly more than mere works of fiction that enable the reader to better understand the 'real' history from which their author has borrowed details. Rather, they are what Christine Brooke-Rose (referring to works alongside Foucault's Pendulum such as Salman Rushdie's The Satanic Verses) terms 'palimpsest' histories; history already re-interpreted within a philosophical framework:

The novel took its roots in historical documents and has always had an intimate link with history. But the novel's task, unlike that of history, is to stretch our intellectual, spiritual and imaginative horizons to breaking-point. Because palimpsest histories do precisely that, mingling realism with the supernatural and history with the spiritual and philosophical re-interpretation, they could be said to float half-way between the sacred books of our various heritages, which survive on the strength of the faiths they have created [...] and the endless exegesis and commentaries these sacred books create, which do not usually survive one another, each supplanting its predecessor according to the Zeitgeist, in much the same way as do the translations of Homer or the Russian classics (Eco and Collini 137).

The work upon which the bildungsroman genre is formulated is widely recognised to be Goethe's Wilhelm Meister's Apprenticeship ${ }^{9}$. I discovered that the autobiographical style allowed me a freedom to structure my narrative around a chronology of historical events, but which at the same time invited the hallmarks

[^9]of the picaresque. The picaresque, as Mark Schorer explains, is characterised by the kinds of elements that abound in conspiracy fiction:


#### Abstract

There was still enough left of the character of the picaresque novel of the eighteenth century to fill the story with the most improbable coincidences and fantastic adventures; with tales of attempted murder and arson, of insanity, incest, and suicide; with complicated romances and mistaken identities; with lost, stolen or substituted children, with mystical messages, prophetic dreams, and, of course, a Secret Society. (Schorer 83)


The interpretation of improbable coincidences is a theme explored by both Foucault's Pendulum and The Journeyman Years, in which the protagonists seek to find the links between seemingly disconnected events and information. The problem with the bildungsroman, as Irvin Stock points out, is the tendency for such a style to devolve into a series of vignettes serving only to explicate a moralistic connection between the coincidences that form the narrative:


#### Abstract

...the Bildungsroman, of which Goethe's novel is the great example, is a sloppy and self-indulgent genre - there is no form, since it just goes autobiographically on and on, nor any proper commitment to experience, which the self-obsessed hero only passes through; that this one might be full of "wisdom," perhaps, but that here is precisely its greatest fault, for what can wisdom be but smug "Victorian" moralizing or analyzing or generalizing, mere simplifying abstraction at best, and the death of all actuality, complexity, and charm. (Stock 84)


David Martin cites Schorer's analysis of the picaresque in his own critique of Wilhelm Meister's Apprenticeship, concluding that the sprawling narrative can actually be seen to be structured around a single image: a comparison made of the protagonist to the biblical Saul, who "went out to seek his father's asses, and
found a kingdom" (Martin 202). This, he argues, structures the narrative neatly into two halves - firstly the pursuit of a lesser goal, through which the character meets those individuals who will help him on the second, more important journey, from boyhood into maturity:

> Everything which Wilhelm comes in contact with, however seemingly insignificant, gradually acquires meaning when reflected in terms of the dominant image. Thus he and all things in relation to him undergo a change from doubt to certainty, from complexity to significance - in a word, from asses to a kingdom. (Martin 202)

For Riven, I realised that there was (initially) no dominant image, no object through which each experience could be interpreted. The journey from code to map is doomed to fail, for the map will always be incomplete. A symbol, therefore, is necessary to link the map back to the code once more. In Foucault's Pendulum, it is clear that the Pendulum itself is the symbol of certainty against which all things could be measured:

> The idea that everything else is in motion and up above is the only fixed point in the universe ... For those who have no faith, it's a way of finding God again, and without challenging their unbelief, because it is a null pole. It can be very comforting for people of my generation, who ate disappointment for breakfast, lunch, and dinner. (235-6)

An instantly recognisable symbol of certainty and authority for the young Catholic is the cross. Like the titular (though irrelevant to the narrative) "rose" of The Name of the Rose, the cross is a symbol that resists contemporary interpretation due to its generality: upon different translations it can be a number, a Roman
numeral, a plus or multiplication sign, a compass rose, a marker on a map or a symbol of danger, to name a few. As Dee asks Riven:

> 'And why do you worship the cross?' asked Dee.
> 'It was the instrument of Christ the Saviour's martyrdom,' I replied, automatically.
> 'Was it?' pressed Dee. 'Do we not know that the garrisons of Jerusalem executed their political prisoners upon a single pole? And that Constantine's cross was simply the initials of Christ, chi rho? Or how similar the Pagan cross of the Sun, the Egyptian Ankh of life, the Greek Caduceus of Hermes - all absorbed by the Christians of Rome?' (107)

The historical figure of Dee was obsessed with the reduction of the world into symbols. According to Michel Foucault, the sixteenth century was the moment when similitude became the focus in the recognition of similarities between symbols and signs:

Let us call the totality of the learning and skills that enable one to make the signs speak and to discover their meaning, hermeneutics; let us call the totality of the learning and skills that enable one to distinguish the location of the signs, to define what constitutes them as signs, and to know how and by what laws they are linked, semiology: the sixteenth century superimposed hermeneutics and semiology in the form of similitude. (Foucault 33)

The danger, for Eco, occurs within the Hermetic tradition, which carries the notion of similitude to an extreme conclusion:

Neo-platonist Christian thought will try to explain that we cannot define God in clear-cut terms on account of the inadequacy of our language. Hermetic thought states that our language, the more ambiguous and multivalent it is, and the more

# it uses symbols and metaphors, the more it is particularly appropriate for naming <br> a Oneness in which the coincidence of opposites occurs. But where the coincidence of opposites triumphs, the principle of identity collapses. Tout se tient. (Eco "Interpretation and History" 32) 

Tout se tient, or "all is connected", is the motto of both the mapmaker and the conspiracy theorist. It is therefore the Golden Rule of the conspirators in Foucault's Pendulum, and for Dee, Mercator and Riven in The Journeyman Years. It means that no myth or story or coincidence can be considered irrelevant to the search of the God-like perspective that the protagonists each covet, but which they have no hope of achieving.

It also means that the symbol forming the focus of The Journeyman Years could never be limited to the alleged cross upon which Christ was crucified. For sixteenth-century scholars, the power of God stretched further back into history than the life of Christ. Christ, after all, was merely the incarnation of a God whose first recorded acts were witnessed at Eden by the first humans.

As I wrote the novel I hoped, like Riven, to connect as many religious legends from history as possible, stretching back to Genesis, through the life of Christ, up to the life of John Riven, centred on the image of a cross. With the multitude of variations of the imagery of the cross, I sought a unifying symbol that was both different from the traditional Christian cross whilst still incorporating Christian mythology: the double cross, or Cross of Lorraine.

The double cross, comprising both parallels and intersections, could symbolise the coincidence of opposing concepts and the meeting place of incongruous ideas. In
the same way, the Pendulum is a symbol of movement between opposites in Eco's work:


#### Abstract

What we might call pendular thinking, oscillating between opposites, has always characterized Eco's work-both creative and theoretical. We need only remember the importance of nonorder to order and instability to stability in his semiotic theorizing, or the undercutting of reason by chance in The Name of the Rose. That pendular binaries also end up moving more or less in circles, like Foucault's pendulum, is not unrelated to Eco's theory of the self-reflexive circularity of semiotic systems in his Theory of Semiotics. (Hutcheon "Eco's Echoes: Ironizing the (Post)Modern" 6)


For Eco, the pendulum is simply the pointer to the object of the conspiracy: at first the Holy Grail, then finally the Omphalos, or the centre of power of the Telluric currents. In The Journeyman Years, I wanted the symbol of the double cross to point to a relic that was the combination of a variety of mythological relics: the staff of Moses, the Lance of Longinus, the spear of Constantine, the sword of Joan of Arc, and so on. Any relic that could be reduced to lines or intersections could be swallowed into the conspiracy. The more tenuous the connection between the stories, the better; for, like Eco, I was constructing an image of a world saturated by symbolism and relics, not all of which the reader will understand:

> I don't think that the reader of the book should know the exact meaning of everything. Suppose I am a film maker and I show you a character walking in the dark in a castle holding only a candle, and you come to ask me: 'Would you put a lamp on the scene to illuminate it?' But why? If I wanted the scene to be dark it's because that darkness has a meaning. So if I want to overwhelm you with a lot of mysterious magic spells and names it's not because I presume that you are a scholar of the Warburg Institute. I want you to feel this unbearable, suffocating accumulation of strange and exotic and magic spells. The reader has

> to understand I am making puns of ideas and so I use an enormous amount of material some of which even I don't know. (Eco and Blonsky)

With the search for the "true" meaning of the double cross to frame the journey from code to map, the logical conclusion to Riven's journey arose from the world of the era. The religious conflicts between the Catholic King Philip of Spain and the Protestant nobles of the Netherlands culminated in a violent iconoclasm, during which Catholic churches were vandalised and relics and iconography destroyed.

What matters therefore in the historical novel is not the re-telling of great historical events, but the poetic awakening of the people who figured in those events. What matters is that we should re-experience the social and human motives which led men to think, feel and act just as they did in historical reality. And it is a law of literary portrayal which first appears paradoxical, but then quite obvious, that in order to bring out these social and human motives of behavior, the outwardly insignificant events, the smaller (from without) relationships are better suited than the great monumental dramas of world history. (Lukács 42)

The Journeyman Years is not a historical novel in the sense that Lukács would define it. In a sense it is the inversion of a historical novel, using the historical reality to poetically awaken the motivations of the characters. It is what Bouchard refers to as a "carnivalization" of the genre, as pertaining to Eco's work:

With regards to the historical novel, The Name of the Rose represents the philosophical inversion of the genre since, unlike its classical models, Eco's work heightens the tensions between reality and fiction. Such overt carnivalization of genres and conventions finally leads to the creation of other forms, capable of being described only by what they are not: the anti-detective

> novel, the non-mystery novel, the failed Bildungsroman, or the historiographic metafiction. (Bouchard 16)

For Mikhail Bakhtin, "carnivalization" (or "carnivalesque") means more than the subversion of genres - indeed, Bakhtin eschewed all but the broadest of genre distinctions (Hoy 767). The medieval carnival serves for Bakhtin as the prototype for an artistic space in which the seriousness of traditional and established wisdom is subverted, inverted and transformed into a new kind of wisdom - a tangible creation that recognises the authority of the old and the dominant whilst, at the same time, employing humour and irreverence to construct a richer, fuller, more whole description of the world (Hirschkop and Shepherd 159).

Furthermore, the "historiographic metafiction" genre, as coined by Linda Hutcheon, serves more to create analogies between history and the present era than to illuminate the personal motivations that gave rise to historical events. In this sense The Journeyman Years is a contemporary coming-of-age story about a youth growing out of religious beliefs in an age of information. However, as Eco warns:


#### Abstract

...one must be extremely careful with analogies. Once I wrote an essay in which I made some parallels between the Middle Ages and our time. But if you give me fifty dollars, I will write you an essay about the parallels between our time and the time of the Neanderthals. It's always easy to find parallels. I think nonetheless that being concerned with history means making erudite parallels with the present time. I confess to being monstrously old-fashioned, and I still believe, like Cicero did, that historia magistra vitae: history is the teacher of life. (Eco and Zanganeh)


The double cross first appears to Riven as a spectre in the sky, after he has navigated his ship into a storm (7). This vision, and its connection to a name, "Anael", prompts Dee to take an interest in him, and Riven finds an opportunity to escape the punishments of Hell by joining Dee's quest for the secret of angelic immortality. Throughout the story Riven bears witness to Dee's acts of apparent sorcery, growing more convinced of the possibility of supernatural power, whilst the astute reader will recognise the rational explanation for each occurrence.

When Riven observes Dee's descent into madness (168), with the publication of the Monas Heiroglyphica, and that his obsession with immortality is motivated by a desire to save a woman from cancer (176), he becomes disillusioned and diverges on to the path that will intersect with Mercator, and the pursuit of disciplined learning. His experiences until then, however, leave him with the sensation that the double cross is important - and when it appears again in the form of Corput's Jacob's staff (185) and the emblem of Lorraine (198) it tempts him once again on to the pursuit of revealed wisdom; a pursuit that results in disaster.

Whatever the true nature of the relic, the ordeal of encountering and retrieving it marks a change in Riven. When he returns to Duisburg - the only place on Earth he has actually truly mapped, and therefore truly known - he makes the following observation:

[^10]Riven has reached maturity through his ordeals, and instead devotes himself to the cause of the Dutch revolutionaries - hoping at last to find some more noble cause to which to devote his life, but he is disappointed to find only another form of idolatry in the wealthy Protestant revolutionaries.

The climax finds Riven inciting the iconoclasm through the destruction of a church and the unprovoked murder of a priest. Riven, who first foresaw his death in his vision at sea, expects to die in the same fire that will consume the church, only to be rescued by the very mob that he helped to incite. They immediately abandon him, moving on to vandalise more churches, and Riven is left alive, his guilt now overwhelming him. After running for his life for most of the story, he attempts to turn himself into the Inquisition for execution.

The quotation prefacing the first chapter, from Aristotle's Meteorologica, and the title of the final chapter, "Northern Lights", suggest a rational explanation of Riven's vision ${ }^{10}$-though by this time such an explanation is no longer important. It is revealed that Riven is suffering from the guilt of his perceived responsibility for the accidental death of a girl (coincidentally called Anael) he met in Muscovy (231); this is his true motivation for the quest for immortality - to avoid punishment in Hell. The irony is that Riven has learned enough to no longer believe in Hell, but suffers instead at the very real hands of the Inquisition, which are skilled enough to keep him from ever dying.

Eco has suggested that death is the first recognised limit of interpretation that gives rise to the hope of other limits:

[^11]
#### Abstract

But we have the experience of an undeniable limit in front of which our languages evaporate into silence and it is the experience of death. We question the world being sure, by a millenary experience, that all men are mortal, and death is the limit after which all the interpreting initiatives vanish. Therefore, by knowing for sure that there is at least one limit that challenges the infinite progress of our interpretation, we are encouraged to keep on by suspecting that there are other limits to the freedom of our conjectures. (Eco "On the Ashes of Post-Modernism")


This does not, of course, consider the possibility that death is the only limit, but it does help to remind that choices made in interpretation are bounded by time. The ticking clock of mortality transforms the game of interpretation, and makes real the threat of becoming lost in a labyrinth. With all the time in the world, no interpretative path is any better or worse than any other. For the mortal, the ability to distinguish between good interpretations and poor ones becomes imperative. Stories, with their definite endings, their final pages, may offer some comfort from this panic:

> Stories that are "already made" also teach us how to die. I believe that one of the principal functions of literature lies in these lessons about fate and death. Perhaps there are others, but for the moment none springs to mind. (Eco and McLaughlin 15)

The tone of the novel changes from the beginning to the end of Riven's journey, with the playfulness of the opening chapters giving way to serious, darker tones. Foucault's Pendulum similarly offers a disquieting end, with Belbo awaiting an uncertain fate on the hill, convinced of the dual reality and unreality of the Plan. Where Belbo finds beauty in the hills upon which he awaits his fate, Riven finds peace in his vision of his lost love. As he dies, he envisions Anael, and the reader
is offered the same promise of hope that religion offers: perhaps there is a higher plan, but it is impossible to know for certain in this life.

> The playful mood of Foucault's Pendulum encourages us to do better than Belbo and build a future discontinuous with our past by emulating the process of language in which we live, rather than constantly seeking the reality language imperfectly represents. (Artigiani 866)

For Eco, the notion of destiny is closely linked to the form of the novel. The very "fixedness" of a novel asserts to the reader that the conclusion was predetermined from the first words of the narrative:

The real function of a novel is to give the reader the impression that destiny can't be altered. With electronic material, you can change it whenever you want. But a novel tells you that life can't be changed. That's its power. (Ng and Eco)

Yet, for the struggles of the characters to have any meaning, there must be a sense in which their actions and experiences are part of a larger whole - of which the reader's own experiences and actions are also a part. The tragedy is that of the character who seeks to understand the entirety of the whole, who wishes to speak in code, who thinks the map is the territory, who believes that a branch of the Tree of Life is the Tree itself.

The inescapable circularity of code, map and symbol reflects the idea that any one story cannot hope to contain the whole, but can instead offer a chapter in a greater story, since the present is not a conclusion, but a transition between the past and the future.

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Only by having a sense of history's trajectory (even if one does not believe in
Parousia) can one love earthly reality and believe - with charity - that there is
still room for Hope. (Eco and Martini 25)
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I would like to believe there is still room for Hope, and wish my writing to express this in the future. The word "legend" (literally, "things to be read") is used to name both the part of a map informing the decoding of its symbols, and those stories in the encyclopaedia of human culture that are blends of historicity and fiction. For the Hermetic drifter such a homonym is not etymological coincidence, but a clue in the grand conspiracy: that this thesis was destined to contain a legend that described how symbols are used to help maps make sense of codes.

In conclusion to this exegesis, I would offer one final piece of received wisdom that I cannot prove, but that I feel may be true. If, as Eco argues, the essayist's duty is to impoverish the labyrinth, then perhaps the storyteller's duty is to create, from the symbols of the world, those secret, empty codes, that tempt readers to begin a journey of discovery, that does not end with any grand secret, but encourages them to keep making maps with which to navigate the labyrinth of the world with maturity and intention. This would be a satisfactory goal for my writing in the future, and a satisfactory goal for my life.

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[^0]:    ${ }^{1}$ Charles Sanders Peirce (1839-1914), whom Eco acknowledges as "the father of semiotics and the theory of interpretations" (Eco and Zanganeh), was a pioneer of pragmatism and a champion of a 6 of 87

[^1]:    If [Umberto Eco] had wanted to advance a thesis, he would have written an essay (like so many others that he has written). If he has written a novel, it is because he has discovered, upon reaching maturity, that those things which we cannot theorize about, we must narrate. (Bondanella 95)

[^2]:    ${ }^{2}$ Eco goes on to warn against the unwarranted association made by many semioticians between terms such as 'arbitrary' and 'digital' (as opposed to 'analogical') and 'conventional' (as opposed to 'natural') in attempts to distinguish between purely symbolic signs and those signs that relate to their signifiers by more physical causal relationships (Eco A Theory of Semiotics 190).

[^3]:    ${ }^{3}$ In his introduction to Aristotle's Categories the Greek philosopher and logician Porphyry suggested a hierarchical tree structure to categorise concepts into hereditary branches of descending genus and differentia.
    ${ }^{4}$ In a rhizomatic structure, by comparison to the Porphyrian tree, every point is and must be connected to every other point in the structure, and the connections are non-hierarchical.

[^4]:    ${ }^{5}$ Though only temporarily, as the phrase infuriatingly reappears in Riven's travels and lures him back to reinterpret other apparently meaningless coincidences.

[^5]:    ${ }^{6}$ Why the comparison to hair? Perhaps it resonates with down-to-earth Lia's comparison between the hoax of the Plan and the hoax of "hair lotion" (541), a fiction attractive to those whose hair is receding, like esoteric wisdom recedes in the face of scientific knowledge, ever back towards its point of origin.

[^6]:    ${ }^{7}$ This year also marks a shift in Eco's academic work from post-structuralist criticism to semiotics, with the publication of The Absent Structure (Berrio 193).

[^7]:    The Pendulum, which haunted Jacopo Belbo all his adult life, had been-like the lost addresses of his dream - the symbol of that other moment, recorded and then repressed, when he truly touched the ceiling of the world. But that moment, in which he froze space and time, shooting his Zeno's arrow, had been no symbol, no sign, symptom, allusion, metaphor, or enigma: it was what it was. It

[^8]:    ${ }^{8}$ Eco notes that since the text speaks of "pendular movement" the construction is a simile, not a metaphor, but that "the specific effect of condensation is not affected by this".

[^9]:    ${ }^{9}$ I had not yet heard of the sequel to this seminal work, Wilhelm Meister's Journeyman Years, when I chose the title for my novel, though this would prove to be another in a long line of improbable coincidences that would characterise the writing and researching of the work.

[^10]:    It should have felt familiar, it should have welcomed me like an old friend. I had mapped every step of it with Corput, I knew it better than it knew itself. But instead it was cold and different. Nothing had changed, except for me. (206)

[^11]:    ${ }^{10}$ Of course, Aristotle's explanation, though more rational than Riven's supernatural one, is still incorrect.

