

***Transcendence: boundaries, thresholds, and the
fourth dimension in the composite 'musical novel'***

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This thesis is my own work and has not been submitted in substantially the same
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Abstract

This PhD has two parts: a composite novel (*Transcendence*); and an accompanying essay, which explores creative and critical strategies vital to the novel's writing.

Transcendence follows characters who cross boundaries and thresholds of different kinds, to undertake life-changing journeys: the Anglo Saxon Cwenhild must choose between art and marriage; Jules, a pregnant man, becomes the subject of an unlawful experiment; Izzy and Mei plan escape from their futuristic cities, travelling through ruined dystopian landscape and magical forest in search of freedom; and an anthrobot called Dottie reminisces about the old world which gave way to the new. Forgotten women are resurrected, as the characters' stories overlap in chance encounters which breach boundaries and cross thresholds in space and time.

Transcendence is inspired by the composite novels of David Mitchell, in its long timeline, multiple narrators, composite form, and cross-genre elements. The novel explores how all manner of boundaries and thresholds can be creatively crafted to push both narrative form and content in new directions.

Transcendence is accompanied by a 20,000-word critical essay. The essay explores the musical devices I employed whilst writing (form, dissonance, silence, motif, coda and aleatoric composition), adopting Emily Petermann's term the 'musical novel' to examine how these relate to fiction. I identify a beyond-boundary landscape in the fourth dimension, and suggest how Fortean aspects of the fourth dimension (ghosts, timeslips, alien abduction and the magical forest) can contribute fresh elements to story. I conclude that musical form and the fourth dimension present all kinds of boundaries and thresholds, which inspire new interpretations of structure and content in cross-genre pan-historical composite narrative.

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Chapter I - Maiden of Glaesen

Peterkin spun around. Caught by surprise, his eyes were wide and dark as those of a startled fawn. A spade handle swung from his fingers. ‘Cwenhilde?’

I slid to a halt and slumped over a beech stump, breathing hard. Peterkin tossed the spade to the ground. It landed in the damp sand with a thud.

‘What in Hel... you look like you’ve been chased by Sleipnir.’

‘I feel like it,’ I gasped. ‘I brought you these.’ I sat on the stump and pulled a sealed bottle and a roundel of bread from my waist-pack.

Peterkin reached for the bottle warily. ‘You’ve not got yourself into this state just to bring me food.’

I glanced down. My over-tunic was sodden around the hem, and the undergarment was streaked with mud.

‘I came the quick way, over the brook. I’ve got two pieces of news, and you aren’t going to like either of them.’

Peterkin ripped into the roundel and chewed slowly. ‘Go on.’

‘First, Eadred. The biscop is considering him for the new window.’

Peterkin’s face puckered. ‘We can’t let that happen.’

‘We don’t have long to change his mind. The biscop needs to come here, to see your kiln, and the glass. Then he needs to view my latest work. Eadred’s is skita in comparison to ours. The biscop will see so for himself.’

Peterkin took the bottle from my outstretched hand. ‘Don’t worry, Cwen. I’ll organise it as soon as I’m finished here.’

He pulled out the plug with his teeth, and drank. The yeasty scent of small-beer mixed with the faint whiff of hramsa from our side of the river. In the distance, a water-bird shrilled.

Peterkin lowered the bottle and belched. 'What's the second thing?'

'It's Tod.'

'What's he done now?'

'He took the last of Mother's things and sold them for drink.'

The flush drained from Peter's face. His burns looked worst suddenly, where the skin was eaten away in pocks like rain-marks on soft sand. It was the price of his craft, he always said. 'I'm sorry, Cwenny. I had no idea. Does your Father know?'

I shook my head. Overhead, a black ceo flapped, cawing, above the grille of branches.

'There wasn't much left – necklaces that I daren't wear in case they broke, a cloak pin, some carved wooden things. All gone now.'

Peterkin began to speak but I cut him off.

'There's nothing to be done. Just promise me that you won't entrust anything to my brother's care. Not now, or ever.'

'Of course I won't.'

'And I'm not only talking about money. I mean glaesen, materials, anything. The drink's got Tod bad and if he's capable of selling the last of Mother's things behind Father's back, then he wouldn't think twice about going to Eadred to sell whatever he steals from you.'

'He'll get his hands on nothing of mine, I promise you.'

We sat for a while in silence, remembering Tod, how he used to be before the sickness had set in, both of us too sad to speak of it. The wind moaned and rattled the bare branches around us.

‘I’m frightened about what’ll happen to me after Father dies.’

‘Please don’t talk like that, Cwenhild.’

‘My brother will sell everything and drink the proceeds away. And I won’t be able to stop him.’

Somewhere distant, a bird gave a sharp screech.

‘You don’t have to be your brother’s chattel,’ Peterkin’s face flushed. ‘You could marry.’

He sat on the beech stump next to mine, close enough for the warmth of his body to make my skin itch. Weak sunlight shot threads of gold through his eyebrows, fine as the stitching on Lady May’s cape.

‘And die in childbirth like my mother?’

‘Cwenhilde, it doesn’t always work like that. And besides, there are ways to stop a baby coming. My sister told me that-’

‘I can’t think about marriage right now. Watching Father go downhill and Tod drink himself into more evil is about all I can cope with. Not to mention my plans for the glaesen.’

Peterkin picked up his spade. He scuffed dead leaves with the tip, the movement sending tremors through the curls around his face. ‘Cwen, I just want you to know that-’

‘Finish your beer. I’ll take the bottle back.’

Peter drained it and handed it to me. I tucked it into my waist-pack and we stood up.

‘Don’t go just yet,’ his hand brushed mine lightly.

‘I have to get back to Father.’

‘At least come and look at the tiles before you go. I found them in the fallow field.’

I shrugged. ‘Alright.’

Peterkin’s face brightened. He turned away and I followed him along the path, scattering the hens that pecked around the hut. Inside it was dark, the smallest flash of orange brightening the firepit. Smoke hung in ribbons that wound up towards the roof vent. Peterkin’s pallet sat in a corner, opposite the beechwood racks that lined one wall. His few domestic items were stacked there along with bits and pieces that hadn’t found their way to the kiln house yet.

‘Just look at these.’ He scooped up a handful of tiny squares. They jangled like faery-coin. ‘They haven’t been washed, but you can see how special they are.’

I cupped my hands. Peter poured them in. Even in the firelight, I could see the quality. ‘They’re beautiful.’

‘Those bloody Romans took a few secrets with ’em. I’d die to get a colour like this. Would you mind gathering some in your skirts and bringing them to the kiln house? I don’t want scolding again for using a cooking pot.’

I laughed and held out my apron.

We picked our way across the yard, dodging puddles. The kiln house was a roof on stilts over a rock outcrop, which Peterkin had built up with clay that turned the holes into ovens and the vents into chimneys. He’d lined the work area with a big bench. Carefully, I let the tiles out of my apron onto the top. Peter pulled a sieve from a shelf.

‘Is your father still managing to work?’

‘Officially, yes.’ I took a handful and put them good-side-up. ‘But not really. I made the last frame on my own. I can do better without him.’

Peterkin reached for the pitcher. ‘I’m so sorry. I had no idea. Whenever I’ve passed, he’s seems well enough.’

‘He’s a good actor. And he can convince anybody in a short conversation. I’m sure Father would prefer it that way,’ I shrugged. ‘I’ve been passing my own work off as his for a while now. Truth be told, he was becoming a bit of a liability.’

Peterkin began to pour. The tiles rattled in the flow. ‘You know, you shouldn’t have to pretend like that. Not when you can do the job with your hands tied.’

Dirt began to loosen, lifting away to reveal glass as pale as a winter morning sky. ‘The people Father deals with expect his work, not mine. They don’t want to trade with a woman.’

Peterkin sighed, a big sound like the pigs-bladder deflating at the Yule begannes. ‘Then deal direct with Hagid. His sister is with the Church. His niece, too.’

‘I don’t get a choice. Father deals with Upton the Elder and his bloody awful wolf-turd of a nephew. That’s just the way it is.’

Peterkin set the empty pitcher on the side. ‘Seriously, Cwenhilde, there’s got to be more to life than this. The number of times I’ve thought about going to live where they’re building the big Church. There’s a small fortune to be made at a place like that.’

‘What’s stopping you?’

Peterkin looked at me with a strange kind of intensity. I regretted my question immediately.

‘Ties.’ He picked up a cloth and started to polish a tile. Somewhere distant, a forest bird gave an alarm call. A squall of wind buffeted the break. ‘You could come too, Cwenhilde. Once your Father...’ he shrugged awkwardly. ‘Once your family responsibilities have released you.’ Peter’s eyes shone honey-brown in the light. He’d flushed again. He looked healthier when emotion overtook him; less gaunt, somehow. ‘You’re talented. Together, we could make a good life.’

Peter spoke the truth - I knew plenty of women who ran their own affairs and were paid well for it. Eadgith had her brewing, and a reputation that carried beyond our ham; Odelinda managed her sheep and chickens, shearing and butchering and egg-collecting happily since the day her husband had walked out and never come back; even Cartimandua’s slave-girl who made the cheeses was free to visit the market and the homesteads, and lived her life as though she were an alms-relative rather than a cype-cniht. Many of these women got good coin in the hand. It didn’t make sense that the best I could do was be forced to deal through Father with Upton the Elder and his smeoruwig nephew, who seemed to dream up new ways of cornering me in the workshop whenever he could, the disgusting pig.

‘I have a third thing to tell you. I was on the top track when I saw a window being taken from Eadred’s place.’

Peterkin stopped polishing. ‘Oh?’

‘We know that Eadred’s glass is nowhere near as good as yours. But the cuts and shapes he used were unimaginative, too. I know I can do better.’ I picked up a fire poker and began to draw in the scorched earth at the edge of the pit. ‘See here? Eadred and his boy aren’t using the full flex of the material. They’re softening some of the curves, like this... a shoulder here, a cloak there... but they aren’t bending it as much as they could. We should be able to make windows with lead arcs set into them,’ I pushed the poker around in the dirt, drawing, ‘and saints with round faces, even the curve of the sun-’

‘Whoah, you’re going too fast! There’s a reason that can’t be done. Glaesen is brittle, remember? How are you going to cut a circle in it?’

‘Hear me out. I’ve experimented on offcuts. I’m almost able to score a circle by making run-offs with a flint. That way the shape comes bit by bit. With bigger pieces of glaesen, it should be easier. Then I’ll use the full flex of stretched led to set them. It has more potential than a wooden frame.’

Peter looked surprised. ‘And you say you’ve already tried this?’

I nodded.

‘Can you show me the offcuts? And the almost-circle? The comes?’

‘Not anymore.’

‘Why?’

‘I ground the glaesen to make paint.’

A pair of ceo flew over the kiln house, straight as arrows, but Peter didn’t notice. He’d forgotten the tiles on the board.

‘How did you grind it?’

‘Pestle and mortar. I got the powder fine as breod flour.’

‘Have you tested this paint?’

‘I found an offcut and made leaf patterns. Then, I used a stick with a fine tip to drag the pigment.’

‘Pigment?’

‘Yes. I tinted the powder with soot and Blace-berries.’

A gust of wind shook rainwater from the trees, scattering the hens.

‘Pigment aside, no powder sticks to glaesen.’ Peterkin gestured to the tiles. ‘Like muck from a field, it washes off.’

‘Hush, Peter. This isn’t for any other ears.’

The light had changed around us, merging the branches into a grey tangle that reminded me of the faery forests my grandmother used to talk about. I couldn’t see anybody on the path behind the nut bushes, but that didn’t mean nobody was there. After all, I’d watched glass being taken from Eadred’s workshop without anybody noticing.

I lowered my voice. ‘I mixed the powder with a little honey. It stuck much better. The pictures held themselves to the glaesen.’

‘But it wouldn’t hold up to the rain, it’d just wash off.’

‘That’s where you come in.’

‘Me? How?’

I glanced over his shoulder towards the kilns. Peterkin followed my gaze and made a small startled noise. ‘You want me to fire it?’

‘Shhhh. If Eadred gets wind of this, he’ll steal the idea as his own.’

Peterkin squinted in the direction of the bracken bank. A gust of wind soughed around the roof stilts.

‘Firing it is the only way to get the paint to stick forever. If the soot burns off in the kiln, I’ll find another pigment that doesn’t.’

Peterkin walked to the nearest kiln-mouth and ran a hand around the rim, sending a shower of powdered stone to the ground. ‘Cwenhilde, if I put your work into a hot kiln, you may lose it. At best, it’d end up in a stewy puddle that’d set looking like bird shit.’

‘Think again,’ I said, joining him. ‘What have you always told me about knowing when the heat is right?’

Peterkin shrugged. ‘That the flames are a certain colour. But I can’t predict it. Some days take longer than others.’

‘But you see the signs, Peter. You’ve described them to me. The flames changing colour and shape, the glow. It isn’t faery magic – it’s reality. You just get used to what to look for. Right?’

‘It’s an art, but yes... all you need is a bit of patience.’

‘So,’ I continued, ‘we don’t use the kiln when it’s melt-ready, we use it before it reaches full heat, yes?’

Peterkin rubbed a thumb into his chin stubble, his gaze lost somewhere deep in the trees, towards where the deer grazed, and mushrooms grew along the old path.

‘And you reckon that the powdered glaesen will seal itself to the fragment?’

‘I surely hope so.’

Two of the hens pecked their way into the kilnhouse and began to fuss around our feet.

‘If you’re right, if this works, it could change everything, Cwenny.’

‘I know.’ I pictured Father, his face grey as he lay by the firepit pretending that he was fit to get back to work tomorrow, always tomorrow, the day that never came. ‘If I can earn good coin then I can provide things that Father’s never had. I could ease his pain with poppy juice, even buy a pony to take him on pilgrimage for the return of his health... I needn’t fear my brother. I can make my own way in the world. Hang Tod and his drink.’

Peterkin’s expression softened. ‘I’ll help in any way I can. And I won’t tell a soul.’

A sudden crack of thunder rolled out overhead. The sky weighed down heavy with un-spilled rain.

‘Let’s go inside.’

‘I need to get back to Father.’

‘You’ll get soaked. If you wait it out until the worst is done, I’ll lend you my best cape to walk back in.’

We made it into the hut just as the sky opened. Peterkin pulled the door closed behind us, and dropped a log into the firepit. I slumped down on a straw-bag. The rain on the thatch hissed like angry ganders. Lulled by the flames that licked around the wood, coddled by their warmth, I saw not fire, but the sun blazing through a window of vibrant glaesens in hues of yellow and orange, patterned by images of saints who had faces, real faces with eyes and noses instead of sharp-cornered slivers. A halo around the Virgin’s head was round and luscious as a ripe fruit, just as I’d seen on the skin-leaves of the abbetissas that afternoon I’d gone to collect stone-fruit...

‘Cwenhilde?’

I blinked. The glaesens vanished. I was back in a dark hut with Peterkin sat opposite, his toes hanging over the edge of the firepit, boot soles smoking.

‘Are you seeing things again?’

‘I... yes. Perhaps.’

‘What was it? What did you see this time?’

But the vision had dissipated like ice fingers rinsed from the inside of a water barrel, fading fast until no trace remained.

‘Is it bad news, Cwen? Is something terrible going to happen?’

Peterkin knew that I’d foretold the lightning fire, the loss of a ham woman in travail, the death of a cotter in a frozen ditch. Rarely did I see anything that uplifted me. But this was different - the future of glaesens was a good thing to see – and it was mine.

‘No. Nothing terrible. This time, it’s different. I’d paint animals.’

‘What?’

‘On the glaesen. Magical animals. The animals of the forest. And the tree gods. I know how much you favour them over the saints.’

Peterkin leaned forwards, his elbows on his knees, and stared into the flames. He was smiling. ‘You could paint anything you wanted, for me. You hear that, Cwen? The rain’s getting lighter already.’

A log toppled in the pit, wheezing like Father’s chest. I thought of him on his pallet, and wondered whether he’d managed to get to the dig-out to relieve himself. If not, I’d have a mess to clean up when I got back.

Peterkin pulled his best cloak off a peg on the wall. ‘Here. Warm it by the fire before you set out.’ His hand brushed mine and rested a moment too long.

‘Thanks,’ I said, but I didn’t meet his eye.

‘You know I’d give you whatever you wanted, Cwen. You could work, keep a few pennigs for yourself, confide your seeing in me whenever you needed...’

I stood and stepped away. ‘Thanks, Peter. I’d better go now. Father’s been on his own for long enough.’

Peter was a good man; a quiet man, and caring. But he wouldn’t wait forever. The ham had some pretty girls who were fast reaching womanhood, and Peter would only take so long to wait on my decision.

One day, he’d be gone.

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Father had fallen asleep, propped up by skins at the edge of the firepit. His cheeks were hollow, his hands sinewy as knotty willow. I worked opposite him by

lamplight, grozing pieces of glass to size, stacking them neatly, listening to his breathing, until something moved across the path in the darkness outside. I glanced down instinctively for Fealu, but the old dog's place by the fire had been empty since before winter. A bundle of sticks I'd propped under the rain-cover outside scattered like hnefatafl pieces. A man's voice cursed. The door rattled.

'Open up.' Tod's speech was slurred. 'Open up! Father? Cwen?'

Father stirred, his brows pulling together, his face darkening even in sleep.

I put my grozing iron down, pushed up the door bar, and opened it a crack. Tod stepped into it, banging his shoulder and whining with pain. I held firm.

'Bloody well let me in,' he hissed, his breath soured by drink.

'Father's not well, Tod. You can't just come by disturbing him whenever you want. Why have you come here now?'

'Because I live here.' Tod lay a forearm against the door and pushed.

I stepped back. Tod barged inside. The lamp flame guttered as a cold draft swept in. He surveyed the room, his eyes lingering on Father, who stirred and woke, and on the glass I'd stacked on the low shelf next to the pots. He put a hand on the roof post to steady his swaying.

'At least close the door.'

I reached for the shawl I'd thrown over my loom. Tod slammed the door shut so hard the whole cott rattled.

'Cwenhild, is that you?' Father blinked, his eyes scanning doesil to widdershins over and again.

'Father, I'm here.' I stepped around the firepit and passed him his cup of honey-mead.

His hands closed around it.

‘I dreamed,’ he said. ‘I dreamed that Tod came home.’

‘I’m here, Father.’ Tod slumped on a skin opposite. In the days he’d been away, he’d gained weight. His cloak and tunic were new and made of fancier plaid than I wove.

‘Tod.’ Father put his cup down and held out his hands over the flames. He seemed not to feel the heat.

Tod took Father’s hands, squeezed them briefly, then let go. ‘I’m hungry.’

‘Cwenhild, what do we have to eat?’

‘We have bread to break our fast tomorrow, and nothing else,’ I lied.

‘Get the boy some bread, then.’

Tod turned to face me, his eyes glimmering in the flame-light, a sly smile on his face.

‘You look like you’ve eaten, Tod. The bread is the last we have.’ That much, at least, was the truth – but I had a few nuts and one piece of salt eel hidden in the roof.

‘Then bake some more.’

‘I’ve no more grain until two days’ time.’

‘Cwenhild, Tod is my child too,’ said Father gently.

Tod smirked. I reached for the bread pot, took off the lid, fished inside and broke off half a roundel.

‘Tell us about your adventures, Tod,’ said Father. ‘Where have you been?’

‘At the hall.’

I passed the bread to Tod. He examined it closely in the firelight, then bit into it and grimaced.

‘Nice clothes,’ I said. ‘Did Aldin give them to you?’

Tod spat out a husk. The charcoals hissed. ‘He might’ve.’

‘I suppose he fed you and gave you ale, too.’

Tod crumbled the rest of the roundel into the fire. ‘This stuff is disgusting.’

‘You didn’t have to take it and waste it,’ I snapped. ‘You’ve developed expensive taste, being Aldin’s lackey.’

Tod twisted around, his eyes narrowing. ‘What did you say?’

‘Everybody knows,’ I said, my voice trembling. ‘Everybody knows what you do for him.’

Father stared into the shadows, blinking. ‘Hold your tongue, Cwenhild.’

I turned away, my shawl swirling over the pit, sending the flames into a frenzy. ‘Father is worst than he’s ever been and you leave me here to cope.’ I lowered my voice to a whisper. ‘The least you can do is not turn up to take what little we have. He might not know about the rest of Mother’s things, but *I* do.’

Tod sprang to his feet, swaying. ‘I won’t be spoken to like that in my own home.’

‘It isn’t yours, yet,’ I said. ‘How about you bring Father back some nice food from the hall? Or how about you give him one of Aldin’s cast-off cloaks? Even one with holes in would be better than his old one. But don’t come here drunk and do *this*.’

Tod leaned towards me. ‘And if you were weaving like a proper woman, Father would have his new cloak, and I wouldn’t have the need of Aldin’s cast offs.’

‘Why are you shouting, Tod?’ Father’s useless eyes searched the darkness.

‘I cannot weave and finish our commissions at the same time,’ I said, gesturing towards the glass on the side. ‘Look at Father, Tod. He can’t work anymore. I have to do both our jobs. It leaves me little time for anything else. And right now, the glaesen is set to bring in pennigs.’

Tod stepped around the chest and moved closer, forcing me backwards into my loom. The hand-piece jabbed me in the hip.

‘So, you have money? You said you had none.’

‘What I had is gone on materials. What Father and I earned was never yours anyway.’

Tod stepped away. He turned his attention to the shelf on the side, where the glaesen was stacked.

‘What is this shit?’

‘Cut and uncut,’ I said, darting in front of him and holding my hands to Tod’s chest. ‘It’s a new window commission for the biscop.’

Tod shoved me out of the way. I stumbled, hitting the door bar with my hand. Pain shot from my palm up into my wrist. Tod flicked a piece of glaesen from the top of the pile. It hit the boards with a ping.

‘Tod, no! You break the glaesen, I have to buy more to replace it. I don’t have the coin.’

‘I thought Peterkin was in your pocket, little sister?’ Tod flicked another piece, which slid down the back of the shelf and tinkled onto the floor. ‘I thought you got your glaesen whenever you clapped your hands. And anything else you want for that matter.’

‘Peterkin has to pay for his materials just like we do,’ I said. ‘You’ve already broken one piece, now leave it alone.’

As Tod raised a hand to go for the glaesen again, I grabbed his wrist. He snatched away, almost toppling backwards into the loom. Before I could stop him, he'd righted himself and raised his opposite arm into the air. As I ducked, Tod brought it down onto the bench with a crash, sweeping glaesen onto the floor. Behind us, Father began to keel, rocking backwards and forwards, his honey-mead spilled.

Fighting my tears, I went to him and sat him up, plumping the skins and removing the cup.

'Is Tod still here?' Father's voice cracked. 'What's happening, Cwenhild? Why can't I see any more?'

Tod started to shout incoherently, cursing at me for not doing a proper job of looking after the cott. He picked up a wooden bowl and threw it at the wall. Father's cheeks glistened with fresh-spilled tears in the firelight. I barely knew the shadow of the man that he'd become, unable to intervene as his son thrashed his arms in temper, snapping the new wooden window frame that I'd leaned by the door. Tod almost fell, skewing the loom, and then grabbed out to save himself, pulling a slat from the shelf. The rest of the glaesen fell and cracked under his feet like pond ice. I cradled Father's head as Tod rampaged towards the sleeping pallets, kicking them and tipping straw wadding over the floor. When he'd done, he wheeled around and stumped to the firepit. He smacked a roof beam with an open palm, cursing. The blow sent a tremor through the thatch and knocked down the wrapped salt eel and the nuts I'd stowed. The eel landed with a slap, followed by a scattering of nuts, and a tiny drawstring purse. As the purse hit what was left of the shelf, the jangle of coins brought Tod to a sudden silence. He turned around slowly.

'Coins?'

Tod lunged for the purse and snatched it up.

‘Tod, please,’ I said, pressing Father back into the skins.

‘You lying bitch.’

‘Why are you speaking like that, Tod?’ said Father.

‘That money is not to spend on ale or gaming, Tod.’

Father’s frail limbs trembled as his eyes searched the shadows.

Tod tipped the coins carefully into one palm and whistled. ‘You lied. This is a small fortune. You said you had nothing.’

‘Tod?’ said Father.

‘Shut up! And you, sister, tell me you’ve no food and resent me a piece of stale, bug-riddled bread, and yet you have this stowed away? Who’s being cruel to Father now?’

I left Father and moved slowly towards Tod. ‘This is money for materials I need tomorrow. The glass was to be finished in a few days. The profit was set to buy us meat to smoke for stores. And grain for more bread. Without those coins, I cannot complete the work and Father and I will have no food. *You* may be welcome at the hall, but I doubt that Aldin’s parents will feed us, too.’

Tod took the biggest pennig and flicked it into the air. The surface glinted dully in the firelight. A puff of smoke blew back through the vent as the wind rose outside. The roof thatch rattled. Father coughed. He tipped slowly over onto one side, and groaned.

Tod poured the coins back into the purse. A small one fell onto the floor and landed in the dirt. He ignored it. He pulled the drawstring tight and held it up in front of my face, swinging it gently. His eyes were half-closed and bloodshot. A glob of spittle shone on his lower lip.

‘Mine,’ he whispered.

I snatched for the purse. Tod lifted it higher, beyond my reach. He laughed, his face a twisted mask I barely recognised.

‘Just go,’ I said, lowering my hand.

Tod turned away, stumbling on the broken plank. He fumbled with the latch and left in silence, leaving the door wide open. I hurried after him to close it, my feet crunching on slivers of glaesen. I slid the bar down. Father was on his side when I turned around, his face dangerously close to the charcoals.

I scooped him up, holding and rocking him while I pretended not to cry.

Only three days before I had dreamed of Tod’s unwelcome coming. In my sleep, I had watched our belongings splinter and smash as my brother rampaged through the cott like a bad-tempered tup. I’d seen him leave in the night framed by the open door, and I’d awoken beaded by cold sweat, yet I’d pushed those images from my mind because I was tired of seeing things I didn’t like. Now, with the cott cold and embers spitting weakly in the pit, I wished I’d taken heed of my own sight. And yet, what could I have done? I had the ability to see, but not to change. As I rocked, Father fell asleep in my arms. I remembered the man he’d been, before age and illness had robbed him of his eyesight and flesh. I remembered, too, the final part of my dream. Tod had staggered down the path in the darkness before collapsing by the well, sliding down into the dirt and hugging his knees. He’d cried until his ribs ached because he knew he could not beat the bad spirits that made him weak for drink. He cried because he knew that the things he did and said were wrong. He cried because he knew that Father would soon be dead, and that he had lost me, too, forever.

*

Father's sight never came back. He quickly became pallet-bound, and then refused food and drink. I tried all I could, visiting the Hall to trade root vegetables for honey, smearing it on bread to tempt him, but it was as though he had already decided to wait out his calling steadfastly, and do nothing to hang on. His eyes sank and his lips remained sealed, then his breathing became shallow and slowed. He passed one dawn, even before the buds had unfolded for eostremonath.

Tod disappeared before the cremation ceremony. He waited until I was out then broke into the cott. He stole my thick shawl, my best cooking pot, and the weaving loom. Nobody knew where he was, until the cheese-maid said she'd heard him in Aldin's bed chamber when she'd gone to collect milk, arguing about a gaming debt.

Peterkin and the women from the village helped with the funeral ceremony, even supplying some of the things Father requested be buried with his ashes – simple things that held memories: dried herbs; an old pot; mother's last broken necklace, the one that'd been too worthless for Tod to steal. The potter made the funerary urn, despite them having gone so much out of fashion, and wouldn't take coin or kind. He remembered Father from better times, he said. A good man; a kind man. As we stood in the burial-place, a chill wind pushed clouds across a blank sky. Peterkin stood so close that the heat from his body warmed through my thin cape and touched my skin. After the words were spoken and the respect-givers had said their piece, he rested an arm about my shoulder and for once, I didn't move away.

'You shouldn't be on your own, Cwen.'

'I'll be fine, Peter. It's not like I didn't have a long while to prepare for this.'

The others began to leave, each squeezing my shoulder or arm as they filed away. Only Peterkin stayed back. On the walk home, he kept pace with me.

‘You have no protection, Cwen. What if some crazy dog should come wandering by and break in? And what about your wonderful brother?’

‘There’s nothing left for him to steal.’

The hens scattered as we reached the door. Inside, a single beam of sunlight streamed through the vent, picking out wisps of smoke that unwound themselves from the pit like marsh mist.

‘Gods, Cwen, it’s bare in here – where’s everything’s gone?’

‘Tod,’ I said.

Peterkin stood in the space where the loom had been, toeing grooves in the floor that were the only sign something had once stood there. His eyes roved the empty shelf, the broken pallets that I’d pushed back against the wall, the hooks from which pots had once hung. I picked up a flagon and two borrowed wooden cups from the side.

‘You have ale?’

‘A funerary gift. From the hall. The alewife there has fond memories of Father.’ I began to pour.

We slumped by the firepit where Father’s old skins had once lain, and raised our cups. Peterkin said a blessing for the dead and asked that Hel be kind to Father, then we drank.

‘When are you going to tell me?’ he said at last, wiping froth from his top lip.

‘Tell you what?’

‘Exactly what’s going on. Tod might’ve sold whatever he could get his hands on, but you can’t live here like this, with nothing. You don’t even have a cooking pot.’

I drained my cup and stared into the charcoals. ‘What he didn’t take, I packed in a basket and hid in a nut bush. It’ll stay there until I need it.’

‘Why?’

‘I’m leaving.’

Peter picked up a half-burned stick and snapped it. The sound ran down my spine. ‘Is this why you wanted me to take care of the glaesen and your paints?’

‘Don’t be daft. I couldn’t cope with Tod turning up again and breaking what he didn’t get the first time.’

Peterkin screwed his beaker into the dirt. ‘So, what happens now? Who’ll finish the windows for the biscop? What about your plans? What about me... about us?’ Peter rubbed his face, disturbing the curls that fell around his cheeks. ‘I don’t think you realise how important you are to me. If you weren’t here, life would seem so pointless. The glaesen, everything...’

I took Peterkin’s cup and poured the rest of the ale between us. In truth, I’d set my heart on leaving alone, for the abbey. But looking at him right then, the honey-coloured eyes my grandmother had always said belonged to a fawn, the spun gold lashes, my voice choked in my throat. The path I was treading had unexpectedly forked.

‘I waited until now to ask you to come with me.’

Peter’s head jerked up. *What?*

He would never know I’d lied. The lie didn’t matter. The lie was just a twist in the path, a change of direction amid a tangle of fast-growing thorns that gave me another route forwards.

‘I went to see the abbess. We spoke about the glaesen.’

‘Cwennie, you and I *are* the glaesen.’

I took Peter's hand. 'Tod smashed my last big project and left me with nothing. All I keep thinking is how I could've kept Father alive for longer if I'd had coin. I have to change things, Peter. Nobody will do it for me.'

Peterkin exhaled sharply. 'You kept your Father alive for as long as you could.'

I drained my ale and put the cup in the dirt. 'I can't marry you just to protect myself from Tod. Besides, when Aldin or whoever his latest lover is kicks Tod out, he'll come back to me. If I marry you, Peter, he'll come back to you too, and it won't stop his drunken rages. We'd never be safe, either of us. Neither would our coin, or our glaesen.'

My fingers fell away from Peterkin's. He remained silent for a long time, poking a stick into the ash, watching swirls of white smoke rise.

'Tell me about the abbess. I'm guessing that she's asked you to go live at the abbey?'

'She made an offer, but I said no. She's asked to see me again. I want to take you too, if you'll come.'

Peter's eyes met mine through the haze. 'I don't understand.'

'Abbess Inga told me about the new glaziers in Normandig. The techniques there are second to none. They lead the Christian world in holy glaesen. I think she might have plans for us. I just don't know exactly what they are yet.'

Peter regarded me as though I was crazy. 'Cwenhild, Normandig is several days away, across the sea, and they speak a different language. How does that help either of us?'

'Inga told me about a glazier who'd come from Normandig,' I said. 'He's learning our language. This man is based at Inga's new abbey but he's a

journeyman, he won't stay. It's in our interest to act before somebody introduces this glazier to Eadred.'

Peterkin grimaced. 'I wish I'd never had dealings with that dog turd.'

'I'm not telling you this to annoy you. I'm telling you because I think you need to come to the abbey.'

'Normandig.' Peterkin repeated the name flatly. He threw his stick into the fire.

'At least come and hear what's said. Abbess Inga has told me that she will make me – us – an offer.'

He watched me through strands of pale hair, his eyes dark in the shadows, his face still. Somewhere in Peterkin's head there was a stream he didn't want to jump, afraid in case he couldn't turn back again, that he might become lost in the woodland of dreams at the other side, the faery forest from my grandmother's stories. It was a beautiful place, she'd always said, but a dangerous one. A man might lose his mind in there; a woman might vanish, never to return.

'I'm scared, too, if that helps,' I said, reaching for his hand.

Peterkin took my fingers and squeezed. 'This is the only promise I'll make to you, Cwenhild. I'll come to the abbey, I'll talk about glass, I'll hear what's to be said, then I'll make up my mind.'

'That's enough for now,' I said, raising his fingers to my mouth and kissing them lightly. 'Thank you.'

*

Abess Inga was in the garden, wrapped in a cape of winter ermine. Her hair, which I supposed to be fair-turned-to-snow, was hidden underneath a scarf of finely woven cloth. She stooped over a patch of late-flowering herbs with a basket on one arm, her gold ring shining in the weak sunlight.

‘The glaesen people are here, mother,’ said the girl who’d shown us through.

The abess put down her basket and straightened up. Despite her age, Inga moved like a girl, her walk easy and painless, her back unbent by endless tilling and dung-collecting.

‘Cwenhild – how lovely to see you again. And you must be Peterkin. I’ve heard much about you already. Come inside. I have refreshments waiting.’

The abess led the way. Inside, a wash of coloured light patterned the entrance hall floor like a giant butterfly wing stretched over the stones. Speechless, I stared up into the glaesen, searching out new hues and shapes, blinded by its beauty. Peterkin stood beside me, enrapt. But as he walked forwards and paused in front of a representation of Christ, I saw his body stiffen, and knew that, at close hand, the workmanship was Eadred’s, the corner joints of the frame clumsily cut, and mistakes in the grozing visible to a keen eye. Inga remained at the table, pouring small-beer and un-lidding a pot of nuts.

‘Everything on the table is from our own gardens,’ she said. ‘We’re completely self-sufficient as of this eostre, although it’s taken a four-season to set up. We have sisters who tend to the animals and look after the bees once prayer is done. I chose the alewife myself. Everybody has their strengths, and here, we allocate accordingly.’

Abess Inga beckoned us to the table.

‘I’ve heard about the work you’re planning to do for the sick, madam,’ I said. ‘I only wish I could’ve brought Father here.’

The abbess's expression softened. 'I'm sorry we weren't set up in time to help him. But it's early days and we're attracting the attention of some competent physicians, as well as new students. I have very high hopes for our abbey.' Inga gestured to the long benches and invited me to sit. 'But you're here to talk about glaesen. I'll ask one of the sisters to bring our Normandig glazier.'

Peterkin joined us. Inga proffered nuts and cups of ale, then reached into her muffler and pulled out a small iron bell. She rang it, the sound bouncing off the stone walls. Footsteps whispered in the corridor.

'Cwenhild, I wish to be direct with you. You know of my interest in you, but you don't entirely understand. The Lady May tells me that you have visions, yes?'

'It's not something I talk about, madam,' I lowered my eyes, uncomfortable. 'It happens when I look into moving water or firelight, or when I sleep. I see things that will come to pass.'

The abbess nodded, her head on one side, her eyes narrowed. Peterkin took a nut from the jar and turned it in his fingers. He was hungry; he often didn't have enough to eat, or plain forgot when he was carried away with his glaesen, yet he wouldn't raise the nut to his lips.

A girl dressed in an undyed tunic appeared at the doorway. 'Mother?'

'Fetch the glazier,' said Inga. 'We need to speak with him about his work.'

The girl inclined her head and disappeared.

Inga turned back to us. 'As our devotion to the Christ becomes more widespread, abbeys spring up like holy wells throughout this land and beyond.'

'And they all want good glaesen,' said Peterkin, tossing the nut into his mouth and crunching.

'Indeed. But each abbey needs something special as well as the glaesen - something to strengthen its link with God.'

‘Like a fragment of the True Cross?’ I remembered the new pilgrimage routes I’d heard Cartimandua talk of.

‘Yes, or a thorn from the Christ’s Crown. I’ve corresponded only this week with the abbot at St Mary, who tells me that his own thorn has sprung a holy bush which pilgrims are flocking to. Three miracles have already been declared. They’ve had to put guards on duty to stop the bush from being torn to bits by the faithful.’

Peterkin sipped his ale. ‘The desperate, more like,’ he muttered, then louder, ‘Do you have a True Thorn, Abbess Inga?’

‘No. I can’t compete with the others, so I’m not going to try. I want something different.’ She turned to me. ‘I want you, Cwenhild.’

‘Me?’

Peterkin tensed.

‘Yes. You have the gift of seeing. Our abbey could put it to excellent use.’

‘But how, madam?’

‘I have heard of your prophecies. Not just from the women of the ham, but from the hall itself. Many people, trusted sources, have told me some of the things you foretold. And I have to say, I’m impressed. You warned of the flooding of the river?’

‘Yes, madam.’

‘And the coming of the white deer in the forest?’

‘Yes madam, but-’

‘And the rains that drowned the barley last harvest.’

I linked my fingers in my lap and stared down at them, the skin stained by charcoal and pocked with burns. I didn’t want to talk about prophecies. I wanted to talk about glaesen.

‘As I said to you recently, I want you, Cwenhild, to join the sisters here with me. I want you to dedicate your gift to God in doing so. You’d never go hungry again. You’d have a pallet bed in a small room of your own, and you’d always have a fire and honey-mead in winter. Our sisters all have skills – they farm, they nurse, they fish – some copy manuscripts onto the most beautiful calf-skin, to spread the word of God. You are different, because you have your own unique skill; you are a seer, therefore you’re an unusual asset. Your insight will help us to spread the word of God.’

An old woman in a plain tunic and headscarf limped through the far doorway towards the fire. She picked up a log from a neatly stacked pile and dropped it into the pit. Sparks rose, and a cloak of grey smoke puffed up towards the vent. The woman turned and left the hall with a heavy-lidded glance in our direction.

‘Then I misunderstood you at our first conversation, madam. I work with glaesen,’ I said. ‘That’s what I want to do – I have new ideas, things I must try... I have visions, alright, of all the glaesen I want to craft, and those visions I understand much better than the pictures that sometimes come to me when I look into fire or water.’

Abness Inga topped up our cups, even though we’d barely touched them. ‘I have no reason to doubt your glaesen, Cwenhild. I’ve seen it already, and your Father’s.’

Peterkin pushed his beaker away. His skin was flushed, his eyes dark. ‘Mother abness,’ he said, ‘forgive me for speaking freely, but if Cwenhild enters this abbey and promises herself to God, then she’d be tithing herself. She might as well be a doc-incel.’

Inga’s eyes widened with surprise. ‘I don’t know who you’ve been talking to, Peterkin, to give you an idea like that – all you need do is look around at the sisters to see what a blessed life we live.’

‘I’m only repeating what they say about this place, madam,’ Peterkin mumbled, bowing his head.

‘You’ve been listening to too much man-gossip at the tabernae,’ Lady Inga retorted.

Peter flushed. The abbess’s face softened. She took a deep, tired breath.

‘I will concede, but not wholly. Myself and the sisters could be described in some ways as doc-incels in the eyes of God, because we serve the Father, the Christ and the Virgin Mary. So perhaps your tabernae gossip isn’t entirely wrong. But look around,’ Inga spread her hands. ‘We are truly blessed here, and much safer and healthier than we would be in the ham. And you, Peterkin, could share this too. I want your expertise – I need it. I’ve been told that your glaesens rivals the very best from Normandig. And I assume that, with training, it will only get better.’

A young man in a work tunic appeared at the door. His forearms and face were scarred; one lid had healed badly, and drooped. Glasesen burns. I’d recognise them anywhere. He had even more than Peterkin.

‘Henri,’ said Inga, beckoning him into the hall. ‘This is Peterkin, whose glaesens, so I’m told, sees no rival in these parts.’

Henri spoke a greeting and swept a low bow, wafting the scent of burned greenwood and cloves towards us.

‘Please, Henri, take Peterkin to the new kiln house. Tell him as much as he can take in.’

‘Yes, madame.’

Peterkin climbed out of his seat.

‘If you agree to making glass for us, then I want you to be bound to our work here as well, Peterkin,’ the abbess said.

Peterkin turned around in the doorway. 'I've no desire to be a monk, my lady.'

The abbess laughed, a small tinkling sound that flew around the room like a summer butterfly, winding its way towards the rafters with thin ribbons of firepit smoke.

'This is a house of women,' she said. 'But you may still serve God here, and never go without. Go see the glaesen workshops. Then come back, and we'll talk further.'

Henri gestured towards the corridor. Peterkin stepped through the doorway, glancing back once. As they disappeared, Inga pushed the nut bowl at me. My stomach turned over with nerves.

'I understand the bond between you and Peterkin,' she said. 'But you wouldn't be the youngest bride in the ham, Cwenhild, if you chose to wed tomorrow. I understand that there must be a reason. Am I correct in thinking that your continued girl-life is more than just about having cared for your Father?'

Outside, the sounds of women's voices sailed in through the cracks in the shutter. A hen called loudly from the gardens to celebrate its egg; the fire sputtered as the flames caught a greenstick. Lady Inga's question was something I'd thought on often, yet talking about it here, now, with a virtual stranger, and a woman of birth at that, was like feeling a tender-spot in the centre of a poorly tooth.

'I'm a great believer in freedoms,' Inga continued. 'A number of the sisters here have committed themselves to God, and will not take a husband or a lover. But there are many who work as healers, who have families. I'm confident that God doesn't find them wanting. What I'm saying is, you have choices, Cwenhild.'

I sipped from the beaker, savouring the bitterness of the liquid. Whoever Inga had chosen as alewife knew her job alright.

‘And in case you’re wondering who I am to advise you on your life choices, know this: I’ve been married twice, once widowed and once divorced.’ Lady Inga toyed with the ring on her finger, twisting it absently. Her nails were clean and shiny, like fat-smearred almonds. ‘Although you look at me and see a privileged woman, I am a woman nonetheless, and I know what malady that can bring with it. I’ve been married off as a political pawn, captured and ransomed, imprisoned for three long years in a tower in the Forest of Dene Magna – and my second husband divorced me to wed a maidservant because I couldn’t give him a son.’ Inga’s eyelids drooped and the lines on her face seemed more visible, as though her bright manner had disguised her real age, only for it to be revealed as the memories returned. She blinked rapidly and straightened up in her seat. ‘I have an adult daughter. She’s set to join us here, soon. She was a big baby. I couldn’t have another, due to the tearing. Then I discovered, surprise surprise, that the maidservant my husband wanted a divorce over, had already borne him a son in secret. I insisted on a court hearing to hold on to my assets. I just about managed it. Then I came here - so you could say I’ve lived a little.’

Whispering voices and the shuffle of footsteps came from the corridor beyond the firepit. Shadows crossed the threshold. Whoever cast them was gone before I had chance to see.

‘Fortunately,’ Inga continued, ‘I’m provided for by my own assets, and I’m serving God as best I can, so I cannot complain. But what of you, Cwenhild? What kind of life do you look forward to, with or without your glaesen?’

A cat wandered into the hall, pausing briefly to observe us. It strode past the table towards the firepit, tail in the air. Around its neck was a woven collar of fine white material, with a tassel at the throat that reminded me of one from my grandmother’s old cloak.

‘My mother died in childbirth,’ I said.

A burst of wind rattled the shutter closest to the table, bringing the scent of fresh manure from the paddocks.

‘Ah, I understand.’

The cat settled at the opposite side of the firepit, its yellow eyes rippling behind a wall of heat.

‘I was lucky to survive Ethel’s birth, by the grace of God. The physicians were never able to completely cure me. I still carry injuries to this day.’ Inga ran a hand over the lower part of her stomach, her eyes lost somewhere distant.

‘I’m so sorry to hear that. And thank you, madam. I’m glad you understand. As for glaesens, when I make it, I feel truly free. I could make it for the old gods, for the faeries or green-sprites, for the Christ and the Virgin... so long as I can make it. It’s what I want to do. I need the glaesens more than I need the seeing.’

Lady Inga plaited her long fingers on the tabletop. ‘And what of Peterkin? I see the way he looks at you. He’s in love.’

The scent of roasting meat drifted through the open doorway. The cat blinked languidly, stood up, and wandered off, following the smell. It was a long time since I’d eaten meat, real meat, rather than eel or salmon. The scent evoked the taste of hare that Peterkin’s trap had caught last wet season. Even the juices on a heel of bread would be more than I was used to... Inga watched me intently, her thin brows pulled into a frown.

‘Peterkin won’t wait for me forever,’ I said. ‘Whatever decision I make, my time is limited.’

Abbess Inga smiled.

‘As for my seeing, not everything I see is always of much use.’

Inga hadn't taken a nut or even sipped her drink. The smile on her face was genuine, but I sensed underneath a tension, like the poise of a stalking cat before the pounce.

'I'm willing to indulge you, Cwenhild,' she said at last. 'I will sponsor you to train in France for a full four-season. The abbey – I myself, to be more accurate – will act as your patron. I'll provide a pack pony to take you to port, and give you safe passage on a small ship crossing the Anglo-French sea. The ship belongs to my family. I'll send you with a letter. You'll be given safe haven in our nearest sister-abbey in Normandig. There, you will train with the glaziers to learn the techniques you crave, and to experiment as you see fit. Peterkin is free to travel with you, with the blessing of the Church, as a companion – we have more than enough work for him too, when you both return, so it makes sense. But you must not marry or lay with Peterkin during this time. The risks of childbirth would compromise our agreement. Once you're returned, you will work on the abbey's glaesens until all the windows are finished. You may cleave to Peterkin when you return, or not. You will also be our seer. When the windows are complete, you'll be free to make your decision: stay or go. Marry or not. But remain our seer and you retain the protection and the goodwill of the abbey, for life.'

'And Peterkin?'

Abbess Inga sighed. 'Peterkin is always welcome here. But only you will know the answer you should give him.'

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The pony stood patiently in the courtyard, resting one hind hoof. Abbess Inga instructed a woman from the kitchen to fill its saddle bags with bread, a sealed crock of goat's milk, cheeses wrapped in hramsa, and some smoked fish. She

stowed the wrapped bundles quickly, then with a nod to Peterkin and myself, and a curtsy to the abbess, went back inside.

Abbess Inga had loaned us a pack mule with panniers, where we'd stored our tools, some glaesens samples, and my paints. The mule stood behind the pony eying us warily. The cat, who one of the kitchen women called Blace after the thorn-berries in the woods, sat upon a wooden mounting block watching us with lazy yellow eyes. Abbess Inga handed a cloth-wrapped bundle to Peterkin.

'Here,' she said. 'I hope you have no need of this, but one can never be too careful.'

Peterkin unwrapped it. It contained a leather knife belt with two knives, a small one and a much longer weapon.

'The route is well-travelled and doesn't have a bad reputation,' Inga said, turning to me, 'but the sight of a professional soldier's blade can often head off trouble before it starts.'

I remembered that I was dealing not with a pampered noblewoman who had never seen the grit of a hard life, but a woman of the world, who'd paid a price for her high birth and who had herself been captured and ransomed. Perhaps she'd seen such a knife thrust into her bodyguard or felt its blade held to her throat. Peterkin assessed the weight and feel of the longer of the two weapons, the faintest trace of a smile on his lips. He re-sheathed it and strapped the belt around his waist.

'Thank you, my Lady.'

'I have every confidence that you will return it to me safely, with no need for bloodshed,' Inga said. 'Go now. Stay safe. May the Christ and the Virgin Mother bless you both.'

As Inga made the sacred sign above our heads, the waite began to wind the big gate. Its rollers rattled. Fingers of mist swirled through the gap. The path and

trees beyond were barely visible, and pale as sour milk. Peter gave me a leg up onto the pony. Behind us, the mule was attentive now, ears pricked. Peter picked up its halter rope and coaxed the animal on.

We left the abbey and set off into the woods.

The mist floated like swaying pond-greens, wrapping itself around the animal's legs and leaving a wet sheen on our boots and bags. No birds sang. The tops of the trees had been stolen away and replaced by cloud. Somewhere behind us, the gates clinked shut. The clump of the animal's metal-toes was broken by the occasional movement from either side of us: the skitter of a small creature we couldn't see; the patter of falling water as wet leaves were disturbed.

The woods should not have felt unfamiliar. Only the day before, I'd been confident that I'd known the location of the best mushrooms, where the biggest fruit bushes were, the place the hares hid in the cold season... yet I felt like a stranger, travelling a path I'd never seen, through a land I didn't recognise. At intervals, I imagined I saw faces appear in the greenery beside the path, that were just as I imagined the leaf-sprites to be, with tendril stems pushing through their nostrils and climbing up the sides of their open mouths. Every time I peered closer, the heads snapped back into the undergrowth and vanished, but the leaves moved in sympathy as though they'd been newly-disturbed. The animals' ears remained taut, and they occasionally turned their heads in the direction of the swishing branches.

'Peter,' I said, as loud as I dared. 'Do you see them? The faces, in the trees?'

'Yes. Don't be afraid, Cwen. The woods belong to them today, not to us. I offered to them before we set out. They will not harm us.'

As the woods shrank in around us and it became harder to see, I doubted that I could've even have found my way back to my old cott, with its dead fire pit and wrecked pallets. The path was swallowed by mist, rubbed out like vole-prints

on a riverbank, as though it no longer existed, as though we were in a circle that spanned only a few paces with nothing beyond but cloud. I remembered my grandmother's stories and half-wondered whether our journey had been thrown by a faery, and whether Peterkin and I would spend our lifetimes wandering around lost in the trees, being laughed at by the little folk and the wild gods – would they resent my belief in the Christ and the saints? Nervous, I swivelled around in the saddle to look back the way we'd come. The pony's fat rump swayed in time with its hoofbeats. Quite suddenly, a woman with cropped hair the colour of fox fur appeared about ten paces behind us, looking back at me over her shoulder just as I looked at her. She had on strange clothes that were dark in colour, and men's leggings. A thrill of fear burned my skin, making the pony startle. Peter muttered a few soothing words and the beast calmed. I tried to cry out but I'd barely opened my mouth before she'd gone, just like that, into the mist as though she'd never been there in the first place. I stayed twisted round in the saddle for a long time after that, watching. I saw nothing else. I didn't tell Peter – had I become fog-blind? Or were the gods I'd forsaken teasing me?

We travelled steadily for a long while, until at last, I leaned over the pony's neck, and said:

'Are we lost?'

Peterkin glanced around uneasily. 'We haven't strayed from the track. We can't be lost. It's the mist slowing us down, Cwen. Don't lose heart.'

'Do you want to swap places with me?'

'No. You stay up there. The abbess will never forgive me if you get to the boat all covered in mud.'

Without warning, my pony shied. I clung to its mane and struggled to keep my seat. The animal stopped dead and I rocked back into position dizzily. Its ears

and neck were high and its eyes trained on something I couldn't see. By my side, Peterkin drew a knife slowly, its blade singing along the leather sheath.

'Here,' he whispered, leading the mule alongside and handing me the rope. 'If anybody comes out of the bushes, drop the rope, leave the mule and ride for your life.'

'Peter-'

'Do you understand me?'

I nodded, squinting into the mist, seeing nothing but white. My mouth was suddenly dry. By my side, the blade of the knife shone cold. Peterkin clicked his tongue and the pony moved on, ears quivering.

A small black shape emerged from the path ahead. The pony stopped dead.

'It's a cat,' Peterkin whispered.

The cat stood still, its great yellow eyes turned towards us. Around its neck was a woven collar of white cloth, with a tassel under the chin. The pony whickered.

'That's the abbey cat,' I said. 'They call it Blace - I saw it in the great hall, by the fire, and again just before we left.'

'What's it doing out here in the middle of the woods?'

'I've no idea.'

The cat regarded us from the edge of a puddle. Its reflection transformed it into a strange beast of many legs and two heads, charcoal black in a land of fealu and grey. It flicked an ear as though listening to something, then, in one quick movement, bounded into a gap between a tangle of ferns, the white tassel swinging. Almost immediately, the sound of voices came from somewhere close – young men, harsh laughter.

Peter snatched the pony's cheekpiece and led us into the ferns through the same gap that the cat had taken. The mule followed, nostrils flared in quiet alarm. We came to a halt behind a holly bush. I slid out of the saddle and ducked low next to Peterkin.

The voices were clearer now. Their owners came into view, two rough-shaven men I didn't recognise, both armed with crude but dangerous-looking swords and wearing big dark capes. They were followed by a hunting dog on a lead that stopped to sniff the ground. The dog glanced in our direction. I froze. It was close enough for me to see the sheen in its eye and smell its wet coat; a moment later, it turned away, and caught up with the men.

'Dog thinks we're out for the usual prey,' said one of the men.

The other laughed. 'I reckon we should pay a visit to the new abbey.'

'That's a fair walk.'

'It could be worth it. Besides, nobody will recognise us there.'

'Why the abbey and not the tabernae? Plenty of drunken fools to be had around there.'

'Aye, drunken fools with empty purses because they've spent their coin on ale. The abbey is better. There's bound to be folk in and out. Who knows what we might happen across. Traders? Rich merchants?'

'Womenfolk carrying bread and cheese.'

'Womenfolk without the bread and cheese would do for me. So long as they're young and pretty.'

They laughed again, a sound rough as cawing ceo, the first one tugging on the dog's lead, the second swiping his sword at a clump of bracken, slashing it in half. Peterkin's face darkened. He gripped the hilt of the knife as we watched them pass, his body still as cold-set glaesen.

The men vanished into the mist. We waited a while longer for their voices to disappear before urging the animals out of the bushes. Peterkin pushed the knife back into his belt.

‘If the cat hadn’t run from the path, I wouldn’t have known which way to turn. I followed it into the gap.’

But the cat was nowhere to be seen.

A startled bird made a danger call from somewhere, its cry growing faint as it flapped away through the undergrowth.

‘How can Inga’s cat have come this far?’ I said. ‘We’ve been travelling since morning. It’s impossible.’

Peter helped me back on to the pony and took the mule’s lead rope.

‘Remember how your grandmother thought that cats could walk a secret path into the world of the spirits and faeries?’

‘Maybe she was right.’ Ahead of us, a faint glow of sunlight radiated through the mist. A bird began to sing somewhere, softly. ‘There’s our answer. We’re on the right path.’

‘So my offering to the leaf-sprites worked,’ Peter smiled.

‘I’m sure the abbess would tell us that her protection spell did it.’

A gloam of light spread ahead, as though we were walking towards the opening of a cave-mouth. The treetops came into view, the leaves on the evergreens shining with moisture. Quite suddenly the mist vanished, as though we’d stepped through fabric as fine as Abbess Inga’s headscarf and peeled it off behind us. The sky above was clear blue.

We’d reached the path pointer, a stout trunk carved with waves. The road was wider, pitted with water-filled holes, and rutted from the recent movement of carts. Dead ahead, the trees parted, and a port sat on the horizon. Boats crowded

the dock, which was knotted with walkways and the tiny, distant figures of hauliers moving sacks in barrows, a shepherdess coaxing nervous sheep into a pen, an alewife yelling from a tabernae window. Behind the boats, a much bigger ship rose out of the water like the leviathan the holy sisters spoke of. Peter turned to me and grinned.

‘This is just the start, Cwenhild. Me with my glaesen, and you with your clever painting and your ideas - we’re going to make something special of ourselves, I can feel it.’

I lay my hand on his shoulder, the first traces of real excitement building in my stomach. ‘I know, Peter. But it’s what we’ll bring back with us that I care about most. Our glaesen? It’ll be known the world over.’

Peter looked into my face, one eyebrow raised. ‘Are you having the sight, Cwen?’

Flashes of colour like sunlight through painted glaesen, the sweep of long skirts over cold stone floors, Inga’s face, much older, palsied and frail, a baby in a crib, the biscop’s gold ring pushed to my lips... all these things flashed through my mind so quickly that they became a single headachy tangle of images impossible to unravel.

‘Yes,’ I said, dizzy. Peterkin took my elbow. ‘Your glaesen and my pictures will outlive us both, Peterkin. The windows will survive destitution and will stand untouched for an eternity.’

A fragment of broken glaesen imprinted with a cat’s paw slid through my mind and was gone. A salt-scented breeze riffled our hair. Peter took his eyes away from my face and tilted his head back in the warmth of the sun. The pony jangled its mouthpiece. Somewhere overhead, a flock of mewling gulls wheeled in a cloudless sky.

Our ship was waiting.

*

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School: Lincoln City High II

Date: 2/10, 3rd cycle, 2157 CE

A Philosophical Piece about The Black Cat Panel, with some
thoughts on the History of Stained Glass

I' m producing this piece for my Historical Awareness folder. I was supposed to be collaborating with Sophie and Milo, but they ditched me to wander the dark bits around the top end of the cathedral. They disappeared on the pretext of looking for the Lincoln Imp, but I saw them hold hands and kiss as soon as they thought they were alone. Disgusting. They have the guides to show them where the Imp is. They aren' t using them, though. They stuffed the headsets into their bags as soon as they collected them.

Visiting religious buildings isn' t exactly my idea of fun, which is probably why I ended up at II instead of going to the Choir School. My parents say they couldn' t afford the Choir

School, but the fact is, I'm tone deaf and I have a singing voice like a strangled hamster, which obviously doesn't help. Anyway, the less said about that, the better. And just remember, Autoscan, when you're grading this assignment, I'm including what Ms Mitchell calls *personality*, so don't mark me down for the asides, please.

The stained glass has taken me by surprise. I've never paid much attention to old art like this before, but I have to admit, inside the minster, in the quiet and the cool, the sunlight shoots through the windows and the colours are so vivid, it takes your breath away. I find it hard to imagine how old this stuff is, how many battles it's survived and and plagues it's stood through. I suppose that's why they brought us here - to think about deep stuff we've never really worried about before.

I've spent all morning poking around, visiting the darkest corners, looking at the smallest panes as well as the big famous ones, sitting in the meeting room with its weird old seats, snooping through the courtyards to get a feel of the place. It's got underneath my skin. Some of the stones are worn so bad, you can see they've been trodden by generations of folks trooping in here to listen to sermons and to sing hymns. I caught Sophie and Mitch snogging behind a big stone pillar, but

I' m not supposed to say anything about that, not to anybody, but clever-clogs Sophie forgot to make me promise not to write it down (remember, Autoscan, it' s called *personality*).

My favourite piece of glass is a tiny little corner panel just off the ladychapel. It has a black cat on it. At the edge of one corner, there' s a smudge that looks a wet paw-print, as though the cat accidentally walked onto its portrait. The cat has bright yellow eyes that the notes say are made with something called silver stain. You paint it onto the glass in a goo and put it in the kiln. You take the glass out, let it cool, and wipe the dried goo off. The glass that was touched by the goo is now bright yellow. The thing is, silver stain supposedly wasn' t used at the time when the cat panel was painted. Some history buff dated it and said it was the earliest use of silver stain ever recorded, and nobody knows how or why. Stick with me here, because this is about to get interesting.

For this short project, I' ve decided to think about the history of the windows. Apparently, they were all made by men. At least, that' s what the records say. But as I' m wandering around and taking photos of the glass, I' m wondering whether that' s the truth. We did a class with Ms La Rue last semester where we learned all about the things women did that men took the credit

for - the Mathilda Effect, somebody called it, many years ago - and it got me thinking about the long-distant past, when no records survive to put us right. I mean, we know about Madame Curie and Vera Rubin and Esther Lederberg because we have proper records and stuff to tell us what they did and when they did it, regardless of who got the Nobel Prize, but what about distant history, when there are no records for us to check? I'm looking at some of these paintings, the folk in robes, the animals, the saints, the bible stories and the peasants going about their day-to-day business, and I'm thinking, some of these have got a woman's touch. Don't ask me why I think so - maybe it's intuition. Mum always said I was good with my sixth sense. Inherited, apparently. My great gran could hear the banshee whenever anybody in the family died. Anyhow, that's another story.

So, I had a picture in my head, a bit of a narrative really, about a woman who painted glass way back when, who discovered silver stain a Century before anybody else. She used it in her stained glass workshop, but never let anybody in on the secret, because it was hers and hers alone, and this secret let her paint things that nobody else at that time could: Mary with a halo; the sun rising over the brow of a hill; a cat with bright yellow eyes. In my story this woman, whoever she was, took the secret to her grave. Another hundred or more years passed before

anybody else discovered silver stain for themselves. A bit like a fairy tale, really, as though the secret recipe was kept under lock and key in an enchanted forest, to be freed after a hundred years by a true love's kiss.

I'd like to think that somewhere, there's a scrap of old manuscript that'll be discovered one day, a piece of vellum stained with age and written in a long-dead language. I'd like to think that on this piece of vellum, the woman who painted glass wrote all about her work, and about other glass-women like her, the ones who've slipped into what Mr Khan calls 'the hinterland of the past' .

I hope that one day, I'll get to look the past straight in the face, and to find out what really happened.

Chapter II - Bar Blu

Jules helped himself to water from the dispenser in the corridor. A colleague passed by, flashing him a smile, and he watched her go, buttocks rising and falling like juggling balls inside her suit trousers, heels stabbing the carpet. Some men paid to be walked on by shoes like that. Jules had once imagined the coltish blonde from the tram terminal walking on him in heels, but he'd scrapped that notion when Ewan had stepped into the office. Ewan was the one who'd decided Jules that he was definitely gay, with his gorgeous hair dishevelled by a hastily-removed rain hood, and his shoes so shiny that they blinged the ceiling strips right back off their expensive leather. Ewan's name still brought a twist of distress to Jules's stomach. What would Ewan think of him now? Ewan had argued that Jules's blind urge to reproduce was unnatural, despite Ewan working in aesthetics and pumping silicone into his clients' orifices five days a week, an irony that wasn't lost on Jules. But now Ewan was gone anyway, and all Jules had to show for it was a slowly stretching abdomen and an empty bed each night.

Jules drained his water, tossed the cup in the recycler, and made his way along the corridor. He took the lift down, clocked out, and grabbed a rain hood from the door dispenser. On the street, the fug of fast food stalls mixed with the stench of the wet walkways. That'd been an obsession of his father's, the smell of the rain. *When I was a boy, rain smelled fresh. These days it stinks. You don't know what's in it.* Jules couldn't soften the memory of his father's expression, which'd been set grimly for as many years as he could remember. It hadn't changed before or after his mother's death; it hadn't even changed after his own. In Jules's memory, the downturn of the old man's mouth would forever be set above a gurney with a blue blanket pulled hastily up under his chin, an unforgiving monument to his own expunged existence.

Tram lights flashed, sirens hollered and people hustled but Jules heard little as he crossed the square. He was deep in thoughts of pregnancy. Would he garner furtive looks once he started to show more? Would children point and women whisper? Would men stare at him with thinly-concealed envy? Doctor Magnus had told Jules to keep away from the media during his first two trimesters. Doctor Magnus had also advised Jules to delete his social media accounts and to keep a closed-circuit digital diary instead. *It might be worth something in sponsorship deals, further down the line*, she'd said. Jules's heart constricted ever so slightly at the memory, a rush of adrenaline reminding him that he was a trailblazer, set to have scores of eager young men sending him fan i-mail and telling him that his selflessness had paved the way for them to experience something that they'd never believed was possible: bringing a new life into the world, without a woman. Well, mostly. The eggs got borrowed but that was comparable to the days when women had bought flasks of semen and turkey basters to fertilise themselves. And in Jules's imagination, the days of surrogates and maturation racks and ex-utero would be finally over, and he would be leading the crusade, charging into battle with his pennant snapping and his big pregnant belly splendid above his metaphorical saddle...

A slosh of cold water hit his ankles. Jules cursed as an old woman on a mobility scooter sailed past. He reached the Health Centre and headed inside, dodging info-holograms that sprung up at each intersection. He'd half supposed that a member of staff might stop and question him so that he could proudly announce himself as Jules Fargo, the man whose ID they would, of course, already know. But nobody gave Jules a second glance. He started up the stairs, deflated.

The second floor was full of pregnant women, bumps straining against their clothes, some with sensible shoes and swollen ankles, some with partners, others alone. Jules suddenly felt like an impostor. But he wasn't, he reminded himself: he was pregnant. Really pregnant, not 'pregnant' like the ex-utero Primary Parent guys who he'd heard hung around at the back of pre-natal looking awkward.

On a side table, a flickering e-zine stared up at him. The woman on the cover reminded Jules of his egg donor, a Russian supermodel with long legs and tawny skin. Jules had used gene therapy to make sure the child inherited his eyes. He wanted – needed – for people to look at his child and say, why Jules, you’ve got a mini-me right there. All the add-ons had cost, of course, but Jules kept going until the money ran out, and, when he smiled to himself as he rubbed his fattening belly, he took satisfaction in the fact that it was the kind of smile his father would’ve wiped off his face with one clean swipe. Except his father had been replaced by his father’s money, which was entirely more accommodating.

Jules chose a chair. A few men and one woman hugged the back of the room, leaning against the perimeter desktops with studied nonchalance. He observed them from beneath lowered lids, trying to decide whether they were ex-uterus, whether the only woman in the group actually was a cis-woman, or a man who allied himself as female, or an intersex individual who just happened to favour a skirt and red lipstick. You just couldn’t tell, and it wasn’t the done thing to ask. A woman at the front of the room introduced herself and started talking. She was a midwife. The more heavily pregnant women began to practice relaxation breathing. Their bumps heaved and swelled. Little lumps appeared and vanished as their unborn babies kicked and writhed like aliens inside their taut wombs. Jules felt queasy.

Is this what he’d signed up for? To have his innards pulverised by brutal little fists and feet?

Your delivery will be by caesarean section. While modern science can allow you to carry your baby by managing the blood and nutrient supply vital for foetal development, we are not, I’m afraid, gods. You are only able to give birth in hospital, via the obstetrician’s scalpel.

Jules had gazed at Dr Magnus gratefully, unsure how many men had shown enough enthusiasm to push a baby out themselves. He certainly hadn’t.

It isn't the donor parts, Jules – wombs are ten a penny, as the old saying goes. It's the anti-rejection drugs. They're proving a little difficult. But don't think of yourself as a failure. Plenty of women have caesarian sections. It does not reflect on your ability to parent a child.

The midwife was saying something, now, about breast versus bottle. Jules straightened in his chair, suddenly self-conscious. So, he didn't have breasts. That didn't make him inferior.

And no, you won't be able to breastfeed. The hormones needed to stimulate your pituitary are too risky in combination with the others you require.

Now she was talking about leaking breasts.

‘And for those of you expecting your first, remember that pregnancy creates spare flesh,’ the midwife gestured to her stomach. ‘You’re going to stretch and stretch over this nine-and-a-half months and those who have bigger babies, or who’ve been implanted with twins, just accept that you’re never quite going to get back to normal without laser treatment or surgery. If you can’t afford the surgery, carry your spare skin with pride. Know that you’ve sacrificed your figure for the continuation of the human race.’

Supressed laughter.

We have the option to add the cost of post-partum flesh removal to your quote, Jules. Would you like me to go ahead and do that?

Even though Ewan had already run for the hills, the idea of starting a new relationship with unflattering wads of spare flesh and hideous stretch marks filled Jules with dread.

Yes please, Dr Magnus.

The women in the circle had begun to pass around a new-born baby doll. When it was his turn, Jules reached out awkwardly to take the thing. It was cold and hard, with horrific little painted eyes half-covered by lids that jiggered as it

moved. The doll slid through Jules's outstretched fingers and tumbled headfirst onto the floor. A sibilant hiss reverberated around the room as its head smacked the tiles. Jules swore. He hauled the doll up by one cold foot and swung it by its heel into what he imagined was a suitable position to hold a new-born. Its head settled in the crook of his elbow, and the eyes, those awful, cold little eyes, opened as the lids tipped into a recess behind its glassy eyeballs.

Jules stared at the baby.

The baby stared lifelessly back.

Jules pushed the doll at the next woman in line, and returned to his seat, trembling.

'Do you mind if I join you?'

The voice was male, refined, whisper-soft.

Jules turned. The young man beside him was tall and slender, with dark hair and honey-brown eyes.

'Of course,' Jules whispered.

The other ex-uterus crept towards the empty chairs. The plastic child had vanished, replaced by a feeding bottle and a rubbery, pendulous breast complete with a big dark nipple.

'I'm Ash,' Jules's new neighbour nodded a greeting. 'Are you ex-utero, too?'

'No,' hissed Jules, 'I'm ManCarry.'

Ash's eyes widened. 'You're kidding me, right? So you're one of the Anonymous Dozen I keep hearing about?'

Jules hesitated, feeling both pride and fear. He'd been advised to keep his mouth shut.

‘They’ve hidden you all over the world, so my sources tell me – scattered to the four winds. It truly is an honour to meet you.’

Jules studied the man’s face, the veiled admiration. This was a brother-in-arms, a comrade, a future confidante – after all, Ash was pregnant too, if only in an inferior ex-utero kind of way. Jules smiled coyly.

A hologram of a distended womb sprang up in the centre of the room, and began to rotate. The breast, meanwhile, continued to work its way towards them, hand by hand, some of the men moving it on quickly, one woman’s toddler daughter hauling the oversized nipple into her mouth to suppressed laughter.

‘Are you birthing naturally?’ Ash whispered.

Jules shook his head. ‘Not possible. Where’s your baby growing?’

Ash grinned. ‘I’m not supposed to say anything, but she’s a ten-minute tram ride away. I’m going to visit right after class.’

Pregnancy, Jules noted, had certainly made Ash sparkle.

The holographic womb in the centre of the room peeled back to reveal a sleeping, head-down baby. Jules studied Ash from beneath lowered lids, observing the neatly pressed suit and expensive jacket. Ash was the kind of man Jules’s father had loved to hate: pristinely scrubbed and impeccably well-presented, understatedly gay, an affront to his own careless, chaotic and unemotional manhood. Outside in the corridor, two women walked past arm in arm, staring in at Jules’s group with sour expressions. It was truly painful to observe the jealousy of females who couldn’t afford fertility treatment. Anybody would’ve thought they felt entitled to pregnancy. Irritated, Jules looked away.

‘And now we’re going to talk about pain relief, for those of you doing things the old-fashioned way,’ said the midwife. ‘I believe that Dr Magnus herself is going to lead the discussion.’

Backs stiffened with anticipation. Dr Magnus appeared quite suddenly from a narrow lift door with stage-managed efficiency. The virtual womb vanished, the fat breast was placed on a trolley, and Dr Magnus walked into the centre of the room. A silence followed which reminded Jules of the celebrity chat shows he'd seen, where the audience suddenly begins to breathe as one. The woman possessed a mystique that Jules realised he'd underestimated. She was a new kind of celebrity, a cult figure; Dr Magnus was a fertility goddess.

'If you're at a loose end after class,' Ash leaned in close and whispered, his breath warm on Jules's neck, 'why don't you come to the centre with me? I'd love you to meet Lucia.'

Jules glanced at Ash's hand. It rested on the knee of his pressed slacks, the skin soft and dark, the nails short and clean. There was no wedding band.

'Good afternoon, everybody,' said Dr Magnus, with a voice smooth as treacle. 'It's so good to see you all blooming.' Subdued murmurs of amusement. 'Let's talk about pain relief...'

'I'd love to come and meet Lucia,' Jules whispered.

And so, after Dr Magnus had disappeared back into her lift and class slowly dispersed, Jules found himself following Ash out into the damp night to catch the city-line to the outskirts of town.

The carriage was empty and the conversation rolled easily – babies, bodies, the future. Ash stood up suddenly at a badly-lit intersection.

'This is us.'

Jules hesitated. His reflection slid over a damp bench and a broken light outside. A squall of rain slid down the window.

'We're only a short walk away,' Ash beckoned. 'Don't be put off by the locale. You'll see, once we're off the platform.'

Jules peered into the darkness. He knew that in recent years the fertility centres had moved out of town, disguising themselves as regular offices or factories, hiding in the darkened corners of anonymous suburbs to remove the risk of sabotage. The women's pressure groups; the men, like his father, who were terrified of what they saw as the feminisation of the male body, as though it was contagious; the transsexuals who had campaigned so long for womb transplants that they denounced anybody who gestated a baby outside the body as pure evil... all of them had militant factions which seemed to have no problem getting hold of automatic weapons and breaking an entry. Jules pushed the thought from his head as he followed Ash out through the sliding door. A holographic law enforcer sprang out to watch them pass. The tram slid away into the night.

'You ever been inside a centre before, Jules?'

'Never.'

'Prepare to be amazed.'

They cleared the walkway and, minutes later, arrived at a cluster of shadowy industrial units.

'This place is dead,' Jules whispered, his eyes straining to see along the unlit streets. 'Are we safe?'

Ash did thumb and retinal at a discreet terminal on the wall.

'Couldn't be safer. They cleaned the district up when the centre went in.'

A rectangle of wall slid upwards. Jules peered through the gap. It was too dark to see much.

'Cleaned it up in what way?'

'The badboyz vanished overnight. Never came back. Nobody knows where they went. My guess is, it was the dogs. Follow me.'

They stepped through. The wall whizzed shut behind them.

‘Dogs?’

Jules had never liked dogs, not since his aunt’s apple-dome Chihuahua had bitten his ankle as a boy. He could still picture its face pulled back into a snarl, the yellow teeth, the brown gums, the thick strings of saliva. He’d kicked it afterwards. His aunt had never forgiven him. Neither had the dog.

‘Yeah. Dogs.’

Ash disappeared into the darkness. Jules scampered along in his wake. A finger of fear wound itself around his throat.

‘Ash, are you sure we’re OK in here?’

Ash laughed. The sound reverberated off the walls, a touch manic.

‘Of course we are.’

Jules’s eyes began to adjust. They were crossing a yard that resembled photographs he’d seen of concentration camps from World War II, with high razor-wire topped walls.

‘Do the dogs come into these yards?’

‘Not past the gate.’

‘You sure?’

‘Yeah. They roam the streets in the district. You’ll catch a glimpse sometimes. I’ve never seen one close enough to touch, thank god.’

‘What do they look like?’

‘Huge. They wear collars with flashing lights and weird-shaped backpacks. And their eyes shine red in the dark,’ said Ash, his voice low. ‘They watch, and then vanish.’

A frisson of fear prickled Jules’s shoulders. ‘Have they ever gone for the wrong target?’

‘I wouldn’t know.’

Ash hurried on, the folds of his raincoat flapping like bat wings, illuminated by the occasional shaft of light from the guard tower.

‘Hey, slow down.’

‘There’s a time limit for access. Try to keep up.’

‘I can’t see!’

‘That’s part of the security. Your fear is psychological, but you won’t fall. There are no obstacles. You’ll be ID’d soon.’

Jules flinched as something moved in the shadows. He searched for red eyes, and the flashing lights of a high-tech collar, but he found only darkness. Ash opened a door, slicing the ground with light. They were at the threshold of a blindingly white stairwell.

‘When do they ID me?’

‘They already have.’

Ash took two stairs at a time in ridiculous bounds that suggested to Jules he did parkour. Jules, sweaty and breathless, promised himself he’d start to exercise more after the baby arrived. At the back of his mind came his father’s voice, telling him he that was a wimp, that he’d never amount to anything, that he wasn’t even man enough to kick a ball into a net, despite the fact that Jules had never seen his father kick a ball, or in fact anything except himself and his mother. When Jules caught up, Ash was holding open a door with a twist of a smile on his lips.

‘She’s in here,’ Ash stepped inside.

The place was as big and open as an industrial hangar. The air was oppressively warm.

‘Please close the door,’ an automated warning said.

Obediently, Jules complied.

The lighting was dim. The room was stacked floor to ceiling with racks that stretched as far as the eye could see. Jules could've imagined that they were ordinary storage shelves, until movement caught his eye. The framework held sacs which hung in hammocks. Each had a baby growing inside. The foetuses were at various stages of development, some tiny like little sea creatures, others almost ready to be bathed and nursed, thumbs in mouths and little backs curled around tiny feet. Dim lights illuminated parts of the babies' bodies: a hand here; a foot there; a twitching arm; the dark blot of a head. Sotto voce to Ash's retreating footsteps were the sounds of gentle movement: the odd squish; soft bubbling; a gentle shushhh as a limb brushed the inside of its surrounding membrane. In the third row along, Ash's baby was curled peacefully in sleep, papery eyelids closed, fingernails barely visible, the hair on her head a sooty slick.

'She's got your nose,' said Jules awkwardly, because he couldn't think of anything else to say.

'Thank god I haven't got to push this one out myself,' Ash viewed his daughter with a grin. 'No wonder women spend a lifetime whingeing about their ruined pelvic floors, eh?'

Jules, who felt squeamish at the thought of torn flesh, began his breathing exercises.

Ash drew his eyes away from the baby. 'Life isn't fair, Jules. There are some things which are stacked very much in women's favour, if only they'd see it that way.'

'What, the real-live pregnancy thing? You could've put your name down for ManCarry, too.'

'I couldn't afford it.'

They stood side by side in silence, staring at the baby. Jules was shocked to think that once, he had been this tiny, this vulnerable. But then, so had his father. The thought made him shudder. At what point had the man gone so badly wrong?

‘What does she do when she wakes? Open her eyes?’

Ash gave a soft laugh. ‘No. She moves around. Like the others.’ He gestured to the other sacs. ‘They wriggle, they kick, they take their thumbs out of their mouths, that sort of thing. You’ll feel all that for yourself. You’re so lucky.’

Jules was beginning to feel nauseous. The wombs, the babies, the oozy liquids and squishy noises made him feel that he was surrounded by aliens, little gremlins who might wake up at any moment, burst from their sacs and bare their gums in a show of slobbering hostility. Did women feel this confused by pregnancy? Or was he, as his father had always maintained, a poof, a wuss, a mummy’s boy who couldn’t look at a bloody handkerchief without wanting to heave?

‘I feel a bit claustrophobic, Ash. I think I’ll go back to the walkway and take some air.’

‘No!’ Ash wheeled around, his voice sharp with alarm. ‘Don’t go back the way we came. You try, you’ll trigger an alarm that sets the dogs loose.’

Jules felt dizzy.

‘It’s security, Jules. We enter and leave by different routes. But I can’t visit Lucia every day. I don’t want to leave early. Please, can you hang on?’

‘Of course,’ Jules’s eyes swam, just as they did whenever he looked over a precipice, or when he sprinkled pepper on his pizza, or saw a gory scene on a TV drama. ‘I didn’t mean to be rude. Please, can I just get out of this room?’

‘Head to the end of the racks,’ Ash pointed. ‘Wait for me there.’

Jules walked, blocking out the wet sounds by humming a little lullaby he'd been learning, which was different from the lullaby his mother used to sing to him when he was tiny, because that brought back too many memories.

The stairwell behind the door marked *entrance* was much cooler. Jules slumped against the wall, and slid down. Security screens showed the vista outside, with guard huts on stilts and sparkly wire, and harsh white spots that wove webs of light in the night sky. Most of it, Jules realised, was for show. Aerial spotlights wouldn't do much to deter a ground-level break-in. No, the real deterrents were the dogs. Jules strained his ears, listening for the clip of claws on concrete, for heavy canine panting. But the only sound was the soft hiss of rain outside, amplified by the yard microphones.

Jules's father had liked dogs. In fact, his father had preferred his old dog to Jules. Sometimes it'd slept in Jules's bed while Jules was banished to the kennel. His mother, long-suffering and bruised, had never had much to say about the matter. Jules didn't hear her speak a word in the last five years of her life. He'd wondered since whether his father had excised her tongue just as he'd threatened so often.

At last, the door opened. Jules scrambled to his feet.

'I'm sorry to keep you waiting,' said Ash.

'That's OK. I understand.'

'Would you like to go back into town? We could have a glass of wine. There's a great heated rooftop garden on Forty Fifth. It's got a rain barrier.'

Jules glanced down at his stomach.

'Silly me,' said Ash. 'How could I forget – you're ManCarry.'

But Jules didn't want to go home, to the unit where Ewan's last few belongings sat in a box at the end of the bed they'd once shared. He didn't want to

listen to the automated voice of the i-housekeeper ask him if he'd had a good day and did he want the leftover casserole re-heating.

'I'm sure one glass won't hurt,' said Jules. 'I'd love to.'

'Then it's my treat,' said Ash. 'Come on.'

Minutes later, they were back on the dark street. A tram was already waiting. Jules and Ash took opposite seats in an empty carriage. As they sat, Ash's knee gently brushed Jules's, the heat of his skin transferring through the thin fabric of his trousers. But Jules was distracted, searching the shadows beyond the window. Two beads of red shone from a distant intersection. They were unbroken, unblinking, and were trained right on the tram.

'Ash!'

'What?'

'Look!' Jules extended a trembling finger.

Ash turned.

The eyes vanished.

Jules stared into the shadows as the tram pulled away and slid into the darkness.

'What?'

'I saw a dog. I saw its eyes.'

'Where?'

'Over there. They were shining red, just like you said.'

Ash peered outside, but the tram sailed past a row of warehouses and the view of the street disappeared. He shrugged. 'Well, I did warn you.'

Jules laughed uncomfortably. Ash didn't seem in the slightest bit concerned. He studied the sole of one shoe, rearranged the folds of his raincoat and started to tell Jules about the bar they were heading to. It had naked intersex cage dancers; if you gave a good tip, you could get their cages lowered to stroke them through the bars. Perhaps that was a clue, Jules told himself: Ash liked something to pet. He clearly wasn't afraid of dogs. But dogs with backpacks and shining eyes?

Bar Blu was up four tortuous flights of stairs. Outside the main door, a black cat sat upright like a sentry, its yellow eyes unblinking. At its feet was a little glass bowl with the word 'Sooty' painted on.

'Is that cat real or stuffed?' hissed Jules as they headed into the bar.

'Sooty? She's real alright. Comes and goes. Once she came back covered in paint. Left pawprints all over the bar. Manager went nuts. I mean, it's made of *real* wood.'

The server was a shaved youth of indeterminate gender, who sported multiple needle pattern piercings instead of clothes. Jules had never seen such flesh-art before, but Ash was neither fazed nor fascinated. He picked up the drinks and gestured towards a door marked *balcony*. A woman with red hair and fluorescent green eyes stuck her head out through the bars of a cage and hissed at them as they passed.

'You won't believe the view,' said Ash, motioning for Jules to go first.

Jules hesitated. Four flights of stairs equated to two floors. Two floors could be conquered by using the coping techniques his therapist had advised. He could feign indifference to the height, so long as he wasn't on the edge looking down.

The balcony was an elegant mix of old-world fake timber and modern reclaimed metals, encased in a frameless dome. Only the odd freckling of rain overhead gave away that they weren't truly open to the elements. Ash handed Jules a glass and raised his in toast.

‘To new friendships.’

‘And parenthood,’ added Jules.

The glasses chinged sonorously. Beyond, the cityscape shone, a patchwork of blocks and towers stitched together by threads of light.

‘Ash, can I ask you something?’

‘It’s not the dogs again, is it?’

‘It’s the centre, actually.’

‘Oh?’ Ash twisted the stem of his glass. Wine dark as blood spun in slow circles.

‘It was full of racks. Of babies, I mean. Only... there was nobody else there visiting. Why is that?’

‘Parents get allotted times to visit,’ said Ash. ‘They’re strictly monitored. I guess they try to distribute visiting evenly across the day and night. Plenty of ex-uterus are shift workers.’

‘But that doesn’t explain so few visitors for the sheer number of babies. The place is huge. How many floors?’

Ash shrugged. ‘My baby is on floor three and that’s nowhere near the top.’

‘Exactly,’ said Jules. ‘There should’ve been other parents there at the same time as us. It doesn’t add up.’

Somewhere distant, an emergency alarm sounded, its pitch morphing as the Doppler kicked in.

‘Maybe there are other entrances for other floors,’ Ash said. ‘It’s Lucia I’m interested in, that’s all. I have no idea about the others.’

The alarm whined itself into silence.

‘I’m sorry, Ash, I didn’t mean to be nosey or rude. I think your daughter is beautiful and you’re going to make a terrific dad. I’m just curious, that’s all. I don’t know a lot about ex-utero.’

Ash brightened. ‘And I don’t know much about ManCarry. Tell me everything. And,’ he said, glancing around, ‘you don’t need to worry about being overheard in this place. It’s the haunt of lovers, odd-bods and Uniques – we all have a story, and here, we’re all safe. There’s no judgement, no cameras, and no repeating anything we see or hear.’

Jules relaxed. He’d had nobody to share his journey with beyond Dr Magnus, and, revered as she was, Dr Magnus wasn’t really a friend. Ash listened intently: about Ewan’s fantasy spending plan for Jules’s inheritance, how Jules’s refusal had led to their split, the implantation procedure, the appointments, Jules’s dissatisfactory job, how disappointed his late father would be, how the money had finally run out. Eventually, Jules leaned back, stared up into the star-spattered sky, and watched the wind bully the clouds away for the first time in days. He felt more at peace with himself than he had in a long while.

‘Would you like to come again?’ Ash said softly.

‘Huh?’

‘To see Lucia, at the centre.’

Images of the pods with their moist contents flashed into Jules’s mind, and he imagined it to be his father on the other side of the foetal membrane, not baby Lucia. The foetus’s head grew before his eyes and became the grizzled adult he remembered, face pushed into the translucent pouch, twisted with anger despite his mouth being full of fluid and his words bubbling, yelling at Jules that he was pathetic for not liking dogs and for crying at the sight of blood and suddenly the wine had gone to Jules’s head and he felt reckless and defiant.

‘I’d love to visit again.’

A smile spread across Ash's face. He picked up the table water and poured into both glasses.

'That's settled, then.'

*

Lucia was almost ready for delivery. While Ash sang his daughter lullabies and frisked eager hands over her digital records, remarking on her sudden growth spurt, Jules battled the familiar sensation of queasiness. The little knot of flesh and bone that was growing into his baby was pushing on the wall of his intestine, making him uncomfortable and giving him less tolerance than ever to heat. Dr Magnus had warned him about this, about the extra blood flow that made you feel like a hot water bottle. He unbuttoned his shirt collar and tied his jacket under his ribs, loosely. Ash was too absorbed with Lucia to notice. Eventually, he told Ash that he needed air.

Jules practiced his breathing exercises as he walked, ignoring the racks that ran each side of him. At last he reached the corridor, but in his hurry Jules tripped, instinctively thrusting out a hand to save himself. Instead of feeling solid brick beneath his palm, Jules felt nothing at all - the wall vanished in a shower of sparks. A neatly shaped cut-out had opened up. Jules fell straight through it and hit the floor at the other side with a thump.

He swore, and sat up.

Instinctively, he reached for his stomach. There was no pain.

The vanishing section of wall had sprung up again. Jules was closed in on the other side, in a corridor he didn't recognise.

He scrambled to his feet.

He punched his hand into the piece of wall he'd fallen through.

The wall fizzled, then pixilated itself back together. A hologram!

Jules glanced left and right.

The corridor was punctuated by randomly-spaced doorways along the back wall, each identical. Jules walked stealthily towards the closest. The handle was cold. He depressed it gently, listening to the faint clunk of the mechanism. He pushed. The door opened with a sucking sound. Inside was dimly lit, with a plastic floor the same as those found in animal sanctuaries, thick with the smell of old-fashioned disinfectant. The room was lined with racks like those that held Lucia and the others, but smaller, and fewer. From suspended sacs came the jerk of movement, accompanied by the tick and blip of monitors.

Jules stepped inside.

The squirming mass closest looked like a dark-haired child. Jules reached out one hand. The sac was warm. The contents jiggered against his fingers. But the membrane didn't hold a single foetus – it was full of things, dark hairy things, with claw-like nails and long snouts. Something thrust out violently, pushing the membrane - a single, perfectly formed paw.

Dogs.

Baby dogs, litters of dogs, any number of them sealed into the sacs all around the room, dark dogs, pale dogs, squirming dogs.

Jules felt dizzy, so dizzy that he might pass out at any moment. He reached out a hand to steady himself and hit a lamp that toppled into a desk. The sudden movement stirred the closest sac, which in turn set off the others. Sacs that were previously still now wriggled with straining limbs and scrabbling claws, those closest to Jules moving so vigorously that he half expected them to tear the imprisoning skin and spill out onto the floor in a gush of liquid. A flash of tiny white teeth appeared and vanished again.

Jules turned, opened the door and ran.

He sprinted down the corridor. He hurled himself into the wall, but bounced off it and landed in a heap on the floor. His forehead throbbed, and his neck ached. Somewhere out of sight, the sounds of footsteps and hushed voices drifted closer. Somebody was heading towards him, on the wrong side of the vanishing wall.

Jules scrambled to his feet. He hurried back the way he'd come, thrusting his hand into the wall at intervals, bruising his knuckles repeatedly until at last he found the sparkling gap and slid through it, just as the whoosh of an automatic door came from somewhere behind.

Jules slithered to a halt in the twilight hangar. Behind him, the wall had returned to its 'solid' state, the door marked *exit* still closed, a security cam immobile above it.

Ash was singing to Lucia.

His out-of-key lullaby drifted between the racks and petered into silence. Jules limped slowly towards the door marked *entrance*, and made his way into the corridor beyond.

Later, when he and Ash climbed on the tram to go home, Ash solicitous because he could see Jules was feeling unwell, Jules brushing him off to avoid too many questions, Jules realised that he no longer had his jacket tied around his waist.

*

Jules was in the canteen, queasily sipping a black decaf, when the story broke.

‘Secure Gestation Centre breached,’ screamed the announcement.

A newsreader from *Get It Here First* appeared, red faced and barking into a microphone from beside a tall fence on an empty street that looked familiar.

A collage of film clips showed police accompanied by big dogs searching the area, a hangar door blown open, gestation racks pulled from the walls, torn sacs hanging like tattered pennants, dark liquid staining the floor. Jules’s cup slipped from his hand and landed heavily in its saucer, sending hot liquid over the table.

‘Somehow, the invaders breached security just after midnight,’ the voiceover continued, ‘blowing off the door, sabotaging millions of credits worth of equipment, and ultimately ending the lives of babies, real babies, who were being gestated en-mass in this out-of-town facility...’

Jules couldn’t remember stumbling out of the canteen. In the corridor outside, he slithered down a wall and pushed his i-hand to his ear.

The other end rang and rang until eventually, somebody picked up.

‘Ash!’ shrieked Jules. ‘Ash, is that you?’

Panicked breathing. ‘Yes, it’s me.’

‘What happened!’ Jules pitched forwards and came to rest on his knees.

‘It’s OK,’ said Ash. ‘They delivered her early. I have Lucia at home, here with me. She’s safe.’

Jules slid sideways along the wall and landed, one cheek embedding itself in the carpet, clutching his stomach.

‘I’m sitting in front of the news now. It’s terrible, Jules. Lucia went into distress so they cut her out early. I brought her home. I haven’t had chance to call anybody because I haven’t slept. She cries for milk every hour and a half, day and night. It’s much harder than they tell you. Thank god, though. Thank god she was delivered early. If she hadn’t been...’

Jules, convulsing with emotion, found himself surrounded by colleagues who had witnessed him stumble from the canteen. Somebody was trying to lean him up, somebody else was trying to prise his i-hand away. Jules snatched it back and batted them off feebly.

‘I thought... I thought...’ his voice drizzled away into a sob.

‘We’re safe,’ said Ash. ‘Just pity those poor bastards who’ve lost their kids. The police have been here already to interview me. Fine sight I must’ve looked when they door-knocked me, covered in wee and puked-up milk, but at least Lucia is safe. At least I have her home. They have no idea who did it.’

Later, Jules was unable to recall the rest of the conversation, or what he’d said to the colleagues who led him back to the sofa and insisted that the screen in the corner was turned off because ‘he’s got a friend who’s affected – he’s distressed, can’t you see? And he’s pregnant!’

His only memory, still as a freeze-frame, was the final image that *Get It Here First* flicked onto the screen before it blacked out. One of the saboteurs had been caught by a security camera wielding a long knife. The face was impossible to identify because the assailant wore a headscarf. But the eyes shone clearly through the gap with a hatred that was horribly familiar. They reminded Jules of his father’s expression, moments before he’d kicked him, or set upon his mother. They were the eyes of somebody completely demented.

*

‘I didn’t just call you here for a check-up,’ said Dr Magnus, as she pulled open a desk drawer.

‘Oh?’

Behind her, on the wall, was a picture that Jules had never noticed before: a canvas of a naked girl between some closely-planted trees. The trunks looked like prison bars.

‘Is something the matter, Dr Magnus?’

Dr Magnus pulled a dark blue jacket from the open drawer. Jules recognised it immediately. A tourniquet of fear tightened around his throat.

‘Your name is lasered onto the label, Jules. You were wearing it last time you came to see me.’

‘I lost it, Dr Magnus. At a tram stop on the outskirts.’

Dr Magnus pushed the jacket towards Jules. It had splotches of something dark along one arm. The fabric hissed against the leather desktop. Jules reached out to take it. Dr Magnus tightened her fingers. Jules retracted his hand, plaiting his fingers in his lap. He imagined his father’s lips puckering into a snarl and yelling at him for being too afraid to stand up to a woman.

‘What were you doing in my gestation centre?’

‘I was visiting. With a friend.’

‘A visit which seems to coincide with a saboteur episode that killed most of my babies.’

Jules swallowed hard, pushing a sick feeling down.

‘My words seem to come as no surprise to you, Jules.’

‘I saw it on the news. The attack, I mean. My friend had a baby there. She was delivered early. She’s OK.’

Dr Magnus’s lips curled up at the edges, as though she’d attempted a smile and then thought better of it.

‘Well, this gives us a little problem.’ She stood up and wandered to the window, where she turned her back on Jules and poked open the slat blinds with two long-nailed fingers.

‘A problem?’

‘Yes. Your jacket was found at the scene of a crime.’

‘But I can prove I had nothing to do with the attack on the centre!’ Jules hated when his voice came out as a whine. ‘Check the security footage, Dr Magnus. You’ll see exactly when I arrived and left. I was there before it happened.’

‘We know exactly what happened in the centre, Jules,’ Dr Magnus’s voice was low and level. She remained with her back to him. ‘And we know all about your little fall from grace. Or should I say, your fall from the main corridor.’

Jules shook his head dizzily, the memories flicking into his mind in random snapshots, the pain in his hand and neck reappearing as he relived his fall through the wall: the pixilation; the white floor; the fallen lamp which set off the disgusting wriggling creatures with their paws and claws and stubby snouts...

Dr Magnus snatched her fingers from between the blind slats. They shut with a metallic slap.

She turned around.

Jules had never been able to read her expression, but he’d never had to – she was his medic, his ManCarry advisor, the person who held his best interests at heart. She had also been paid very handsomely to give him what he wanted. Jules didn’t recognise this new doctor. The slim figure, taut cheekbones and bobbed hair were as before, but she was different, somehow, oozing coldness and an air of calculation which were entirely alien. Dr Magnus wore the ghost of a smile that quite didn’t reach her eyes.

‘You see the marks on your jacket?’ she gestured at the dirty piece of cloth on her desk. ‘AmnioFlu. It’s a manufactured version of the fluid the female body produces during pregnancy. You have it inside your own sac,’ she waved a hand loosely at Jules’s stomach. ‘Ours has its own unique chemical formula which can be identified under analysis. And your jacket is covered in it.’

Jules’s hand crawled towards his neck. Under the delicate skin of his fingertips, his throat-pulse bulged like a creature trying to tear its way out.

‘But... but that’s *impossible*, Dr Magnus. I never touched a sac when I visited. I kept my hands to myself.’

‘The AmnioFlu was released by the saboteurs when they took weapons to the gestation racks. When they killed the babies, Jules. With knives. And your jacket is covered in AmnioFlu. There is only one possible explanation for that.’

Jules’s vision began to darken at the edges. Dr Magnus’s face suddenly didn’t look real. It swam in front of his eyes as though he was watching a very bad pirate copy of an old-fashioned movie.

‘Do you know what the penalty is for multiple infanticide? Or the additional charges of breaking and entering a secure medical facility?’

‘If you have cameras then you already know it wasn’t me,’ Jules whispered.

Dr Magnus perched on the edge of her desk, arms folded, head inclined to one side. Her long silver earrings flicked in and out of her hair like snake tongues.

‘As you can imagine, my people had a fair mess to clean up. Needed counselling afterwards, or at least that’s the official line. We have already catalogued every single corpse found on the floor, tangled in the racking, drowned in its own fluid or mashed to pieces by a blunt instrument.’

Jules’s stomach began to heave. He flattened the back of one hand against his mouth and closed his eyes, blocking out the images that began to crowd his

mind. Babies, babies everywhere, torn from pouches, cast onto the floor, their tiny bodies bruised and broken... and Lucia, her hair a smutty smudge against the opaque membrane, little fingers curled into fists...

‘Sadly, most of the parents-to-be weren’t insured. And for your information, we already know the identities and backgrounds of everybody involved in the attack. Open your eyes, please, Jules, and look at me.’

Jules did as he was asked. The room seemed darker, monochrome. Dr Magnus folded her hands in her lap.

‘We know much more than we feed to the police.’

‘What do you want from me, Dr Magnus?’ Jules’s voice didn’t sound like his own. He was reduced to everything his father had ever called him, a squirming wimp with wet eyelashes, close to soiling himself, a child again.

‘Am I really so obvious?’ Dr Magnus’s eyes came to rest on Jules’s face.

Jules blinked and in that moment Ewan sprung into his head, full lips pulled into a sneer, asking him what the hell he expected to happen since he’d started messing about with things that could only end badly; and there was his mother, too, her great brown eyes reproachful, telling Jules that she’d only ever wanted grandchildren but she hadn’t dared tell him that when his father was alive; and his father’s voice, booming around in his mind, the hand that found the side of his face, the foot that connected with his ribs... Jules screamed to silence them all. He couldn’t stop himself. It came from somewhere deep within like the cry of an anguished animal that knew it was done for. The scream turned into a wail that got weaker as his lungs deflated, ending in an agonised whimper. When Jules was finally silent, he opened his eyes. Dr Magnus watched him from her perch on the edge of the table, unblinking.

‘Feel better now?’

Jules nodded and wiped his nose with the back of his hand.

‘Then I’ll continue. Forget the Centre. What happened there is collateral damage. Once in a while, we let the latest crazy bunch break in, because it earns us official approval for getting rid of the lot of them. Nobody likes a baby-basher, Jules. Joe Public will celebrate when we catch them. And as a result, we get to relax our licence regulations just a bit. Which is where you come in. I’ve a little project on the side and I need somebody... *special*... to assist me,’ said Dr Magnus.

A thrill of adrenaline chased up Jules’s spine, but it wasn’t the good kind.

‘My work hasn’t gone anywhere near far enough. I know I can achieve so much more. I want to take it further.’ Dr Magnus glanced down into the courtyard below, frowning. ‘I’m using gene splices, Jules. Interspecies gene splices. And no matter how much I try to battle government red-tape, I find myself struggling to find a human subject whose DNA I’m free to take without causing all sorts of irritating little problems with the licensing board. The question is, why *wouldn’t* you help me?’

Jules leaned back, willing himself not to fall. He gripped the chair seat tightly, his head spinning.

‘One of my favourite quotes comes from the past, Jules – from way back in time when genetic engineering was regarded, by those who knew no better, with suspicion. Do you want to hear it?’

Jules shook his head. He wrung his fingers in his lap, watching the blood blanch out wherever he pressed the flesh, trying not to listen to the screaming voices in his head, trying not to see the images of babies strewn on the cold, hard floor of the gestation centre.

‘Well, I’m going to tell you anyway.’ Dr Magnus began to pace the room, her shoe heels digging the carpet. ‘If, 50 years ago, society had given in to fears about IVF we might be living in a world without fertility treatments. In 50 years’ time, we may have lost our current anxieties about genetic engineering... Until then, we

should encourage the practical research without giving in either to the hype or to the dystopic fears”.’

Her words washed through Jules’s head like a tide.

‘To spell it out simply, I’m fusing human and canine DNA. I’m making dogs with strength, power and loyalty, with enhanced cortexes capable of structured thought. Of course, they’ll look like dogs, but they’ll be superior in so many ways. They’ll have almost human brains. My work is ground-breaking. I’ve a few early prototypes already patrolling this district in the name of security, but in years to come, when the licensing boards have got over their squeamishness, they’ll thank me for it. The uses of these canines are manifold. They can fight alongside foot-soldiers in war zones, patrol secure premises twenty-four hours a day, perhaps even offer personal security detail to wealthy clients...’

Jules unknotted his fingers and looked up at her, incredulous. ‘But how can *I* help you?’

‘By allowing me access to your DNA. I’ve used mine, now I need more. I want to splice it. The procedure is painless. It involves a syringe and a few samples.’

Jules flexed his fingers. His knuckles ached. ‘And that’s all? But why in God’s name would you have done *that* to my jacket,’ he jabbed a finger at the pile of cloth between them on the desk, ‘to entrap me into saying yes? Why didn’t you just ask?’

‘Because my requirements for DNA are simple, but for other things, are a little more complicated.’

Jules cupped his hands over his growing stomach and looked down at the straining buttons of his shirt. ‘Complicated in what way?’

Dr Magnus laughed, a low, throaty sound. Jules saw for the first time the hollows under her eyes, the bloodshot whites, the faint yellowing of the cadaverous

teeth. Why had he not seen these things before? Why had he been so seduced? Dr Magnus, he realised, wasn't just the goddess of birth – she was its exact opposite too.

‘The litters – the offspring - will fare much better when gestated inside a host. Our limited studies have shown that foetuses pick up stimuli in-utero which includes forming a basic knowledge of language. I want my litters grown inside a human host, not a canine host. I want you to carry them. That is my final condition. You, Jules, will be my first true DNA donor and host for project EliteGuard.’

Jules stared at her, uncomprehending.

‘Of course, there will be perks. You hate your current job,’ continued Dr Magnus. ‘I’ll take you out of that office, give you comfortable lodgings at my centre, and your pregnancies will be short. Throughout, you’ll be able to care for your human child and, when you aren’t showing, attend kindergarten and do playdates like a regular parent.’

Jules’s hands spread defensively around his bump. His fingers trembled.

‘And in case you’re wondering about friendships, social life, that kind of thing, I have a little place on Forty Fifth where Uniques can go without fear of reprisal. You can visit it at any stage in your pregnancies, and discuss your life openly. The venue is called *Bar Blu*. You’ll fit right in there. In fact, I believe you’ve already met one of ours.’

Ash.

Ash with his scrubbed nails and his immaculately tailored clothes; Ash with his wonderful manner and no wedding band, who’d singled Jules out that first evening they’d met, to sit next to and to take out for wine.

Jules’s gaze drifted to the window, where dark clouds had gathered. A spattering of rain hit the pane with a hiss.

‘Did you send Ash, Dr Magnus?’

‘To befriend you? Of course.’

‘Why?’

She shrugged. ‘We like you. You’re just right for us, Jules.’

‘How did you know I’d fall through the wall? Or lose my jacket?’

Dr Magnus’s pale nails drummed an even rhythm on the desk. Behind her, the hair of the imprisoned girl stood out of its shadowy canvas in a flash of red reminded Jules of blood.

‘We didn’t. You did that all by yourself. We had another idea entirely, but you gave us a perfectly effective plan B.’

‘And Lucia?’

‘Lucia doesn’t exist.’

‘But I saw her in Ash’s arms after she’d been born.’

‘No, you didn’t. You just thought you did.’

At the other side of the window, rain began to beat hard on the glass. Dr Magnus looked cadaverous in the shadows, her eye circles deep, the lines around her mouth gouges like those taken out of modelling clay with a sharp tool.

‘Why didn’t you use a woman?’ Jules’s voice was weak again; he hated himself.

Dr Magnus laughed. It sounded staged, empty. ‘Women are too much trouble. They’re desperate to bond and to network, to let everybody know what they’re up to. With men, there’s a discretion factor. A discomfort. Especially with cross-species work.’ An auto-lamp flicked on, sending a bilious flare of light up one wall. ‘You may ask yourself how I know these things. Well, I’ve been in genetics for a long time, Jules. I’ve run trials, some successfully, some not so.

There are things I've learned, and mistakes I'm not prepared to make again. You could say that where reproduction is concerned, I've monitored many male and female responses to alternative pregnancies. Believe me when I say that you are my ideal subject.'

Somewhere distant, thunder cracked open and rumbled itself out. Jules had the strangest sensation of looking in on his life from somewhere else, an out of body experience, as though it wasn't really him on that chair in that room at all. Lucia didn't exist; Ash worked for Dr Magnus; the world seemed to have upended itself and taken Jules with it.

'Can I keep my baby?'

Dr Magnus studied her nails, turning them slowly in the lamp light. The veins on her hands stood out like tiny subcutaneous serpents.

'You paid handsomely for the chance to do what once, no man could do. I wouldn't take that away from you. I'm not a monster.'

Jules took a deep, shaking breath. Somewhere in the depths of his memory, his father opened a cavernous mouth, eyes puckered so tightly that they were no more than slits in his flesh, but when he began to shout, there was only silence. Jules was not a failure. Jules was not a waste of space. Jules was not a wuss or a wimp. Jules was having a baby. Jules had made the right choices.

Rain rattled on the window.

Dr Magnus dropped Jules's jacket back into her drawer.

For the first time in years, Jules imagined that he saw his dead mother smile.

*

Sam Delgado

BlitzSecurity

Secure message

The Virtual Herald

Fourthday/Week 51, 2299 CE

Obstetrician Dr Sian Magnus returns to court tomorrow for a sentencing hearing following her trial for unlawful genetic engineering. Dr Magnus, 62, previously known as ‘The Fertility Goddess’ , pleaded guilty to undertaking illegal cross-species gestation work at her West Side clinic.

The charges could result in a sentence of anywhere between two and twenty-two years’ forced labour. Her lawyer Abi Espinoza said outside court last month: ‘We’ re hopeful of a suspended sentence. Dr Magnus has worked tirelessly to bring the joy of birth to Disadvantaged Groups such as cis-gender males and non-binary individuals. To punish her when her work has afforded so much joy would be just plain wrong’ .

Reporting restrictions are to be lifted next month.

Chapter III - My Dearest Olivia

If it hadn't been for Saul, I would never have found the Zone Thirty-One tablets. I wouldn't have thrown myself into my work like I did, sitting night after night trawling the database to fill the hole in my life; I wouldn't have discovered, quite by accident, an archive that'd been catalogued incorrectly, so long ago that nobody remembered when or how. The tablets didn't just change my future, they changed the future of the study of domestic correspondence: the way we think about it, the way we teach it, the way we use the unselfconscious words of ordinary people to reconstruct the distant past. Funny, that I made a difference at a point in my life when everything seemed to be falling apart.

Saul still sends a message at Christmas. He married the woman he had an affair with. She's called Anna. She runs a factory making artwork, the sort my sister likes to collect. They have a child now. The boy, Otto, looks just like his dad.

There are many kinds of written record contained in the Zone Thirty-One tablets – inventories, banquet invites, orders for cavalry equipment and supplies, notices of births, deaths and rituals. My favourite is the domestic correspondence between Augustus and Olivia. There's something in those letters that resonates forwards through the years, something that brings the voices of Olivia and Augustus alive. When I was chosen for the Historia Primis Award, that was the thing they told me: you bring these people alive for us, Julietta. I wanted to say, no, it isn't me, it's *them* - you just have to know how to listen. But I didn't. The award sits on my living room shelf below the big mirror, gathering dust, the way all things from the past do.

Augustus Flavius, Garrison Scribe to Legio II Adiutrix

Deva Victrix, Britannia

My dearest Olivia,

I promised I'd write you a personal letter, not just a begging-note for olive oil or wine. I also promised that I'd tell you how building work at the villa is coming along. So sorry you've had to wait this long. You can thank Aurelius Paulus, who hangs over my shoulder and watches everything I write. Since his promotion, he's become the biggest pain up the arse, as though he thinks he's doing Rome's work single handed. Aside from Paulus, I've spent too much time stocktaking and doing all the usual record-keeping: people, animals, armaments, you know how it goes... I've also been busy liaising with two local chieftains for the assimilation of their sons into the Roman way of life. But I won't bore you with all that now. It can wait.

The shipment got to port here safely, despite the terrible sea storms we get around the island. The cargo was loaded onto barges for the river trip here, then the bloody Britunculi ambushed the convoy in a wooded gully. There was a skirmish, and I'm afraid that many of the liquid stores were smashed, including

cheeses in olive oil, pickled eels, and several vats of garum. I was heartbroken to discover that your amphora ended up in pieces at the bottom of the river. I'm so sorry... Is Ravi still making those urns? If he is, do you think we should request two of them, say, full of dried grapes and figs in oil? Anyway, a couple of the garrison guards were injured, and some of the thieves ran, but they caught a few and dragged them back here for execution. You know what Quintus is like for setting an example. You can only imagine the slate-work, Olivia. Quintus, in his wisdom, has decided that every movement, every execution, every birth and death should be recorded, as though our purpose here is to chronicle as much as it is to conquer. Anyway, it keeps me busy. The ink-makers are improving things, which is how I get to write to you now on this new sort of sheet, a bit like the papyrus the Nile folk are so fond of.

Now the exciting news. I've commissioned mosaics from a newly-arrived artist from Tuscany. His name is Cyprian. His work is sublime. I've asked him to make a big Diana especially for you. It will be finished by the time you arrive.

*

The tablets came from a place the Romans called Deva Victrix, where the early settlers founded a fort and a city. Today, the site of Deva Victrix falls just within Zone Thirty-One. It's all been built over, of course. The tablets are made from thin slices of wood. The writers used a carbon-based ink, which was something the original team discovered during analysis all those years ago, before they put the finds, and the facsimiles, in a 'safe' place and lost them. The wood slices and ink made letter-writing so much easier than was previously possible on slate (too clumsy), vellum or copper sheet (too expensive), or wax (imagine trying to read that during a hot spell!). Maybe my fascination had something to do with Saul and me, and the way Olivia and Augustus seemed so happy in contrast to the way we'd ended up. It's not that I thought Saul was anything like Augustus (I mean, how could he be? They're separated by centuries), but I have to admit, Olivia reminds me just a tiny little bit of me, the more I work on translating her letters. Maybe that's why they resonated so clearly across the years: Augustus is the husband I might've had, if I'd been born centuries ago. Olivia is the woman I would've wanted to be.

So, anyway, after everything got divided into zones, and the old calendar was updated to New Era, the godawful administration got to work and the Tablet facsimiles were filed in a universal database. The originals got pushed off into a thermostatically controlled vault somewhere, but nobody is sure where, because they weren't referenced properly. So much for the new system working better than the old one. An irreplaceable record of early Roman life on a small grey island in Europa lost forever in a forest of an archive that refuses to give up its spoils. Perhaps one day, years from now, when the off-world teams are ready to make the transfer and they pull everything out of storage to ship to a new home, they'll find the original tablets stuck inside a sarcophagus from the wrong continent and the wrong era.

My students often ask me if I've seen the original tablets, and I tell them no, I haven't, but it isn't the original artefacts that interest me. Priceless they may be, and they should never have been misplaced, but they're just grubby bits of stained wood stored in a dark vault somewhere. What draws me is the spirit of the facsimiles, the *anima*, something possessed in the words themselves that goes beyond ink or wood, something you can only connect with if you abandon your academic intentions and think of the writers as real people. Suddenly he or she is there in front of you, flesh and blood, vibrant, speaking for themselves. That's when you really feel it, that connection of talking to the dead - as though you're pulling on a spider silk and feeling tiny vibrations run to and fro across the ages. I sometimes see the writers of the tablets more vividly than I remember Saul. In my mind, after all these years, he's faded like a bad impressionistic painting or a twilight dream, all smudged edges and degraded colours, a ghost that occasionally flits through the apartment before vanishing through a wall. Unlike my ex-husband, the writers of the Tablets of Zone Thirty-One are as clear to me as my own reflection. Their voices are loud, hard to ignore. Saul became nothing more than a whine in the dark long before he left.

*

Olivia, I know you love ghost stories, and tales of the weird and wonderful. You've heard of the druids? All about their singing and poetry? They train 'memories' from childhood. These people become priests and can recite things that have never been written down. In fact, they can't actually write at all. Marcus Sextus told me that the first garrisons were instructed to capture and torture the druids, but all Marcus Sextus ever talks about is capture and

torture, so I'm not entirely sure I'm getting the full story. I'm beginning to grasp the tongue (although a few Britunculi speak good Latin, too) – there's a tabernae just below the castle walls where the men tell stories of ghosts and curses. I join Marcus Sextus there from time to time. He still likes a good drink. Sometimes I have to hang his arm around my shoulder to get him home. And no, don't worry, I never get myself in such a state, Olivia, and I'd never touch a slave-girl even if I did, so please don't torture yourself, my love.

*

I like to read from my chaise longue, the dark red velvet one in my living room. The chaise is modelled on a kind of settee popular in ancient Rome, except made with modern materials instead of palm canes. I've positioned it so that I can look out over the city, and see the lights come on like fairy-bulbs at twilight. I made a fake oil-burner styled like the ones I read about in the correspondence, except we aren't allowed naked flames in the complex, so I have a flicker-diode inside. The light was too bright at first, too whitey-blue, far less flame-like than anything Olivia and Augustus would've used. So, I made a thin cap of old fabric for the top, and now it glows amber in the dark, the same shade as my digi-graphs of real flames. When I sit on the chaise to read over my translations, I imagine Olivia's surprise that I've managed to recreate her own lamps so vividly. Sometimes, when the light is changing as dusk falls, I imagine I see a shadow on the wall, of a woman walking slowly around the edges of the room, and I wonder whether it's Olivia, come to see what I'm doing.

*

There's a grotto here. The locals visit to practice divination and lay offerings. I think they're frightened of it, Olivia – they speak of it in whispers. Aurelius and Lucius (you remember the twins joined the same regiment?) took me there one day last month. The grotto is a little cave. I had such a weird feeling in there. You know the Ossiary, the one on the hill at home? You'll remember we never felt alone there? Well, the grotto felt the same. I know you'll want to visit. I have plans for many adventures, my darling, when you get here. I simply wouldn't bring you to Britannia if it wasn't safe. In fact, I'd go so far as to say the place is currently safer than the quarter of the city in which our old insulae was located.

*

I was working from home, sitting at my pull-out, mulling over an interesting piece of Latin slang and wondering on the truest translation, when the dustbusters turned on and let themselves down the wall. Distracted, I watched them weave patterns across the floor, whisking their brushes over the tiles and sucking up the detritus, popping out appendages to tickle invisible muck from the skirting. That's when I thought about Olivia's home. She'd had none of this, the domestic aides, the fridge that re-ordered food on my behalf choosing things it knew I liked, the oven that conversed with me when I walked into the kitchenette. Neither did she have the polishers and sweepers that came out daily to dance across the apartment.

I'd seen archaic illustrations of long-handled brooms and steaming wet cloths in my history materials, usually held by women in headscarves with ruddy faces and swinging hips. I'd even taught a unit on early household tech as a fresh edu-grad, but I had no experience of using these things for myself. The closest I'd been was an exhibition of an early Victorian household, where a remodelled broom stood in one corner of the kitchen, protected by a tape to stop visitors from touching it, security alarmed because it was made of real wood. It was shiny and brown with a twig-bunch head and a strange, organic smell that was exotic and yet achingly familiar. It'd looked too rustic to do a half-decent cleaning job. If I had devices in abundance, and Olivia had none, then how did she cope with her day-to-day tasks? I'd read that women had once been entirely tied to the home due to the rigours of cooking, cleaning and childrearing, but some of us had put this down to selective recording rather than a reflection the absolute truth. As the dustbusters circled and fainted, whisking up particles too fine to see, I thought again about the broom with its twig-head. What if we'd been wrong? What if Olivia's life had indeed been so dominated by domestica that she'd had little chance for much else? Life must've seemed rather pointless and grey - no wonder she'd liked ghost stories.

The fact was, if I wanted to know what Olivia's life had been like, really like, then I had to try to live more like she had done.

*

Augustus! I love your letters – I can almost hear your voice! And your latest made me think of the Ossiary. So, I went back. You know how papa hates me to travel alone? And you remember how I don't like the fuss of using the litter? Well, I decided to ask mother if I could borrow Etta. We put on our sandalia with much

rolling of Etta's eyes because she doesn't like the Ossiary. She said she'd only go to the gate.

When we got there, I felt as though I was being watched, and I thought of you and the twins in your grotto. As I had that thought, something closed the distance between us, Augustus, like Ariadne's thread pulling taut. I felt that you were with me. I left my offering, a heel of bread dipped in best garum, and I walked back to Etta feeling very strange. I had the most dreadful sense of foreboding.

I'm sending this letter as soon as I've finished it, I don't care what the cost of a night courier to port is. I need you to be very careful and to look after yourself. I have the awful feeling that trouble is coming. Take care, Augustus. I'm worried for you.

*

I disconnected the dustbusters and put them in the back of a cupboard. I found a stash of cloths and sourced some blocks of old-fashioned soap from the hippy market. I turned the fridge and cooker to silent, deleted the auto-order, and made myself a broom from repurposed junk. It took me several days. I spoke with my department and suggested that I took my accrued leave to continue with my study. They seemed surprised, but they agreed. Then, I turned my eyes to the cupboards, and to my food stores.

I didn't have enough space to grow things. I couldn't afford a share in a rooftop allotment, and from what I'd seen of the kind of people who did, they

were more into the kudos than any good at growing things. Pulling up your own veg, even chemi-rain affected veg, was something to talk about over the comms hub at work, or to brag about in the bar on a Friday night. From the Tablets, it'd been pretty clear that Olivia's parents had vines and olive trees, a herb garden in the courtyard, fruit trees and animal paddocks. I never found any evidence of these things inventoried, but they came up in the smallest mention, almost as an aside: Olivia would refer to bringing Augustus a small jar of pickled peaches from the best side of the villa; she'd say that this year's olive oil was particularly good; she'd comment on the herbs that she'd traded with a neighbour and the hemp that she'd taught her mother's new slave to prepare for rope weaving. Apparently, these things brought in 'good coin'. It helped me to conjure up a picture of her, the way she spoke, the things she made. Olivia was coming alive in my mind, so much so that sometimes I imagined I heard her voice, and her laugh, high and fluty, flutter through my apartment as though she was in the next room. I began to see her in my imagination more than I had Saul after he'd gone. I never had another relationship; perhaps Olivia was beginning to usurp Saul as my shadow companion, to fill a gap that I'd been stupidly unaware had existed.

I decided to experiment with Roman foods, and to make some garum. Garum had caught the imagination of generations of researchers, because it was made of fish guts. Good Roman housewives would use every bit of the fish that would otherwise be thrown away, leaving offcuts in a terracotta pot in the sun for weeks. It fermented down to make a strong liquid that was strained off and used to flavour food. The problem was, I had no idea how to get hold of real fish guts. In a land of rack-grown meat and things that once used to swim being fattened in saline beds as brainless hunks of flesh suspended from nutrient pipes, I doubted that I'd find anything like the Romans used. The genuine fish were all protected, out in a tiny regulated paradise somewhere off-limits. And, though it sickened me to think that people had once eaten things that had horns and hooves, I couldn't do anything about the fact that once-farmed species were now in exotic collections

belonging to the super-rich. It took me three full days of research to find the Green Hill Reclamation Suite, and another two to realise I'd caught the tram past it every work-day for the last three years without realising what it was. They couldn't help with fish heads or fins, they said, but they had the occasional 'accident' with a pipe-fed prawn that mutated and grew bits people didn't want to look at. It was the closest I could get.

My department eventually agreed to help, and after my line manager sent me the required identification via my contactor, I set off for GHR with a self-sealing, odour-tight tub. The woman I met at the front desk took the container and slid through a covered doorway, giving me a backward glance. When she came out, she had a sloppy, bloody-looking mess inside.

'You'll need to cover this stuff,' she said, sliding the sign-it terminal across the desk towards me. 'You don't want to attract attention. What are you making, again?'

'Fish sauce,' I said, as I made for the exit.

*

Augustus, I was so happy to hear that you're well. After my fright at the Ossiary, I laughed aloud when I read your letter. And now I have an interesting story for you, too. See if you can explain this! Last week, I was watching the painter at Balbina's. He was finishing off Pomona's hair with some dark paint. She really did look lovely. I happened to comment that one of mother's old murals was beginning to look a bit shabby, so he offered me, very kindly, the remnant of his last pot of black.

I brought the paint back, and I was just about to start filling in the gaps in Neptune's beard when I looked into the pot and saw the face of a woman staring back at me.

She was pale-skinned with pale eyes, and lashes pale as a white pig's – just like the slaves from Britannia and Gaul. And then she vanished.

When I turned around, there was nobody behind me.

I have no idea who she might be.

But I'm sure I didn't imagine her.

*

I put the fish container on my kitchen counter and pulled off the lid. The smell was disgusting. I turned the air vent on, and held my nose to stop myself from gagging. How could Olivia have made this? She'd lived in a hot climate and had no extraction tech. I remembered the stories about how residents of crowded insulae would leave their garum amphora outside the city walls to stew without bothering the neighbours. Perhaps Olivia's parents had banished the festering liquid to the end of the orchard, or the back corners of the courtyard. I'd have to use my balcony. If I tried anywhere else in the complex, I'd probably be arrested.

I layered a big metal urn with leaf herbs I'd purchased for a small fortune from the rooftop garden market, poured in the fish scraps (they splattered unwholesomely), ground in some salt without looking too closely, then lidded the urn and pushed it out onto the balcony. Unexpectedly, I felt Olivia's presence. I

could almost hear her skirts swishing over my dusty floor, as she busied herself doing all the things I had yet to learn.

‘Come on, Julietta,’ she seemed to be whispering, ‘we have much to do and no time to waste. Let me teach you.’

I spent this morning grinding pigment in a big bowl with a real pottery drumstick, watching the oxide flake into fine powder. It was a satisfying thing to do, probably because for many years I rarely used my hands for anything more than screen work. It brought back childhood memories of playing with modelling clay and bricks, and made me wonder, when *did* we forget what our hands were made for? I thought of the rich hippies and their rooftop gardens. Maybe they didn’t care that they actually grew very little, or that the stuff was awful quality. Perhaps it was the feeling of getting their hands in earth and pressing tiny grafted plants into the dirt that did it for them. Maybe that was what they were really boasting about.

When the powder was fine enough, I mixed it with beeswax substitute that I’d emulsified following instructions from an old recipe. Then, I pounded away until the texture was creamy and the colour was even. It was blue, like the Mediterranean sea in the pictures I’d seen, before everything got poisoned and zoned and fenced off. I used another pot for orange, matched with photos of the best Greek terracotta, then another for red. These were all colours I was sure that Olivia and Augustus would’ve used; historically accurate, made as closely as I could to the original recipes. My final pot was black, which was the hardest to grind. I’d barely noticed the light beginning to fade, until it was almost too dark to work. (I turned off the auto-lights and comm weeks ago; my ‘night vision’ is returning after years of being convinced that I can’t see in the dark.)

As I leaned over the pot, stirring in the wax-sub and beating it to a cream, I stopped to wipe a stray hair from my forehead and suddenly, in the pot in front of me, reflected on the uneven surface of the wax, was a face. She was young, with

dark hair that'd been coaxed into a coronet of curls over her forehead. The rim of the pot framed her face; she parted her lips slightly as though to speak, and her eyes, so dark they were almost black, widened in alarm - then she'd gone, and I jumped to my feet, knocking the spatula to the floor. I swung around, half expecting to see a neighbour who'd snuck in through my apartment door, but the room was empty and my main door was closed, the alarm untriggered. The apartment was still and silent, shadows thick in the corners, the urn on the balcony glowing with light reflected from the city beyond.

Shaken, I looked into the pot again, and saw only a dark lump of wax, too dark to reflect anything, even my own face. I poked at it with one finger. My hand trembled. I scraped the wax from my finger onto the rim of the pot and grabbed a cloth. I flicked on the oil lamp and squinted against the sudden flair. Shadows cast patterns on the wall that danced like figures, circling the table. I realised that I hadn't eaten or taken liquids for hours, I'd been so absorbed. Was it possible to hallucinate, if you got dehydrated? I did feel slightly lightheaded. I covered the pots with some old cloths and pulled an orb of water from the fridge. I slumped on the chaise, and drank.

*

Olivia, I have more news on the grotto.

One of the local women went there recently to lay an offering. She'd just arrived when she screamed and burst out, watched by a couple of Marcus's slaves who were fetching eel baskets up. She ran right past them in terror. Apparently, she'd disturbed a hooded figure inside the shrine. When the thing turned

around it had only a skull for a face. Its eye sockets were hollow, the teeth a grin, and the hands, to all accounts, were fleshless claws that clutched a bowl of what the poor woman later described as scrying bones.

A guard later found a broken bowl and some very ancient bones scattered at the mouth of the cave. The locals have been genuinely frightened by this, Olivia. A handful of the garrison women brought a local hag to cleanse the grotto with burning herbs. There's been talk of bringing it more in line with the times, by dedicating it to Venus or Vulcan. But nobody seems keen to go back in there now.

*

I leaned outside to light the tiny fire pit on the balcony, careful to alter the vents so that the alarm wouldn't go off. I brushed my vegetables with oil and lay them on the grille over the coals. While I waited for supper to cook, I checked the garum. The fish bits were sweating down nicely. The juices were pale brown. It smelled sharp and was almost ready to sample. I lit the lamp and sat, wrapping folds of an old blanket around my legs, watching the shadows dance on the walls just as Olivia and Augustus must've in their small insulae before Augustus had left and Olivia had returned to her parents' villa. Olivia, I decided, must've had a pretty good life. Having a husband who loved her was surely the best bit.

I thought of Saul, and his second wife, Anna, who he'd become engaged to within four months of taking his things and leaving me. I wondered how long he'd

been cheating. Did he care for Anna more than he'd cared for me? But I figured I already knew the answer.

Yes, Olivia had been a very lucky woman.

This morning, I took down the painting I bought after Saul left, the one of the red-headed girl. She has that bruised, haunted look that summed up how I felt at the time. I paid too much for it, of course, although the woman I bought it from said it was an original, but I've no idea who painted it. I always felt that red-haired girl was a bit like me, or at least the me that I was then - poised as though she'd just uncurled herself from the dingy forest around her, about to leap out of the canvas and escape to meet her destiny. Taking the painting down was a symbol that I was finally over that part of my life. I left it in the communal recycling bay for whoever wants to take it home. She's left a space, but one I have plans for.

I've begun to sketch out murals on the walls. Murals were traditional wall decorations. The simplest were borders that ran around the edges of the room - grape vines and flowers, birds and so on - but the biggest featured the Roman pantheon. I've chosen Diana and Pomona, goddesses of the hunt and the garden. I've seen enough in Olivia's letters to know that these were her two favourites.

I checked the database for images appropriate to the era and location, and even managed to find some remnants of Cyprian's work. But the strangest thing is, whenever I pick up a pencil to work, I don't feel alone. It happens all the time, now, as though somebody is standing by my shoulder, coaxing me to perhaps draw this way or that way, to make Pomona's eyes bigger or to put more curls in her hair. I've turned around several times and have been surprised to find myself alone, but think I've seen movement in the wall opposite, as though somebody has stepped into it and vanished. And then in the evening, when I sit with my blanket and my lamp, the half-finished sketches almost come alive in the flickering light, and I imagine them moving as though they are dancing and laughing, sliding across

the walls. I never realised until recently how vivid my imagination is. All those years of screen-based study must've deadened it. In some ways, I feel as though I'm only just beginning to live again.

*

Do remember Marcus's wife, Sylvia? She wore those oversized earrings that fell apart and landed in a pot of honeyed dormouse just as the vice consul sat down at your father's banquet? Well, Sylvia wants a party at the big villa. The Yuletide festival is coming. It's similar to our Saturnalia, but the weather is grimmer for longer. Here, people tell ghost stories at Yuletide. So Sylvia wants fireside tales too. And they want me to collect stories about the grotto!

I visited again last week. I'm ashamed to say I dropped my lamp inside. It split open and splurged flame down one wall. Aurelius Paulus had insisted on sending me with a guard, who came flying in with his sword-arm high and the blade flashing. The back of the grotto was dark as Hades – except, Olivia, for a hooded figure! I swear it had a bowl in its hands and before you think my imagination has run riot, I want you to know that the guard saw it too. The thing turned its head towards us. I'm sure you can guess what I am about to say – that inside the hood was a skull stripped of all its meat. Scrying bones were scattered around

*its feet. I recognised the sign on the floor as the omen of death.
How fast we turned and ran!*

*Later, at Brianna's villa, with a fire in the pit and a basket of
kittens playing on the floor, the whole thing seemed dream-like.
I'd begun to question my sanity – but for the fact that Marcus's
soldier saw it too.*

We can't possibly both have imagined it, can we?

*

I'd fallen asleep on the chaise longue, the lamp flickering near my feet. I thought that I heard rustling, a small, furtive movement as though somebody was moving around in my living room while trying not to disturb me. I opened my eyes and saw something in the shadows, underneath the half-finished mural of Diana. Carefully, quietly, I pushed myself up onto one elbow. And there she was in the corner, the shadowy outline of a woman in a long robe facing the mural as though examining the quality of my work, even though in the near-dark it was reduced to shades of grey.

'Olivia?'

She turned, startled.

'Olivia, is that you?'

Her face was only part-visible, like a translucent digi-graph that shone with a strange grey light. Her hair fell in dark ringlets around her face, and I knew then that it was the same face I'd seen in the pot of wax paint two weeks earlier.

'Do you like the mural?'

She opened her mouth to speak and vanished.

If only there had been enough light for me to properly read the expression on her face.

*

Last night, I told Brianna, through a slave who can speak both tongues, how fond you were of the cats you grew up with. She let me pick out a kitten for you – so I chose the only black one of the litter, a tiny scrap of a thing that should be weaned when you arrive. Briana tells me that black cats are lucky here. The locals say that anybody who hurts a cat will come to harm. On this Island, they believe that cats pull a cart that carries souls across the Styx. Or whatever they call the Styx here.

I tried to talk to Brianna about the grotto and the hooded skull-face, but she didn't want to know. One of her sons told me it brings bad luck. I pointed out that our garrison had already lost part of a valuable consignment to ambush. I suggested the bad omen had already been fulfilled. But whatever Brianna said in reply, the slave sketched around translating, and didn't look happy, so I left it at that.

Counting down the days until you arrive. And you have your soot-black kitten, who will be here waiting.

*

When I opened the door, I was both flattered and surprised to see my department head, Tiiu Kask, standing awkwardly with a fancily-wrapped bunch of grasses in her arms.

‘Julietta,’ she said, pushing them at me as she hovered on the threshold.

‘Tiiu, how kind – please do come in,’ I stepped aside and proffered her into the kitchenette.

‘The grasses are from the department. We’ve been worried about you.’

‘Worried?’ I lay the bouquet on the unit.

‘Yes. We haven’t seen you for so long.’ Tiiu’s eyes roved around. Her nostrils twitched.

‘You can probably smell charcoals and garum,’ I said. ‘Plus, I don’t use modern cleaning materials anymore. I’m trying to keep things as authentic as possible. You’ve no idea how liberating it is to banish the dustbusters to a kitchen cupboard.’

Tiiu laughed but the humour didn’t quite reach her eyes. She was tense; I felt disappointed. I wanted her to be proud of what I was doing.

‘I’m sorry, Tiiu, I should’ve been in touch more regularly than a monthly report. I’ve been so engrossed. I knew you’d understand.’

She didn’t answer. She turned around, examining the walls and the work surfaces, the disabled home hub and the silenced appliances. She caught sight of the mural of Pomona through the archway and let out a little gasp.

‘You like her? The paints are as close to the historical original as I could manage. I did mention it in my report.’

She turned back around. ‘I can see that you’ve worked very hard on all this, but we need to talk, Julietta.’ The lines around her mouth were deep, as though her lips had contracted into the opposite of a smile.

‘Of course. Why don’t you come into the atrium?’

I gestured my boss to the biggest chaise, as according to the Roman rules of rank. I offered her posca served in my best glass and although she accepted, Tiiu wrinkled her nose at the smell and put it down on the table without trying it.

‘Julietta, you’ve always been a valued member of the department.’ Afternoon sunlight fell across the atrium, casting bars of light and shadow across the faux-mosaic floor. ‘But you haven’t answered my messages for weeks and as of tomorrow your accrued leave has run out.’

I put my glass on the table. ‘I’m sorry. This is going to sound terrible, but I was so engrossed in the project that I’d stopped checking my diary every day. I no longer use my devices. I only turn them on once a month, when I dictate and send the report.’

‘And last month? Why didn’t you pick your messages up then?’

A jet of sunshine shot from behind a cloudbank and cast a slab of shadow on the sundial that sat in front of Diana. Truth was, I barely even noticed the time anymore, let alone the date. ‘I... maybe the message service malfunctioned. Or... maybe it slipped my mind. One day has started to spill into another. Just like time must’ve passed in the ancient world. I tend to measure it in how long it takes to finish a task, these days.’

Tiiu did not smile. Her face hardened. ‘Julietta, you’re a senior member of staff.’

‘And I’m grateful to be. I feel as though my work is truly valued.’

She didn't appear to have heard me. 'What kind of example do you think it sets amongst your colleagues and indeed the students, if you just disappear off campus and don't confirm that you will return to teach your new classes?'

'Classes?'

'Yes, your classes.'

'But I had no idea I'd been timetabled.'

Tiiu looked out over the little balcony, towards the silhouettes of the distant high-rises which cut a jigsaw into the wet barrier beyond. 'I sent you the roster weeks ago. You're due to start in days. I expected to hear from you. Only the call never came. So here I am, now.'

'I'm so sorry...'

Tiiu waved a hand. 'We're beyond apologies, Julietta. I'm here because I'm hoping that I can help you fix this here and now.'

Fix.

Such a tiny little word. A useful, capable, helpful word – a mending word. My fingers tightened around the bulla that hung between my breasts. The sourness of the posca stung my nostrils.

'The thing is, Julietta, there is only so much I can do. Your research has fallen outside your specialist area-'

'No, I'm following the letters,' I interrupted, 'the correspondence is informing absolutely everything I do.'

Tiiu spoke over me. 'Living archaeology is not your discipline, fascinating though it might be. You're a written records person, a dead languages specialist. We have students who've booked – and paid a lot of money – to study with you, and only you. Nobody else can pick up the slack for you, because nobody else can do what you do. Am I making myself clear?'

Images of my unfinished work crowded my head – Diana’s final coat of egg-white paint, the miniature potted reed-bed I’d hidden in the grounds to experiment with micro-filtration, my early attempts to recreate fabric dyes which I knew could be refined further... and Tiiu sat on my chaise, staring at me without blinking, waiting for an answer.

‘Are you telling me that’s it, Tiiu? That of tomorrow, I’m back into the department full time, and that I’ve got to abandon everything I’ve been working on?’

Tiiu sighed and rubbed one eyebrow, as though she had a migraine coming on. ‘I can’t do any more than boil this down to its basic components, I’m afraid. You must fulfil your duties or you will be suspended.’

I got to my feet, knocking the table and slopping liquid from the glasses onto the top. The stink of vinegar hung in the air between us. Tiiu grimaced. She ran her eyes up and down my stola as though she’d never set eyes on one before.

‘But I’m learning so much. I’ve tried things nobody has tried in generations. I’ve recreated her cooking methods, her cleaning methods, her wall frescos,’ my words tumbled out, faster than I’d intended. ‘All from things I’ve found in the letters. I can’t go back now... to what? Students who can’t even translate a Latin shopping list?’

The sun caught Tiiu’s face, and for a moment she looked as though she was carved from marble. Pomona seemed to be staring down at her from the back wall, her expression darkened by shadow.

‘You’ve missed two big departmental meetings,’ Tiiu continued, dispassionate, ‘both of which I reminded you about. You’ve missed countless smaller get-togethers and a couple of birthday parties. Colm left – you didn’t even say goodbye. You shared an office, for goodness’ sake. Think how he felt after all these years. You weren’t at the annual fundraiser and you ignored every message I

left you about timetabling for this semester. I've had to resort,' she spread her hands and looked around, 'to this.'

I sat back down, gathering my stola around my legs with shaking fingers, staring into the delicate hand-blown swirls of the mismatched glasses on the table.

'And there's nothing more you can do?'

'About what?'

'Can you at least give me another month?'

'To do what, exactly? Paint more murals? Make more...' she waved a hand at the puddles on the table.

'Posca?' I offered. 'The Roman army thrived on this mixture. We thought no recipes survived until I found one in the Zone Thirty-One tablets. It's more hydrating than ordinary water and even though the upper classes thought it beneath them, Augustus actually converted Olivia to it. There's a particular paragraph in one of the-'

Julietta.' Diana and Pomona's eyes followed Tiiu as she shifted in her seat. 'I think it's best if we don't stray off-topic.'

I straightened my skirts. 'Very well. But I need you to understand that the letters have got under my skin. I feel as though I'm in direct communication with the people who wrote them, all those centuries ago. The woman, Olivia, especially – there's something about her.'

'I need you at work.'

'Give me a few more weeks. That's all I ask. We can rearrange my teaching timetable.' Her expression did not soften. 'I'll do extra sessions by way of apology. Just let me delay them until the final term.'

Tiiu's eyes glazed over. 'There's nothing I can do for you now.'

‘Well, who do I go to, then? Who *can* help me? Because I’m not stopping my work without a fight.’

My boss stood up and began to fumble in her case. ‘The decision isn’t mine, I’m afraid. I had one last trick up my sleeve just in case you were reluctant to comply, but it isn’t a very good one. All I can do is give you this. Where’s your contactor?’

‘I deactivated it.’

‘You need to turn it on. We have a newly-appointed Dean – Faiza Shombolini, who came from overseas about two months ago - if you’d been around, you’d know all about her. Her speciality, apparently, was the relevance of old-school experimental archaeology in understanding the past. I can’t promise you anything, of course – all I can do is suggest you petition her.’

I hurried to the dresser and pulled open the top drawer. My contactor was buried under muslin bags of dried herbs and discarded consoles for things I no longer used. I pulled it out and turned it on. A vibration shook my hand as Tiiu’s message arrived.

‘Thank you,’ I said.

‘It’s a little bit too soon to thank me. Just know, I did what I could.’

Tiiu zipped her jacket up, walked into the kitchen and paused at the door. ‘Julietta, don’t ruin your career.’

She threw the lock and stepped outside. I watched her along the corridor, stepping through shadows cast by gathering rain cloud beyond the windows. She didn’t look back.

*

This place is full of spirits, Olivia – of dead tribesmen, phantom dogs, horses, decapitated soldiers and jilted lovers who took their own lives. Some ghosts are ruined women; some are men whose wealth went to their heads and made them do bad things in life. Most wander the edges of burial grounds or mourn by the banks of rivers; some can be heard, others only seen.

The stories at Sylvia's party mentioned all kinds of spirits. They were acted out by the slaves who, I must say, really made the night. But things began to come slightly unstitched when we arrived at what Sylvia had planned as the pinnacle of the evening: the story of the hooded thing from the grotto. She'd gone to the trouble of sequestering me, Ardith (the woman who ran out of the grotto), and Marcus's soldier guard (who looked rather uncomfortable on a recliner in his big boots, since Sylvia had insisted he wore his soldiering clothes in order to play himself more accurately). But Ardith was reluctant to speak, and when she did, even though she'd been rehearsed in Latin by one of Sylvia's women, she stumbled her words and lapsed back into native. The soldier was terribly embarrassed when it came to his turn, and almost swept Marcus's fine glasses from the table when it got to the part where he drew his sword and rushed to my aid.

I've told you all about Yultide here. The locals have holly and mistletoe hung around the hearth, and big logs burning. The atmosphere felt just like Saturnalia, until something suddenly changed and the locals started looking shifty. They began

whispering amongst themselves. Ardith left in a hurry with her cloak half fastened, and her sons following on. When I asked what the matter was, the translator said the hooded figure was a bad omen, and the locals didn't want anything to do with it. Eventually Marcus sent the slaves back to the kitchen to plate up cheeses. Sylvia gave a lovely little speech and we raised our glasses and got the music going. Somebody put more logs on the fire and the atmosphere picked up again. But I have to say that I side with my late father on this one, Olivia – I believe we make our own luck. I'm not really a bad omen kind of person.

*

That night, I dreamed. It wasn't of the shadow woman who'd stared at my wall mural; it wasn't about the frescos coming to life and sliding across the walls. No, the dream took me by surprise, because it was so real that I felt I was watching a scene unfold in true life.

It was daytime. The sun was shining through the open window of a big room. Its shutters were thrown back, and dapples of leaf shadow moved idly on the bed drapes. Olivia was directing a girlchild to put fabrics into a trunk, all in neatly folded squares of colour. She was telling the girl that the blue silk was special, because it had been gifted by her pronuba when she'd married Augustus. As the child put the material into the chest with great care, I saw that the wall behind them was ochre and orange, with a mural of a woman in flowing skirts spilling baskets of fruit – the goddess Pomona.

Olivia told the child that she'd had a dream in which the black kitten Augustus had ready for her arrival had fallen into a well and drowned. Olivia brushed a tear from her cheek and I saw that her fingers were trembling. The little girl's face remained passive as though she either couldn't hear Olivia, or couldn't understand her. They continued to pack in silence, Olivia's face dark with unspoken words. When the chest was full, Olivia dismissed the little girl with a wave of her hand. The child gave a quick nod of her head and walked out of the room. Olivia remained seated, staring into Pomona's face.

I awoke to find the room in darkness. The bedcover was clinging to my torso, and my forehead was damp with perspiration.

I hadn't liked the dream. Something about it frightened me.

*

Greetings, Quintus Aurelius!

Do you have news of the ship with the insignia of the swan, whose tutela is Diana? My wife boarded this ship at the main port of Ostia, to make the journey from the Motherland to the Province of Britannia.

We've heard stories of unseasonable storms but we have no further news. Quintus, please can you help? So many of us here

have kin who we're awaiting, you would be doing the entire garrison, and Aurelius Paulus, a very big service.

Yours in servitude,

Augustus Flavius, garrison Scribe to Legio II Adiutrix

Deva Victrix, Britannia

*

CONFIDENTIAL

From Paul Burt,

Secretary to Professor Faiza Shombolini, Dean of Humanities

Dear Tiiu,

I write with regards to Dr Julietta Mendoza. Professor Shombolini understands that Dr Mendoza was until relatively recently employed solely as a historical correspondence expert, and that the discovery of a collection of facsimile tablets from

the Romano-British period engaged Dr Mendoza to such an extent that her focus began to change from purely translation, to experimental archaeology. Professor Shombolini understands that this change was neither requested nor formally agreed by the University, but, following her interview of Dr Mendoza, has accepted her to be a talented and impassioned researcher. Dr Mendoza's focus is such that the Dean believes it would be inappropriate to create sanctions on her work and therefore, to use a colloquialism, the Dean has granted Dr Mendoza her head.

There are those who believe that the need to translate afresh (when AI has already done it) and the need to use experimental archaeology in a practical sense (when AI can provide a virtual resource of impeccable detail) are today completely redundant. However, the Dean previously specialised in the field of evaluating living archaeology. Professor Shombolini laments that practical experiments have fallen out of fashion, and therefore accepts that Dr Mendoza is one of the few academics left in the country, if not the world, who is putting living archaeology into practice once again.

On reviewing the records, the Dean has been startled by Dr Mendoza's progress. Dr Mendoza has successfully made and used Romano-British tools from materials she has sourced herself; has

recreated recipes using traditional ingredients and methods; has sourced fabrics, made clothing and cosmetics, decorated her home and even fashioned a musical string-instrument from extant sources, using this regularly enough to suggest a supposed tuning and a likely scale pattern. Although Dr Mendoza is unable to grow many of her own foodstuffs, she filters rainwater and relies as little as possible on technology. Professor Shombolini acknowledges that Dr Mendoza is the nearest thing we have in our University to a specialist Roman experimental archaeologist.

The University monitoring system, which successfully piggybacked on to Dr Mendoza's home hub without detection, has noted significant changes in her brain activity and physiology over the past six months. If Dr Mendoza continues with our effective and understated support to live this way for another two years, then we will be able to study, to all intents and purposes, the physiology of a Romano-British noblewoman. Professor Shombolini has therefore arranged for Dr Mendoza to be released from all previous departmental responsibilities, in exchange for more detailed reports and some end-of-project teaching which will be arranged at a much later date.

Professor Shombolini wishes me to convey that, while years ago a woman in Dr Mendoza's position would have suffered criticism,

ostracisation and judgement for her immersive lifestyle, even, historically, imprisonment for her refusal to conform, today we recognise that such behaviour is not madness, but in fact genius. Professor Shombolini wishes to wholly support Dr Mendoza' s ambition to live in the Roman style. We will therefore continue to work with her to learn all we can.

The Dean has asked me to write to you to convey our sincere thanks. The confidential nature of Dr Mendoza' s ongoing project (the department can' t afford for everybody to expect similar sabbaticals, so we' re keeping it under wraps for now!) means that we will never be able to extend this thank you in an official capacity, not for now at least – but I do hope that this letter suffices in some small way.

Yours sincerely,

Paul

*

I dream again and again of Olivia.

She has come out of the walls, now, and sits at the foot of my bed, dressed in the blue silk that her pronuba gave her. Often, she is accompanied by a black cat

with yellow eyes. As Olivia strokes it she is talking, without looking at me, facing the window as though she is chatting to an old friend, yet I know she is speaking to me because there is nobody else in the room. Her hair is piled on top of her head with ringlets falling down the sides of her face, her strong nose and thick lashes forming the most perfect vignette. Much as I try, I can't hear what Olivia says. Her lips move and her head bobs, and the cat pads in her lap and stares straight at me, but there is no sound. In my dreams, it is as though I've gone deaf.

But just as Olivia materialised from nothing and became real, so I know that, with patience, I will hear her voice one day.

The waiting is just like biding time for a letter from a long way away.

It will take as long as it takes, but it will arrive eventually, like a ship in the night.

Chapter IV - Wild Birds

I collapsed on the little sofa and slid my shoes off. The café's 'no-flatties' rule was killing me. They said it was because we had a better clientele than your average greasy Joe's, but I reckoned that An Chen was a foot fetishist. The day Nazarin had worn red patent stilettos, she'd stowed them in her locker after work. The next morning, one of them had vanished. Only An Chen had a master-key.

Rocco handed me a glass of red wine. I took it gratefully. Honour climbed into my lap with a story book. Sam began to burble from his highchair, making happy, non-sensical noises. Rocco pulled out a chair and sat the wrong way around, his arms resting on the back. He hadn't done that since we were students. It looked wrong, somehow. 'There's a new warehouse opening up in Yorkdistrict Eighty Nine.'

I sipped my wine. 'Oh?'

'It's a tech hub. I'd like to apply to transfer. And they're starting a café on site. I thought if I could get the job and put in a word, you might be able to transfer too.'

Sam squealed and bowled his teddy onto the floor. Neither of us moved to pick it up.

'Wild birds,' whispered Honour, tapping her book.

'You know the rules, Rocco. You won't be allowed a transfer for years. And I've the kids to think about. At least this way, I can be home within minutes. Eighty Nine is at the other side of the sprawl.'

Rocco's face crumpled. Honour stared at us intensely. Sam peered at his teddy and began to grizzle.

‘I don’t like what that place is doing to you, Mei Ling.’

‘To me?’

‘Yes.’

‘This isn’t about me. This is about you wanting a transfer.’

‘Mei, you look awful. You hate the diner and you hate this life.’

I set my glass on the side. ‘We’ve had this conversation before. There’s nowhere for us to go. The alternatives just don’t exist.’

I scooped up Sam’s teddy and handed it back. The baby took it in limp fingers and dropped it again, but continued to watch us, his eyes brimming with silent tears.

‘It’s Sam, isn’t it?’ Rocco’s voice was mournfully soft.

‘Please, close the vents.’

Too many prying ears; too much chance of being overheard. Since the Good Citizen payments started, you couldn’t trust anyone.

Rocco touched the pad and the vents sealed. He picked up the wine bottle off the kitchenette cook-n-clean, and stepped back into the living room. Close up, his eyes were bloodshot and red-rimmed, his cheeks bloomed with stubble. I wondered whether he might’ve been crying. He sat on the floor at my feet, leaned one elbow across my knees, and took my hand. The gesture was designed to look relaxed, but tension zinged off him. Honour went back to her book.

‘Mei, I know you’re worried.’

I glanced at the baby, at his lolling head and the way his fingers pulled at the edge of his bib without being able to grip.

‘We can’t seek medical advice - it isn’t safe.’

‘Mummy, tell me about the wild birds, *please*.’

‘Come here.’ Rocco held out both arms, but his eyes didn’t leave my face. Honour slithered from my lap and jumped into his.

‘Read, daddy, read!’

‘Once upon a time, wild birds flew high up in the sky, before the barriers-’

‘Who put the barriers there, daddy?’

‘People who want to keep us safe from the nasty things in the atmosphere.’

I stood up and lifted Sam from his chair, feeling the warmth and weight of him, inhaling the scent of his clean baby-gro and shampoo, holding his too-floppy body to my chest and cupping the back of his head in one hand. Sam gurgled happily and tried to cling to my top. He couldn’t make fists. His fingers slipped away, helpless.

‘...there were peacocks and swans and seagulls and ravens-’

‘Will I ever see a wild bird, daddy?’

I kissed the dark fluff on the top of Sam’s head. He began to grizzle on my hip, but he didn’t struggle. Sam enjoyed the closeness of embrace, but it was more than that; he found it easier to sit with help. While the other babies in his birth-care group could now hold themselves upright, Sam still couldn’t. One little hand star-fished towards the teddy he’d dropped. I picked it up.

‘I don’t know why you’re so afraid of the tests,’ Rocco said suddenly.

Sensing the tension between us, Honour slid onto the floor, her head buried between the pages of her book.

‘Because kids with genetic issues are disappearing, Rocco You can’t have not noticed. When was the last time you saw a wheelchair user in the street?’

Rocco rolled onto one elbow.

Irritated, I pushed Sam’s teddy at him. ‘Please, can we eat?’

I put Sam back in his highchair, tidied Honour's crayons away and pulled out the spring chairs. I slid out the tabletop while Rocco opened the oven. The scent of hot schnitzel flooded the pod, bringing back memories of my great aunt's cooking, except we'd had a real family table and proper solid chairs back then. Rocco and I had longed to give our children a childhood like our grandparents' generation remembered, collecting bugs off roses, running in the fields, catching tadpoles in the brook. But the bugs were gone, now, along with the fields; the water was poisoned and the flowers were in protected collections - and things like big tables and real beds didn't exist anymore. Not for people like us, anyway.

'I'll go check on Mrs Bacon, while you serve.'

'Course,' Rocco said as he ladled steaming rice into bowls.

'Can I come?' asked Honour.

'No, sweetie. I'm only going to look in quickly. Come with me another day.'

'But I want to see pussy cat.'

'The cat will be there another day. She isn't going to disappear.'

The hatch whooshed open.

The evening was cool, the clouds pinky-grey, like a picture from Honour's fairy tale book. Autumn was on its way. The chemi-rain barriers would soon be repaired, reflecting swatches of street-light above the stacks like the Northern Lights I remembered from childhood. Mrs Bacon's light was on and her cat, Sooty, was waiting outside the hatch.

'Hello, Soots.' I bent to stroke the little black head.

The hatch opened. Mrs Bacon stood in the doorway leaning on her sticks, her hair and makeup immaculate above a frayed old dress. The cat ran between her swollen ankles and disappeared into the lounge.

'Mei,' she beckoned me in. 'I wondered if I'd see you this evening.'

I followed her, sticks thumping an uneven rhythm on the floor. Her son Simon had offered to pay for a skeleton support but Mrs Bacon had refused, describing the cost as ‘obscene’ and remarking that her sticks served perfectly well. In the lounge, she shushed the cat off her chair and gestured me to take the other.

‘I have news. They’re moving my son away’.

‘Out of the city?’

She nodded. ‘He’s promised that he’ll get back whenever he can. He’s booked me a homecare visitor.’

‘You mean a daily?’

‘Yes.’

‘But why, when I’m downstairs?’

Mrs Bacon waved a hand. ‘You’ve two young children of your own, Mei, and a job. It’s all very well you popping over in an evening to make sure I’m OK, but it’s a completely different story to expect you to help me every day.’

‘When is Simon leaving?’

‘The end of the week.’

‘So quickly?’

Mrs Bacon shrugged and settled back in her chair. Her eyes drifted to the knick-knacks on the shelf over the wall heater: faded retro photographs of her son and long-dead daughter as children; an embroidery of a cat; a child’s silver rattle. Little memories, covered in dust and poised to be forgotten with her passing.

‘You know he was promoted? He couldn’t refuse.’ Mrs Bacon’s voice took on an acidic note and I saw her for a moment as she must’ve been in her prime, sharp, formidable. ‘He’s working in a new department – gene testing. They’re making sure nobody falls outside the net.’

I thought of Sam and felt physically sick. I shifted the cat onto the floor. She jumped up again. Mrs Bacon leaned towards me and patted my hand.

‘Don’t give in to them. Run somewhere, so you don’t have to take the tests. I’m sure there are places to hide. And whatever happens, your worries about little Sam are safe with me.’ The sharpness fell from her face. ‘But I have to warn you. Simon told me that there’s transport. Like an old-fashioned bus. Kids love the novelty value.’

‘A bus?’

‘To make the tests seem kinder. It’s like a play-centre on wheels. If the children are fine they’re allowed home. But if they’re marked, then they’re kept on the Cartoon Bus. I’m afraid I don’t know what happens from there. Simon won’t tell me.’

The door-announcer said: ‘Your home care visit has arrived. His ID is satisfactory.’

Alarmed, Sooty scooted off my lap.

The hatch slid open. A young man in a light blue uniform stood on the threshold, illuminated by the secure-light. He had dark cornrow plaits and tattoos knotted around his throat.

‘Go now. Go back to your family and your evening meal. Thank you for dropping by.’ Mrs Bacon held one finger over her pursed lips.

My mind swum with a mess of images of masked nurses holding needles in front of Sam’s screaming face. I stood. Mrs Bacon’s eyes followed me, dark and unblinking.

The youth stepped inside. ‘Hello Mei – you’re Mrs Bacon’s neighbour?’

‘I don’t think we’ve met.’

‘I’ve seen footage of you on the secure-screen. It has an ID map. My name is Dylan. I’m here to take care of Mrs B. In fact, I’m starting with supper.’

Mrs Bacon gave a surprised little humph. Dylan set to work immediately, retreating into the kitchenette humming an off-key tune and rattling dishes.

‘The most important thing is not to worry yourself sick over the possibilities, Mei,’ Mrs Bacon whispered. ‘You’re more in control than you think.’

Was I? I could withhold Sam from baby group, I could keep him out of nursery, but what about his first year of school? Somebody would catch up with us eventually.

‘The agency filled me in on all your likes and dislikes, Mrs B,’ Dylan called, breaking my thoughts.

‘Well that’s news to me. Even *I* don’t know what I like to eat some days.’

Dylan appeared at the door with a piece of cheese in his hand. ‘Our information is based on your shopping records and analysis of your recycling. So I know about the chicken hotpot you threw away last week because you didn’t like the cloned birds,’ Dylan glanced at me with a wink, ‘what an old-fashioned attitude, Mrs B.’

Mrs Bacon reached for her sticks.

‘No need to stand up, I’ll bring a lap tray. This is the way it’s going to be from now on. No more needing your neighbours to shop for you, or call in, or feed your cat. We even feed cats - did you know that?’

Sooty, who had seen the cheese, wove tight circles around Dylan’s ankles, mewling. Dylan lifted one foot and shook it. Sooty flew to the other end of the room, hitting the skirting with a thud. She darted underneath the console, her pupils wide.

‘My, what a lovely cat you’ve got, Mrs B. Can’t wait to get the chance to know him better.’

Dylan turned away and loped back into the kitchen. ‘Cheese omelette will be all fixed in a few minutes.’

I felt sick. I thought of Rocco and the children downstairs in our pod, food on the table, waiting.

‘So much for the analysis technology,’ Mrs Bacon said. ‘It didn’t tell him that I only ever have omelette for breakfast.’ Her voice lowered. ‘There is always somewhere to disappear to, Mei. Remember that. Always.’ She straightened up. ‘Now go. You’ve a husband and babies down there. Take me to the market one last time, next week?’

‘Of course. It’d be my pleasure.’

Sooty watched me leave, eyes glinting from the shadows.

Outside, chains of fairy lights transformed the ugly stacks. A sickly-looking moon fought to be seen against their glow. I took the gangplank down, my mind still spinning, passing open windows that seeped food-fragranced air and snippets of muted conversation. My pod hatch whooshed open.

‘I cut it up myself, mummy,’ said Honour, brandishing a piece of meat on a fork.

Rocco smiled, but the strain in his face was undeniable. He’d been his own shadow lately, like a pale imitation of the man I’d married. ‘Mei? Are you OK?’

‘Sure.’ I slipped my jacket off and sat down.

‘So, how was Mrs Bacon?’

‘She’s got a home help. Some guy called Dylan who doesn’t like cats.’

Sam shrieked with frustration as Rocco spooned rice into his mouth and it fell out again. I picked up my fork, but I wasn't hungry.

What would the Gene Inspectorate do if they found out my baby wasn't developing as he should be?

Later, when the kids were in their hammocks with the noise cancellation on, and Rocco had refilled our wine glasses, we slouched on the little settee and turned up the solar against the damp outside.

'Can I show you something I found on the ent-screen?' I said.

'Please tell me it isn't one of those awful reality dramas.'

'It isn't.'

'Or a cooking show. I just can't stand the way those shows are never really about the cooking.'

'It has nothing to do with cooking, I promise you.'

'What, then?'

I gave a vocal and the screen blinged to life. The channels flicked beyond serviceable range and disappeared into white-noise.

Rocco levered himself up on one elbow. 'Don't tell me the sodding thing has just broken?'

'Be patient,' I said, still advancing channels. 'This is something I found by accident. I've watched it a few times, now.'

Rocco dug his hand into the bowl of kettle chips that sat between us. The screen flashed suddenly, and the image, grainy and 2-D, began to move.

'Who the heck is that?' a handful of chips fell onto his shirt. Rocco leaned forwards and squinted.

‘It’s so far beyond usual range that most people assume there’s nothing here.’

‘Please don’t say you’ve got a secret porn habit,’ Rocco guffawed, scooping the chips up and popping them in his mouth.

‘Very funny. Look. See the woman at the back there, with the grey hair? That’s Julie. She’s the matriarch-in-charge.’

Rocco grunted. There were five of them on screen, moving in and out of view, as though filmed by a single static camera with no sophisticated editing equipment. They wore dull clothes that blended with the muddy backdrop.

‘What on earth are they doing?’

‘That was my first reaction, too,’ I huddled back onto the settee. ‘A group of middle-aged people, some of them with mobility issues, in mucky clothes with windblown hair and dirty boots. Do you remember what the wind felt like, Rocco?’

‘No really. You haven’t answered my question.’

‘They’re farming at a secret location.’

‘Farming? Impossible.’

‘Look at the landscape.’

‘It’s fake. Filmed in a studio. Nothing lives outside the city. Nothing *can* live outside the city. Except in the hydroponics and the algae beds. And then it’s Blackwoods.’

Julie was bashing a big stick into the muddy ground, explaining to the camera that they’d had problems with scavengers taking the vegetable harvest, necessitating the making of a post and shingle tee pee, which they were constructing right now for storage through the storm season. I had no idea what she meant by a post and shingle tee pee; storms were a distant memory since the barriers and noise cancellation protocols.

‘That’s hilarious,’ said Rocco, putting the bowl of chips on his stomach. ‘Who the hell grows vegetables outside? And who has to worry about storm damage, these days? Or scavengers? In fact, what on earth *is* a scavenger? What is this shit, Mei?’ His tone was brittle yet the skin around his eyes was pulled tight, the expression contradicting his words.

‘Just watch and listen,’ I said.

Four of the group lifted a wedge of planks and arranged them on a base of stones, while others appeared from off-screen to help. As the structure grew, various members stepped in to give a commentary on how they’d designed the tee pee and what it would do. It was based on evidence from ancient Iron Age settlement remains; one of the group had been an academic in a history department. They’d just finished the uprights when a grey-haired woman in baggy trousers stepped in front of the camera carrying a tray loaded with steaming bowls. Everybody stopped work. They sat down on the rocks to eat and drink, their hands dirty, their clothes tousled and hair windblown. Quite suddenly the picture hissed and broke up. Julie’s face flickered in the middle of the screen.

‘We’re having transmission problems,’ her splintering image said, ‘join us again soon to check up on how we’ve done. And if the establishment tells you that we don’t exist, you can tell them that you’ve seen the folk in the woods make a storehouse tee pee.’

Her face froze and winked off.

‘We won’t get them back now,’ I said. ‘Never do after a technical hitch.’

Rocco stopped chewing and regarded me from underneath lowered lids. ‘So you’ve been watching this for a while, then.’

‘Uhuh.’

‘And you believe it?’

‘Sure do.’

‘But if it’s real, who are they? Some clever dicks with an illegal funding site?’

‘They’re the folk in the woods,’ I said.

Rocco fished around in the bowl for the last few crumbs. ‘Is that the same renegade group the establishment are taking the piss out of?’

‘I guess it must be. The government thought they were a bit of a joke at first.’

‘What changed?’

‘Them letting us know that it’s possible to opt out. These people are existing without technology and without the line-managers making their minds up for them.’

‘Doesn’t look like they have no technology to me. They were plastered all over the entertainment unit.’

‘On flat screen in 2-D. It’s hardly up-to-date tech. The filming is down to a supporter somewhere near Edge Station, apparently. They broadcast whenever they can, daylight hours only. I’ve been watching for months.’

‘So that’s your secret entertainment.’

‘Pretty much.’

Rocco shrugged. ‘I half wish it had been porn.’

I didn’t laugh. ‘I just wanted you to know that there is another way – another kind of life. That we don’t have to wait in here with our vents closed, wondering when we’ll get a knock at the door demanding Sam has the tests.’

Rocco reached for his wine, but I could see, in his eyes, a flicker of something that he couldn’t disguise, somewhere between fear of the unknown and awe, provoked by a group of people working with their hands in the elements to

achieve things we thought nobody could do anymore. On the floor, Honour's fairy tale *The Wild Swans* had fallen open on an illustration of birds flying to find their sister, eleven pairs of great white wings outstretched against a sunset sky. I could almost imagine the breath of air across my face as they passed, their feathers whistling faintly like the controlled pigeon flock in town, the closest we ever got to nature, or to what had once been a wild bird.

*

Honour

Yorkdistrict First School

Progress recording: My Story Today

Today a clown came to school. The clown was a girl with red hair and pink cheeks. She gave us all balloons. David cried because he doesn't like clowns. Po screamed when her balloon burst. Mrs Lu gave her another.

Mrs Lu called us to the window to look at the pictures. The bus had princesses painted on it. One was a mermaid with long red hair. I want to be a mermaid when I grow up.

We got to go inside the big doors, on the bus. We sat on chairs and saw the cake. The cake had chocolates stuck to it. A lady came and put things on our arm. She had a white mask over her mouth. She said it wouldn't hurt and that we only got our cake if we were good. I was very good. My arm has a band-aid on it.

David didn't eat his cake. He left it on the table. The lady took him through another door in the bus. I didn't see where he went. The door closed. A chocolate fell off David's cake. I wanted to take it but I didn't because it was David's, not

mine. I don't know where it went. A lady came to take me back into class. She didn't notice the chocolate had gone.

The clown was in the classroom when we got back. She was blowing up long balloons and making dogs and giraffes with them. She made me a pink dog and a green dog. Sadie got a giraffe. I don't like giraffes.

Mrs Lu and Miss Connors got out the wipes to clean our fingers, then we had to sit down. David's tidy tray was on his desk and his hat was too. David's tidy tray has his name on it. I can read all the names now. Miss Connors started to cough and her eyes went all red. Mrs Lu gave her a tissue from the big box. Mrs Lu told Miss Connors to go and sit down in the office. I think she is sick. She might not come to school tomorrow.

Before home time we drew pictures. Mine was a mermaid with long red hair. Tyga's picture was a clown with balloons. Miss Connors stayed in the office and didn't help us get our coats. Mrs Lu put David's hat in his tidy tray and put it away. She looked very sad.

Tonight I will ask mummy to read me a story about a mermaid. She will tell me all about the sea, and the way things were when she was a little girl, when people could walk on the sand.

*

***The Gene Inspectorate – a National Tour Bus Public Presentation:
‘The Ripple Effect’***

‘Welcome! This short introduction is designed to make all citizens feel at ease with our new department and its incredible work. The Gene Inspectorate heralds a brave new future. And here is how it will affect YOU.

‘The Gene Inspectorate was formed as a think-tank to look at the world’s problems from an entirely new perspective. We identified the main cause of universal woe as defective people. Individuals. Their abnormalities. Extremism. Incompatibility. The wrong combination of genes and circumstance can create a terrorist, a madman, a predatory paedophile, a despotic dictator... anything. Our governments, in the past, tried to control circumstance. They got it wrong. They should’ve been controlling genes.

‘No government in the world can control an unforeseen and constantly changing set of random circumstances. But genes? Hey, we’re in with a chance there! The blueprints, the prototypes, the raw materials of what goes into the mix to make up people, the same people who give selflessly and save lives, or who rape and murder and bomb their neighbours.

‘Let’s start with the basics: illness and disease. Let’s think about hereditary cancers, asthma, blindness, heart conditions – the list is endless, and so are the lives of good people, needlessly lost. And then let’s spread out into mental health and the issues that can sometimes turn a functioning member of society into a dangerous sociopath or a sobbing wreck. Care in the Community didn’t work. We ended up with folks that didn’t take their scrips stabbing kids in the park, and a significant number of individuals whose mental conditions made them susceptible to religious radicalisation. So, we phased out the term ‘mental health survivor’ and

we replaced it with ‘dangerous individual’, backed up by the Dangerous Individuals Act. But that didn’t stop the crime rate climbing, or the mental-health-related sick-days that cost our economy billions each year.

‘What if we had the chance to make sure that dangerous individuals were never born in the first place? Think of the incarceration funding we’d free up for public parks, where children could play safely without guards and screening devices because there’d be no risk of a Dangerous Indi going on a slasher-fest? Did you know, for example, that individuals who have a close relative with schizophrenia are statistically up to fifty per cent more likely to have inherited the illness than other members of society? Can you imagine the ripple effect created by removing such defective genes from the populace? This is why we’ve called our incentive ‘The Ripple Effect’ – because we can make a huge difference by making a few small tweaks to healthcare.

‘Now, let’s think about crime. How would it feel, as a woman or a trans-indi, to walk the subway tunnels after dark with no guard, personal alarm system or scanner, and know with utter confidence that there wouldn’t be a deranged misogynistic perv waiting to pounce around the next corner? Because let’s face it, sex crime is on the up. And the Gene Inspectorate has just located the very gene associated with more than eighty per cent of sexually-motivated attacks. I doubt it will take them long to locate the other gene attached to the final twenty per cent.

‘And paedophilia. Every truly decent citizen hates a kiddy-fiddler. In the last Century, the popularity of digi-media and the expansion of dark networks showed us that society has a very ugly underbelly. We discovered that a significant section of the population has an unhealthy interest in children. And bingo, the Gene Inspectorate recently discovered a nucleotide chain linked to those self-same dark leanings. Now imagine fifty years, a hundred years into the future. The Gene Inspectorate has done its work. Murder, attacks on vulnerable members of society, violent robbery and paedophilia are all things of the past. We have no more

muscular dystrophy or Crohns disease, no more hereditary cancer or blindness. Wouldn't that be the start of a brave new world?'

'So, where do we go from here? Well, genetic disease and gene-carried illnesses will not be completely eradicated until the Gene Inspectorate has successfully put into practice its new model of societal reform. This is where The Ripple Effect begins.

'And here's the exciting part: we anticipate that it will take us no more than four generations to completely fix the human race.

'But we cannot do it without YOUR help. If you would like to take part in our scheme and earn yourself a Good Citizen Bonus, then stay with us until after the short film to learn how you can do your bit to help deliver a brighter future to humankind... and be part of The Ripple Effect.'

*

Julie was working, her back to the camera. Her muddy fingers appeared now and again as she stooped over a row of small plants, pushing them into the earth. Whatever baggy garb she wore trailed in the dirt, but she either didn't notice, or didn't care.

'Think of the onion as a leaf crop as much as a root crop,' she said against a rising wind. The image broke up and half the sentence was lost to static, '... and plant them a handspan apart. Onions have been a mainstay of human consumption since farming first began. You can snip off the green shoots,' she tamped a plant down with a muddy toe, 'and use them to flavour savoury stew.'

Julie stood up and turned around, her hair puffed out around her ruddy face. It was hard to decide how old she was. Fifty? Sixty? She clearly hadn't taken any youth treatments.

'Then bide your time until the root bulb has matured. Once you've harvested, soak the onions in water overnight to take away the sharp bite. You can eat them like an old-fashioned apple. And the real seed-grown thing tastes so much better than a forced product, I can assure you.'

I turned up the solar and tucked my feet under my legs. It was cold and damp, not only around the stacks and in town, but wherever Julie was, too. Julie and the others wore more layers than I'd seen since my childhood. I'd bet the folk in the woods didn't have anything more than natural fire, or metal bars heated on burning stuff to warm water for an occasional bath. Every one of the folk looked wild and muck-covered, as they stomped around in their clogged-up boots and wiped hair from their sweaty foreheads. Had they gradually let go of their nice clothes and their toiletries and hair styles, or had they done it suddenly, overnight, as though stepping out of the city into a self-sufficient world without mirrors suddenly stripped away their old selves like flayed skin? Had the transition been difficult? I glanced at my bare toes, at the slick of varnish that clung in remnants to

the nails. A guilty treat, something to convince myself that I was worth the attention. Ridiculous, really, as far as personal fulfilment went, that anybody could believe a splash of glittery pink would transform them into a desirable woman. But I poured coffee all day. What else was I supposed to do, to cheer myself up?

Somebody cut the screen suddenly, brushing too close to the camera and knocking the stand. When the picture came back into focus, Julie was gone and the camera had a perfect view of long, raised furrows of earth. The image reminded me of something I'd seen as a teenager, on a school trip - a painting on a piece of medieval stained glass, of a man and a woman walking a ploughed field scattering seed by hand from their aprons. That couple could've been the folk in the woods, painted two thousand years before the folk had existed, carbon copies of that which'd gone before, and had now turned full-circle. Even their clothes were similar.

'Now, for those of you who are interested in our way of life,' Julie turned the camera towards her face; it trembled as the auto-focus kicked in. 'We have limited contact with the outside world, which comes via the generosity of our main helper. But, this allows me a small window of time to answer questions each week. I'll do this for as long as I'm able, but it won't be forever. Grab yourself a contactor and take down the address I'm about to give you. It's a message account. It's untraceable. If I hear from you, you'll hear back from me at the end of our next transmission. Appropriate questions only, please. I want to know how many of you can see us, and how many are interested in the life we've chosen to lead.'

I reached for my contactor and grabbed the address. The image cut and died just as the pod door whooshed open. Rocco and Honour tumbled inside laughing, bringing the smell of damp air and covered walkways, with an acidic hint of whatever the recycling plant was spewing out that day. Sam, who'd fallen asleep propped up in his baby doughnut, woke with a start and began to grizzle.

Rocco put his head through the living room archway. 'You OK?'

‘Of course.’

He raised an eyebrow. ‘You’ve been watching those woods again, haven’t you?’

‘Why do you say that?’

‘Your expression. Half awe, half guilt. I’m beginning to recognise it now. No wonder I thought it was porn.’

I stood up and shook out my cramped limbs. ‘I’ll get tea. We’ll talk when the kids are in bed.’

Much later, our naked bodies entwined on a bedspread that we’d put on the floor, Rocco held me in his arms and murmured:

‘So, when’s she on the ent unit again, then?’

‘Who?’

‘This Julie. And her folk.’

‘If I didn’t know better, I’d say you were getting just a little bit interested.’ I pushed myself up and hugged my knees to my chest. ‘I have a message address for them.’

‘For who?’

‘Julie and the folk in the woods.’

Rocco heaved himself into a sitting position and reached for his tee shirt.

‘Why would you want a message address for them?’

‘Julie says we can message her. That anybody can.’

‘For what purpose?’

I shrugged. ‘To answer our questions.’

‘And do you have questions?’

‘Yes. I want to know about their home lives. About where they live, how they cook, how they light fires. Where they draw water. How they serve meals. And importantly, do they have children there?’

Rocco didn’t answer. He traced the hanzi on my shoulder with one finger.

‘I mean, where do they all sleep?’ I reached for my top and shucked it on. ‘Do they share a communal space to make the heating easier, or do they have individual huts? How often do they take a bath? How do they manage in bad weather without noise cancellation? How do they teach the kids? And do they have enough privacy to have a sex life?’

Rocco laughed. He reached for the glass of water he’d left on the console. ‘Mei, why do you want to know all this?’

‘Because,’ I said.

‘Because what?’

‘Because it might be useful to know, that’s all.’

Rocco stood up and wandered into the kitchenette, but I sensed, in the stoop of his shoulders, that he wasn’t dismissing what I’d said – he was mulling it over, and the weight of it bowed him as visibly as if he were carrying boulders.

*

Lakshmi

Central Office, floor 38

‘Boss, you really need to come and look at this.’

Rocco was next to the water chiller. He looked ragged, as though he hadn't shaved or showered in days. He'd been staring out into the courtyard with his lips fixed around the rim of the reusable with his name on it. He didn't seem to be drinking, though.

'Boss?'

Rocco turned. Water slopped onto the floor. 'What?'

'Please, just come here and look. Before the rest of them get back. Think of it as damage limitation.'

Rocco put the drinker down and ambled across the room. He leaned over my shoulder, bringing a faint whiff of sour coffee and old sweat. I had no idea what was going down with him, but he hadn't looked in a good place for weeks now. He didn't talk about his kids anymore, either. Just his wife, with a sad face.

'I was checking footage because we had a theft a few days ago. The ballast for the link repair?'

Rocco grunted. 'They've been back for the rest of it, then?'

'No. The camera caught something else entirely. Camera three-three-nine on the final platform of Edge Station.'

'I know where it is, thanks, Lakshmi.'

I recalled the image, which spun into the space above the desk, frozen in time. Rocco whistled. We stared at it, the tiny thing that wasn't supposed to be there, with its dark feathers and its eye that reflected daylight bright as a glass bead. Its beak and feet were unbelievably delicate, like finely-crafted jewellery.

'That's a wild bird,' said Rocco.

'Exactly. That's why I called you over.'

‘It’s impossible,’ Rocco’s words escaped in a burst as though he was trying not to laugh.

‘It isn’t funny,’ I said. ‘What the heck are we supposed to do next? Could it have escaped from a private collection?’

‘What, on the edge of the exclusion zone? Wealthy folk with private wildlife collections don’t live anywhere near that dump,’ Rocco rubbed the stubble on his chin. The noise went through me.

‘Boss?’

‘It’s nesting.’

I blew the image up. It lost clarity. In the background, the remains of the pilfered heap of ballast lay collapsed like a miniature decimated city.

‘What’s nesting mean?’

Rocco tutted. ‘Didn’t you take biology class in school?’

I shook my head. ‘They didn’t offer zoology by the time I got there. It’s just hydroponics or human stuff now.’

‘Really?’

‘Uhuh.’ I zoomed out and the bird got clearer, the thing it was holding coming into sharp focus. ‘They need grads to work on cures for poisoning or to develop non-haz-chem for the solar sheets. Or better meat for the racks.’

But Rocco was older than me. Maybe he’d eaten parts of an animal with a brain, a tail and ears once; the thought of it grossed me out.

‘Nesting is when they breed, Lakshmi.’ His voice held an edge of sarcasm, as though I was stupid for not knowing. ‘They’re breeding out there, beyond the conurbs.’

‘Except they don’t,’ I said, glancing at the ceiling eye. ‘I mean, not officially. Hence me calling you over to take a look before the rest of them come flouncing back in here. So, what do we do?’

My boss pulled up a chair and sat, but he didn’t take his eyes off the image.

‘I want to watch it,’ he said.

‘The film?’

‘Yes. I want to watch the bird.’

‘Ok.’

At full speed, the bird’s wings moved so fast that they became a blur. Rocco reached across the console and slowed it down, putting it on loop. After three more replays I’d seen all I needed to, but my boss was transfixed, watching the bird fly in again and again as it came to rest on the front of the camera casing with the thing dangling out of its beak. I gave up on the film and looked at him instead, all bloodshot eyes with big dark circles. His shirt was crumpled, as though he’d slept under the desk instead of going home. His hair looked greasy.

‘Can you copy me that loop and send it straight to my contactor?’

I opened my mouth to speak, but I couldn’t find the words. Irregular, suspended and protocol came to mind but I clamped my lips shut again.

‘We aren’t supposed to,’ I managed at last.

Rocco waved me away with a grimace. ‘This wasn’t – isn’t – supposed to happen,’ he said. ‘A bird out beyond the city limits, with no protection from the chemi-rain or the toxins, a bird not under the control of the council or the line-managers or in a private collection – and nesting, too. Reproducing on its own. This shouldn’t be happening, Lakshmi. And yet, here we are, with the evidence on camera.’

‘Recorded by accident,’ I reminded him gently, ‘and now we have to decide what to do about it to sustain the status quo as per the Handbook.’

Rocco tapped the console and the bird’s eye enlarged like an exotic jewel. I reached for my boss’s arm and squeezed quickly, something I’d never done before. Surprised, Rocco pulled himself upright. The ceiling eye glinted dully behind him, rotating a quarter turn.

‘I want the film,’ said Rocco quietly. ‘Send it to my contactor now, Lakshmi. Then erase the film and make no mention of it in the log, as per protocol. The rest of the office don’t need to know.’

I hesitated. ‘I can’t send it to you. You have to do it yourself.’

Rocco nodded. ‘Step away from the console.’

I stood up. Rocco sat in my chair. I walked to the cooler for water.

‘The thing in its mouth? That’s corn. Those long whiskers used to be called ears. Ears of corn. Bizarre name, really.’

‘What?’

He carried on talking at the screen. ‘You won’t remember them. I’ve seen some of the real stuff myself. Growing by the side of a road, believe it or not. I was a child – it was before the big hydroponics.’

‘Oh?’

Rocco nodded. ‘Who would’ve believed it. Organic life gradually replaced by cloning and synthetic subs. But if the birds are using corn grass to nest with, Lakshmi, that means plant life is growing freely outside the hangars, in the exclusion zone., beyond the dead and poisoned bits.’

‘It can’t be.’

‘The camera wasn’t lying.’

The ceiling eye moved again, but the whir seemed louder, more intrusive.

‘We can’t have this conversation, boss.’

‘We’re embracing their blessed Handbook’s ‘core values’ by getting rid of the film. But we can’t un-see what we’ve seen, Lakshmi.’

I glanced at his contactor. It lay on the worktop next to the console.

‘You’ve no need to worry about the film,’ said Rocco. ‘So long as I do nothing with it, nobody will be any the wiser.’

‘But what *do* you intend to do with it?’

Rocco didn’t answer. Further along the corridor, a door clicked closed and a lift whirred. Footsteps started up.

‘They’re on their way back.’

I ditched my drinker.

Rocco went back to his desk. I tried not to think about the bird. If the rumour was true and the ballast had been stolen by that band of losers who’d left the city for the exclusion zone, what did they do with it? Were they building out there, beyond the mountains? Or were they no more than ghosts, flitting between the poisoned waterways and dead forests, spiriting away materials into nowhere? I’d bet they were covered in ulcers by now. Nobody could survive out there for long. Not even the bird...

I’d never guessed that wings could move so quickly. The electronic simulators we had in college didn’t do the real thing justice.

*

Mei Ling

Julie's hair was wrapped in a turban. She'd thrown off her cloak and slumped on a chair made from what looked like offcuts of real wood. It had uneven arm-rests. Something about it reminded me of a rustic throne, the kind a fairy queen might've sat on. I pulled my feet up under myself on the settee, while Rocco crunched kettle chips next to me. For somebody who wasn't convinced by the folk in the woods, he couldn't look away.

Julie came into sharp focus suddenly, along with a bloom of yellow light from a fire by her feet.

'We ready?'

Whoever was out of sight said, 'Uhuh'.

Rocco stopped eating.

'So.' Julie picked up a small device and squinted at the screen. She regarded the camera with ease. 'Thank you for your questions. They make interesting reading. They also tell us folk in the woods that there are a growing number of you urbanites showing an interest in our lives out here. For that, we're grateful. In answer to the first question, we have firepits in our communal spaces. Like this one at my feet. It's based on a very ancient model which requires a vent in the roof of the building.' Julie gestured upwards. 'Sadly that leaves us with smoky air which will gradually blacken our lungs, but we figure we're screwed out here anyway, so it probably won't reduce our life expectancy.'

Subdued laughter rippled through the others, who'd begun to gather around Julie quietly, some within focus, others slightly out of shot, revealing themselves only in a foot or a shoulder, or the back of a head at too-close range. One of the women had what looked like burns down one side of her face; a young man was missing an arm, the sleeve of his top bound tight just below the elbow. They crowded the hearth and slumped on what looked like stuffed sacks around the side

of the room. Everybody else sat lower than Julie, as though in deference. Nobody interrupted when she spoke.

‘We’re going to be sensibly careful with our answers, because there are things we shouldn’t give away. I’m happy to confirm that we’ve organised a couple of raids along the furthest edges of the conurbs. These raids were undertaken without weapons because we don’t have weapons. We didn’t target foodstuffs. Or prisoners.’ She laughed; a rumble of humour rippled through the others. A black cat wove its way through the seated bodies and jumped up into Julie’s lap. She ran a hand along its spine. Its tail responded with a quiver. ‘We have taken only what we needed, a little spare chipped stone that’d been left by the side of a track at an outlying terminal. The stuff had been there for ages and nobody was using it, so we figured the powers that be wouldn’t miss a few goat-baskets of it. Now this, my friends, leads me on to our next two questions. The first, do we have animals?’ Julie glanced down at the cat, who jumped off her lap and wove through the others and out of camera range, tail in the air. ‘Yes. We have a cat, as you can see. She comes and goes as she pleases but she’s fabulous for keeping morale up. We also discovered a breed of goat living wild out here. The males are horned and quite aggressive, the females less so. We use them to shift loads, and for milk, cheese, meat and skins. They’re surefooted and can survive on rubbish food, which is why we suppose they’ve multiplied in this godforsaken place.’ She laughed again. ‘So that’s how we removed the materials from the outpost – with a goat chain gang. But no, we don’t frequent the edges of the conurbs as a rule, because we choose to live further away. And the further away you get from the city zones, the fresher the air. No workplace Handbook will tell you that.’

Rocco grunted and put the empty chip bowl on the floor, his eyes glued to Julie’s face.

‘So, we’ve been asked about birds and other wildlife. Yes, wild things do live out here. Yes, there are recognisable seasons and everything responds to those.

Some of the younger members of our audience might not be aware of the significance of seasons. Well, out here we grow foodstuffs that only come at certain times of year. Animals mate and breed in Spring. The fish spawn. If you don't understand the lingo, visit your nearest education hub and ask. You might learn something.'

Rocco began fiddling with his contactor. I reached over and squeezed his arm. He flinched, startled.

'We live,' Julie continued, gesturing around her, 'in a community of buildings and caves in the hills where we feel safest. There's water here but no danger of floods; it all rolls downhill. There's fuel for burning; we're reasonably well hidden. We have lowland fish traps and pastures for grazing, and we've been successful growing certain crops. We also forage. For those of you who asked about the grimmest aspects, we've fallen foul of poisons in the past. Some of us have chemical burns. We don't know what the long-term prognosis is – that's something we'll discover as we go. There are also intestinal parasites. You develop a near-immunity after time. It doesn't mean they go away, it just means you can live with them, without having the shits constantly.' Julie flashed a tired smile. 'And we dig our own toilets, never near a watercourse, and then backfill them when they're done.'

Somebody broke the camera angle, moving between the bodies. She came into focus, an elderly woman I'd seen before, with a big steaming pot on a tray. She stooped down in front of Julie, who took a cloth and lifted the lid, inhaling.

'That smells delicious. Thank you, Mauve.'

The woman stepped away, towards a table whose corner was just visible.

'We have roles, as you can see. Mauve is an amazing cook who can stretch a few root vegetables and some grain and onion greens into a thick stew that feeds us all.'

Chinks and bangs off-camera suggested that Mauve was serving at the table.

‘We have a dedicated self-taught wood turner,’ a man with his back to the camera lifted one hand, ‘who makes cups and bowls. And we have spinners, weavers and a basket maker.’ More hands raised, including one that was twisted with palsy. ‘So, before we love you and leave you, oh dwellers in the urban zones, there’s one more question I’d like to answer. When and how do we accept incomers.’ Julie lay the device in her lap and looked directly at the camera. ‘We don’t. If anybody out there is desperate enough to leave the conurbs, then be warned, this is no holiday park. You won’t get far without food or water, and we don’t operate rescue teams. If you don’t get caught by the border police or die of starvation in the woods, you’d likely be picked off by the mountain cougars. It seems that before the zoos were closed for good, some escapees found their feet out here just like we did. You’ve been warned.’

Rocco and I waited, both expecting a post-script, but Julie gave a nod and the screen went blank.

‘What the...’ Rocco gave a verbal to re-open the channel.

‘I told you before, we won’t get it back. Once they stop broadcasting, the channel dies.’

Rocco swore. The palor in his cheeks made the circles under his eyes stand out.

‘Are you OK?’

He pulled his contactor out of his pocket. ‘Mei, I’ve got something to show you.’

Rocco tapped the screen and a mini-hologram flew out between us. He set the image moving. A little black dot hurtled through what looked like a cloud bank in an overcast sky. A moment later, it was up close and staring right at us.

‘A bird? Where did you get this?’

‘From a security cam at work.’

I pushed myself upright. The quilt fell to the floor. ‘But you told me that... I mean, the protocols...’

Rocco tipped his head into his hands. ‘I shouldn’t be showing you this.’

The bird repeated its short journey, coming to rest again and again between us. Its dark eye shone as though somehow, behind the digitised image, it saw us through a window into our world. It did not look afraid.

‘Why are you showing me this, now?’

He didn’t answer.

‘Your retirement fund will be downgraded if anybody finds out. We struggle enough as it is, Rocco. Anything you do to compromise that...’

‘Mei, I don’t want to argue. I’m doing this to show you something.’

‘What, exactly?’

‘Solidarity. That we’re on the same side. That just as you believe in the folk in the woods, so I believe that things are living out there, in the exclusion zone. Not just surviving, but living, Mei, really living.’

I pulled away, jamming my back against the sofa arm. ‘When I first showed you Julie’s channel, you wouldn’t have any of it. Just like you won’t listen to me about Sam.’

‘I’ve done a lot of thinking.’ Rocco took hold of my hand.

‘And?’

‘There’s a lot I haven’t told you over the years.’

‘What?’

‘I suppose I was scared. Hiding a lot from myself. Too frightened to think you might be right about Sam, about the medics. This isn’t the only security cam footage I’ve seen. I just never mentioned it before.’

The digi-display flashed a bedtime warning. The noise cancellation eased itself into auto; the faint whirr of the nearby transport system vibrated through the walls, then nothing.

‘Why are you telling me this now?’

Rocco shrugged miserably. ‘Because I can see for the first time that there might be another way. Not an easy one, or a failsafe one, but an alternative.’

He s

napped off the hologram, leaving us staring into space in uneasy silence.

*

Back when I was on maternity leave waiting for Honour to arrive, a package had been delivered with my name on it. It was from a solicitor who’d dispensed the estate of an elderly great aunt I’d never met. She was an aunt on my mother’s side, European; I’d always identified more with my father’s family, who came from Hong Kong. I’d peeled off the wrapping to reveal a very old painting. It was made of canvas strapped taut over a frame with damage around the edges as though at some point it’d been ripped off and then re-mounted. The message that came with it was a slip of old-fashioned paper from my great aunt’s solicitor which said, simply, ‘Anne Marie wanted you to have this.’ I was mystified she’d even known I existed.

The picture was grimy with patina that’d built up over the years. When you looked closely you could see fine detail in the shadows. It was a woodland, very

dark except for the middle, where a naked girl with white skin and long auburn hair uncurled herself from a tangle of thorns on the ground. I'd identified the trees as old European varieties, oak and beech and silver birch with textured barks and long-limbed branches, but they were barely there in the shadows. The girl was tangled up in briars, the sort my grandmother would've plucked tiny fruit from, something I found hard to imagine. I'd never liked that picture. There was something victim-like about the girl. She had haunted eyes and a skin tone that looked bruised as soon as it fell into shadow, like a delicate peach that had dropped from its branch too soon. I'd hung the picture on the biggest wall in our pod, and waited for Rocco to get home from work that evening. He hadn't even noticed it. When I pointed it out, he'd grimaced.

That afternoon, while Sam dozed in his stroller, I took the painting down for the first time in four years, and boxed it up. It left a mark on the wall, a sooty residue like a ghost-print of its outline. I sold it on marketplace for a decent bid. I put the credits in a pop-up temporary blip-code that couldn't be linked to me or Rocco, that I picked up on the way to school. The words 'just in case' kept going round in my mind.

Honour skipped out into the corridor holding a painting that fluttered like a bird's wing with every step she bounced.

'Mummy,' she thrust it at me eagerly, 'I've made you a picture!'

I picked up her coat and satchel, and turned to the door, where one of the teachers and a parent were head to head in quiet conversation.

'Does anybody know where they've gone?' the mother's voice was subdued. 'Only I usually pick David up. I dropped round their pod this morning and the place was empty – cleared out - as though they'd never lived there. And Monica's contactor won't connect,' she waved her own in one hand.

Mrs Lu's head shook, her fixed curls unmoving. I caught something in a hushed voice about treatment and then Honour wheeled around, the painting still dangling from her hand.

'David's gone,' she said. 'Miss Connors cried the day he went in the princess bus.'

Mrs Lu's back stiffened. Both women turned towards us. Mrs Lu's voice was high-pitched when she spoke. 'Honour, give your mummy the picture.'

Honour pushed the painting towards my face. 'Look, mummy, I made a mermaid, just like the one I saw when the clown came. The day David went.'

A smear of wet paint slicked the underside of my thumb, red, like blood.

David was the little boy who'd used a wheelchair. The only young wheelchair user I'd seen in as long as I could remember, when people with disabilities seemed to be vanishing off the streets. And now David had gone, too.

Honour jumped up and down, demanding to know whether I liked the picture. It was a mermaid with long red hair, haunted eyes and bruised skin.

Sam's head lolled in the buggy as I spun it around. I grabbed Honour's hand and hurried outside, feeling the women's eyes on my back.

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The Cartoon Bus sat a full block away from our stack, parked at the edge of a play park crowded with spinning toys painted in muted colours. I'd probably gone past the park a hundred times, yet I'd never noticed it before. The rear of the bus jutted out into the walkway. Two sets of doors released a clutch of men and women in uniform, some with clip-tops in their hands, one pushing a wheelchair,

another carrying what looked like an oxygen mask and strap restraints. Rocco withdrew underneath the cover of the permatrees, inching the pushchair back.

‘What the bloody hell are they doing, Mei?’

‘I think we can make a pretty good guess.’

The staff dispersed in an organised fashion, as though their destinations had already been decided, some heading to the nearest stack, others walking in the direction of the children’s centre.

‘Look at the direction the bus is pointing in,’ I said. ‘When it sets off again, our stack is the next place they’ll arrive.’

‘I know.’

‘Do you believe me now?’

Rocco’s face was grey, his mouth set in a grim line. ‘For god’s sake, this can’t be happening.’

The controlled flock wheeled above our heads. Honour pointed up into the sky. ‘Wild birds, wild birds, wild birds,’ she chanted.

‘We don’t have long, Rocco.’

He wheeled around and twitched the pushchair wheels from a rut in the permagrass, something vandals had cut with a sharp knife. The medics in blue had disappeared now, leaving the bus doors open like a gaping wound. Two of them loitered close to the playground, flicking commands into their palm-tops.

‘Bastards.’ Rocco stomped away.

I scooped Honour off the ground and balanced her on my hip, then set off after him. She giggled as her hat bobble smacked her nose with each step, but within moments, picking up on the tension, she fell silent.

‘What the fuck will we do for money?’ snapped Rocco. ‘They’ll trace us through our tag usage.’

‘Keep your voice down. And no, they won’t,’ I said as I struggled to catch up with him. ‘All the while you’ve been in denial, I’ve been planning.’

Rocco glanced over his shoulder and looked at me strangely, as though seeing me clearly for the first time in too long.

‘Christ, Mei, I’ve been so fucking stupid. You’ve already thought this out, haven’t you?’

Honour started to struggle. ‘I want to walk, mummy. I’m a big girl. Put me down!’

I ignored her. ‘I’ve had very little else to think about. I’ve been worried sick. Everything I’ve done, I did just in case, to be ready for a time like now.’

Rocco stopped abruptly outside a bingo parlour. The sounds of gambling machines and voices funnelled out through the open doorway. ‘Here. I’m not being fair on you. You take the pushchair, I’ll carry Honour.’

We swapped, Honour whooping with delight as she was hauled up onto Rocco’s hip, Sam silent. We set off again, walking fast, the wheels of the pushchair humming on the tarmac.

‘What else do I need to know?’

‘I’ve been storing dried rations, and compressed water. Water purifiers too. I contacted Julie through the message system. The folk in the woods know that if we leave the city to join them, then it won’t be possible to warn them in advance. But they’re expecting that one day soon we might head in their direction.’ I fell silent as a young couple neared us on the sidewalk. They disappeared into one of the eateries near the bingo hall. ‘I’ve got pepper repellent for the cougars.’

‘How the hell do we find a community that’s hiding somewhere in the exclusion zone?’

‘Don’t worry, I’m on it. I told Julie where we’d travel from, that we’d take the tram to Edge Station and then continue through Blackwoods on foot.’

Rocco’s eyes widened with horror.

‘There’s no other way, Rocco. We have no choice. The longer we stay around here, with cameras and security, the less time we’ll have. Once we’re in the borderlands, I have directions based on the terrain.’

‘Directions?’

‘Julie’s folk are a smart bunch. They’ve been leaving signs for us along the route. If we work at it, we’ll find them.’

‘What kind of signs?’

‘There’s time for all that later. For now, just let’s get back and collect what we need.’

Rocco’s face blanked suddenly, as though it was all too much to take in. ‘And you’ve done all this while I’ve been where, exactly?’

‘Unhappy and un-attentive,’ I replied.

‘Oh god.’ Rocco wiped a palm across his face as though it could obliterate the last few years, take us back to a time we were happy, or at least when we still had hope.

We stopped at a crossing and waited for the signal, then carried on, out of breath now.

‘What you just said about travel, Mei... that means taking the tram.’

‘Yes. We can’t risk picking up a private vehicle because they’d track us to Edge Station.’

‘We couldn’t afford one anyway.’

‘Whatever. I can buy us time, but not much. You remember the charity shop on the corner, before it closed down?’

‘Course I do.’

‘I got us both some clothes. We’ll be more difficult to ID. The kids will be fine with a haircut and second-hand coats.’

Honour struggled to turn around on Rocco’s hip.

‘Am I having a haircut, mummy?’

I glanced at the long plait that’d only recently grown down below her shoulder blades.

‘Sweetheart, you’ll look lovely.’

‘And you’ve got all this stuff hidden where?’ said Rocco.

‘In a compression unit at the back of the food cupboard.’

Rocco smiled. He actually smiled. The grey, stooped, indecisive and slightly emasculated man I’d watched slowly deteriorate over the last few years was standing taller, with a firmness in his spine that I hadn’t seen in too long.

We made the rest of the journey in silence. We arrived back at the stack and hurried up the gangplank. Our pod door sensed us and opened. Swiftly, we moved from the kitchenette into the living room. Rocco closed the vents then deftly pulled off Honour’s coat while I flicked on the secure cams and checked the stack from all sides. On external street view, a small group made its way back home after work, heads down. Thanks to the dull weather, nobody was out on the patios. There was no sign of any blue-suited staff.

‘Honour, go to your sleepsack and get your favourite teddy and your pj’s.’

‘Mummy, can I bring Mr Fluffy Bear and Puss Cat as well as Pink Teddy?’

‘No, honey,’ I kissed the top of her pigtailed head and glanced at the scissors on the wall magnet. ‘Only your favourite. And go to Sam’s cot and get his night-gro and Brown Ted. OK?’

Honour nodded, her eyes solemn, her lips pressed together as though she understood the futility of more questions. She disappeared into the next room and I joined Rocco on hands and knees, raking out the contents of the bottom cupboard. He pulled out the compression unit and scooted it onto the floor.

‘Jesus, how much stuff have you fitted into this thing?’

‘Open it and you’ll see.’

Rocco let the valves go and the unit expanded with a hiss, revealing sealed packs of stew, powdered milk-sub, nuts and dried vegetables, clothes and hairpieces.

‘How many months have you been hoarding?’

‘A year and a half.’

‘But that...’ Rocco sat back on his heels, ‘that dates back to when you were pregnant with Sam.’

‘Because I knew something wasn’t right.’

‘Even then?’

I nodded, half relieved to be honest, half ashamed I’d said nothing until now.

‘I know all pregnancies are different, but with Sam, he didn’t move as much as he should’ve. I didn’t get heartburn. I didn’t get nausea. It was *too* different.’

‘I remember you told me all that, but...’ Rocco’s voice trailed away.

‘I didn’t have the tests.’

He stared at me, unblinking.

‘I never told you. I knew something wasn’t right. Call it women’s intuition, a mother’s hunch, whatever, but I felt it.’

Rocco’s bottom jaw had fallen into a gawp, the kind you’d usually see on a child in a playground, watching something unfold that he couldn’t quite grasp.

‘I couldn’t risk being told to abort – or worst still, having the decision taken out of my hands and done for me. So I went ahead with the pregnancy anyway, without knowing the results, because I’d never taken the tests.’

Rocco shook his head. ‘Mei, that’s fine, I couldn’t have cared less either way, we were having whatever fate decided to give us, but don’t you realise how what you’ve just told me relates to the bigger picture?’

I took the travel passes, money cards and clothes from a drawer and began to pull more dehydrated rations from the shelves in a tumble. Rocco helped me cram them into the top of the unit and push them down.

‘Why do you think I’ve prepared for this?’

‘You’re telling me now that you *know* Sam has a problem. That’s different than just suspecting.’

Tears stung my eyes. ‘Come on, you know it too.’

Rocco’s fingers closed around my shoulder, right where the hanzi was. I’d chosen the sign for strength with no idea, at the time, why. Now it seemed to make sense. I slipped my hand on top of his and squeezed briefly. Then we carried on packing, rearranging the things in the box with scrabbling fingers, laying clothes on the floor behind us.

‘You remember Sandi?’

‘Your friend from baby group?’

‘Yes. You remember they told her to go back in for repeat tests when she was expecting her second?’

Rocco nodded. 'I remember you talking about it.'

'They gave her medicine. Told her everything was OK but she was low on vitamins and she needed a supplement. She miscarried twelve hours after taking the first dose.'

What?

'Sandi always swore they lied. Said the medication was to make her lose the baby. I asked around and found three other people the same thing had happened to. It's more than coincidence, Rocco. The state won't tell us the truth, that aborting possible genetic defects is becoming commonplace, so they lie to us instead. They tell us everything is OK and then they go ahead and have their own way regardless. Them and their blessed Ripple Effect.'

I crammed the last few things into the container, my fingers stiff with the effort, my movements quick and panicked. Rocco held the top down while I sat on it and secured it.

'But how did you get away without doing the tests?'

'I didn't use my own urine. I borrowed some. And I switched my blood sample and took a chance.'

'You *switched?*' Rocco's face was white, as though endless permutations of the results of what I'd done were unravelling behind his eyes.

'Yes. For another mother's samples. It was easy. The locum used to leave the tray out in the hallway ready to send for analysis.'

'Mei, if there was something wrong with Sam in the womb, then another woman could've taken the hit – she could've lost her baby.'

I shook my head. 'They repeat the tests. It's only after a second lot of results that they give out the meds. That much I worked out by speaking to the others. If

Sam's – problem – had shown up in the sample, as I believe it did, then they'd have brought the mother in, tested again and found her clear.'

Rocco's eyes were dark with horror. 'You took a hell of a risk.'

I scooted the clothes across the floor away from the compression unit. Honour appeared at the kitchenette doorway with two teddies and an armful of clothes.

'Thanks, honey, drop them right there,' I gestured. 'Daddy's going to get another bag out and pack for all of us.'

'Are we going on an adventure?' said Honour.

'Yes, we are, my lovely,' said Rocco. 'But we've got to keep it very, very secret. We're going to catch the tram out of town and we mustn't talk about it on the journey, OK?'

Honour nodded solemnly. Sam whinged from his pushchair.

'Honour, me and daddy have things to do. If I put Sam in his doughnut, will you sit in the living room and show him the story with the wild birds, until we're ready to go?'

Honour's face lit up. 'Yes, mummy.'

'I'll take him,' said Rocco.

Rocco pulled Sam from his pushchair, kissed him and held him tight, imagining, I had no doubt, a world in which Sam had never come into being, torn from us too early, before he'd even had a start. I understood then that despite Rocco's blind denial that anything was wrong, he'd felt it too, all that time, and had just dealt with it in a different way, pushing the fear away as though it wasn't allowed to exist, trying to control instead of accepting and reacting, in that peculiarly masculine way that so often caused more problems than it solved.

'Clothes?'

I pushed a bundle at Rocco. He glanced at them and grimaced.

‘It’s been years since I’ve worn anything like this.’

‘That’s the point,’ I said, holding up the body suit and checking out the inbuilt pads that were about to transform me from small-boned to curvaceous. ‘Put the clothes on then I’ll do your hair and face. A few hours’ grace is all we need.’

Rocco shucked off his shirt and pulled on the new one, a garish orange garment. Under different circumstances it might’ve looked as though he was imitating a younger relative, or dressing up for a themed party. Now, he looked faintly ridiculous.

‘There’s something I haven’t told you about my job.’ He took off his trousers and pulled on the new pair, then reached for the scissors that clung to the wall magnet.

‘I thought you’d told me everything.’

‘No. I didn’t.’

I flicked the compression unit valves and the lid sucked back into place, gradually shrinking. ‘Can’t it wait?’

‘No, it can’t. It can’t wait at all. Mei, I wasn’t doing the job you thought I was doing.’

I slipped the shift over my head. ‘What do you mean?’

Rocco stooped to peer in the kitchen mirror and began to lop tufts haphazardly off his hair.

‘I was never a programmer for manufacture. That was the official line. My office originally developed security surveillance systems for business. Only somewhere along the line they got earmarked for line manager use and the next thing I know, we’re rolling them out to every high street, every corner and every

tram station there is. We've got them in hospitals and taxi ranks, in shopping centres and on public transport – plus a whole load of locations you couldn't even guess at.'

Something in my core turned to dough, becoming a soft, spineless mass that threatened to pull me into a puddle on the floor. Tufts of hair fell from Rocco's shoulders in soft, greying hanks, settling silently on the floor like the snowflakes we used to get before the weather protocols. I couldn't remember how many years had passed since I'd seen snow. And now I was on my knees in a tiny pod kitchen, feeling sick with worry, frightened for my kids, thinking about how my husband's hair fell like snow.

'These cameras are sophisticated. They can pick up everything from body temperature to hormonal changes, not just physical appearance. Give them a clear view of your eyes and they'll do a quick iridology reading, too. They're the most powerful identification tool invented, plus they flag up all the physiological changes associated with stress.' Rocco snipped savagely, the scissor blades meeting with a metallic zing. 'We'll be sitting ducks, disguise or no. A few tram stops with those things handing over our image and ticket details, and we'll be picked up before we get out of town. How do you think they managed to stop the others?'

'What others?'

'My department dealt with the footage.'

'You never mentioned it.'

'The Handbook said I couldn't.'

I stretched the fabric of my top over my nails, watching the fine warp and weft expand and contract. Nails, beautifully painted, a cheerful shade of bright pink that I'd had done as a rare treat in a manicure bar near work. They seemed so irrelevant now, a symbol of a life that was about to end, a nod to the kind of vanity that wouldn't have a place in whatever we made of ourselves at the other end. Sam

shrieked from his doughnut in the other room. Honour giggled. I had no choice now. I had to move on.

‘Technically,’ said Rocco, taking hold of a piece of hair at the nape of his neck, and twisting his body in an attempt to see what he was doing, ‘I’ve broken the secrecy clause in my contract by telling you about it. And if we run, I’m fucked anyway. But they’ll think I’m worth looking for, Mei, because I co-ordinated the whole damn thing. I was in charge of the development team. I know everything about the project and its potential upgrades and uses.’

My mind spun. Of all the nasty surprises I’d prepared myself for, my husband having lied about his job wasn’t one of them. ‘But if you were heading up something like that, we’d have a mega-pod with a private garden on a gated stack somewhere, not a shitty little place like this!’

I scrambled to my feet and prized the scissors from Rocco’s fingers. His arms dropped to his sides.

‘My enhanced wage was been diverted into a savings plan that you and I were supposed to access once we retired, along with the regular pension. Something to keep loose lips tightly closed and to uphold the secrecy of the work. They always held it over us that if we didn’t play ball, we wouldn’t get what we were due. And now it’s gone, Mei, all gone –we’ll never get the mega-pod or the private garden, we’ll never get to live in a gated stack. We’ll never be safe.’

The scissors dropped to the floor and landed with a clang amid Rocco’s hair. My hands found my face and quickly wiped away the silent tears that’d begun to spill over my cheeks, tears as much of rage as of sorrow.

‘We aren’t safe here anyway. It’s always been an illusion.’

‘Please, Mei,’ Rocco took my wrists and pulled my hands from my face. My fingers were hooked like animal claws. ‘I did it for us. I couldn’t have told you before.’

‘I know. We both did what we thought was best. But we have to get out of here. You know where the cameras are. We’ll hide our eyes. We’ll walk between stops and change lines so that surveillance can’t tie the ends of our journey together. I’ll pay for the tickets on the untraceable.’

‘What untraceable?’

‘The one I bought a few days ago.’

‘Where did the credits come from?’

‘I sold the painting.’

Rocco turned to glance over his shoulder, towards the sooty smudge where the picture had once hung. ‘You’ve sold that woodland thing you inherited? The one with the red-haired girl?’

‘Yes.’

‘Well I hope the damn thing brings its new owner more luck than it’s ever brought us.’

I pulled on the body suit. The heels were too high but they complemented the look, and, with a fair hair piece, a hat, and a colourful blouse, I didn’t recognise myself.

Honour was already at the door, old enough to know that something was going on but not mature enough to understand. She peered in at us. ‘I have a new mummy and daddy!’

‘Come here, sweetie. It’s time for that nice new hair-do.’

I let out Honour’s braid and combed her hair through quickly, snipping the length in sections. Strands tumbled down her back and fell on the floor. Her chin began to twitch and her eyes filled with tears.

‘It’s called a bob cut,’ I said, pulling down the mirror. ‘Look at how pretty you are. It’s what all the big girls in the next class are having. You’ll be just like them, now.’

‘You look beautiful,’ Rocco hugged Honour and wiped her wet cheeks.

Honour nodded solemnly, unconvinced. Rocco fetched Sam. The baby didn’t struggle when I began to snip. His dark locks gave way to an uneven fluffy stubble which made him look even younger.

‘We need to put all this crap in the incinerator,’ said Rocco, toeing a fallen water bottle towards the pile of hair. ‘If they come looking and they find it, they’ll know exactly what we’ve done.’

He pulled out a long-handled sweeper and made a clumsy pile of the detritus. I passed him the baby then got down on my hands and knees with a brush pan. When we’d finished, and everything had been pushed down the chute, I set the incinerator, changed Sam’s nappy and put the new clothes on both children. We put our contactors on the kitchen side.

‘Anybody puts a trace on us, at least ditching them here won’t arouse suspicion,’ I said.

‘At least not for forty-eight hours.’

We checked the rank of cams over the kitchen sink, and waited until a small group returning from work had passed. We left the pod with our heads down, dragging the wheelie bags behind the push chair. I glanced back at Mrs Bacon’s. Her door was closed. Sooty sat on the kitchen windowsill peering out from underneath a half-mast blind, watching us with her big yellow eyes. I hoped that Mrs Bacon would be there, to throw me a knowing smile from underneath the blind, but of course she wasn’t.

When she discovered we’d gone, whether from her carer or her son or even the info-channel, Mrs Bacon would forgive me for not saying goodbye.

I knew that, as a mother herself, she'd understand.

*

Julie

The Homestead

Diary

Some people say that miracles *do* happen.

I was never a believer myself.

Until two things I've seen recently that changed my mind.

A family of four somehow got from Edge Station into the exclusion zone and through Blackwoods without being detected. They were in a bad way when we found them, the children filthy and hungry, their water rations gone, but I've got to hand it to them. They'd survived a cougar attack, a nasty dose of mushroom poisoning and the early stages of what used to be known as 'trench foot'. They were smart enough to pick up on the signs I'd left to let them know we'd gone to lower ground for winter. They're the first who've made out in years.

The woman is called Mei Ling. She's eager, smart and useful. I like that; there's plenty I can do with her. The husband, Rocco, we can work on. He's been in an office all his life, so he's used to spending every day on his arse, but Mackie is teaching him

carpentry and Jamila is showing him how to cut peat. He's willing, if a bit soft-skinned. The kids are a welcome addition. We need younger ones, so that they can take over when we're done. The girl is adorable – bright as a button. The boy has a condition that looks to me like Fragile X. Although of course, they never had him tested. As soon as I pulled them out of the ditch I saw the baby and knew why they'd run.

They used to say, in the old world, that Fragile X brought so many developmental problems to children that their future was impossible to predict. Could they learn to walk unaided? Could they live a productive life? Well, my late mother's old uncle did both those things, and he had Fragile X. Yet the powers that be have decided these children should be removed, for the good of society. Whatever next – a cull of the elderly? Death to everybody with a predisposition towards arthritic joints? In principle, the Gene Inspectorate might be trying to solve society's problems, but The Ripple Effect has no humanity.

We knew of others who ran, of course, and we knew they'd been picked up but we'd no idea what happened to them after they were caught. Every so often the airborne police set out over Edge Station and Blackwoods to fly above the barrier and slit the sky with searchlights. We hear distant laser fire. We figure it's their way of reminding us that society still exists somewhere beyond our borders, like an open sore you don't really want to think about.

But it's illogical that they should be frightened of us. Maybe we stand for something they don't want to have to look in the face.

I could go on about the stupid mistakes successive governments made that caused an exclusion zone in the first place: the fracking and the mining; the 'safe' uranium that didn't turn out to be quite so safe after all; the solar catchers that broke down and poisoned the air; the endless, noxious landfill; the dead bees and the polluted, plastic seas. But what would be the point? To me, it's an exhausting graveyard litany. The government sees no point in looking back. Looking forwards is more positive than asking how things went so wrong in the first place. And so they work on their Ripple Effect, controlling genetics, setting smart folk to work on renewable this and inexhaustible that, making less toxic uranium to power the conurbs and developing solar screens that won't degrade and poison us all. But we lost faith in them a long time ago, because for every generation who gets it right, there are so many who get it wrong – usually those who are too damn blinded by the lure of wealth to care.

So, there's my first miracle, the family who made it here to join us against all the odds. Right now, they're somewhere behind me, the adults digging a new draining ditch, the girl Honour learning to tell the different between poisonous mushrooms and ones that make good soup, the baby watching from his basketwork pen.

Now here's the second story of strangeness and miracles.

It concerns a black cat.

We had no idea where the cat came from. It just appeared one day, as though it'd stepped out of the trees from another time and place.

She was already tame. She brought a kitten on her third or fourth visit. There might've been others, but if so, they're dead now. The kitten was the double of its mother. But the kitten drowned in the new well.

We call the mother-cat Sooty.

She comes and goes as she pleases. She catches rats and rabbits. Sometimes, she scrounges scraps from the grill bay, not that there's ever much to spare.

A while back, Sooty vanished into the woods. She was gone for several days. When she came back, she was covered in paint – proper artists' paint, the sort that I remember from childhood, stuff that comes out of a tube in oozy worms. Sooty had a big dollop of red on the back of her neck and some ochre along one flank, as though she'd brushed past a wet picture and smeared it on her fur. I grabbed a cloth and cleaned her up. She seemed better-fed, as though she'd spent the days in absentia living in the lap of luxury.

I have wondered, sometimes, whether there's a second community out here in the woods, people living like us, but keeping their heads down. If a cat can travel between our community and another then it stands to reason that we aren't so

far apart, doesn't it? But the truth is, I can't see how anybody else can be out here – not within a cat's easy travelling distance, and certainly not folk who have the luxury of painting as a hobby. We've roped off all the best grazing, we've got fish traps at the weir and lookouts on the mountain pass. So, if there was anybody out here at all, even hiding in the woods, we'd know about it.

Yesterday, Sooty disappeared all day and came back with a ribbon tied around her neck. It's pale in colour, with a little tassel on it, made from a strange kind of cloth, very similar to what we weave here for ourselves but finer, as though whoever made it has already perfected the skills we're trying desperately to hone. The children – and we don't have many – have all denied tying it around the cat's neck, of course.

Perhaps the paint, and the ribbon, are like a message in a bottle – a sign that some journeys defy explanation.

Maybe the white ribbon means there are others like us out here after all. Or perhaps that cat can get to places we can only dream of, on a special, secret path untouched by our human selfishness and stupidity.

How I wish that Sooty could speak.

Chapter V - Communion

Thirdday, Week 41, 2116 CE

The lights came again, last night. Even with the blind down, they sliced through the dark around the edges. There was no sound. It's settled into a pattern, now: the lights; the paralysis; the figure at the door. They strapped me to a gurney again.

I saw my face reflected in the surgeon's eyes. The female was behind him, talking, but not with spoken words. Her voice was in my head. *We need a sample*, she said. *We need you to provide it*. Then the metalwork came close to my face and I passed out, the same as always.

This morning, I'm sore. There's blood on my pillow, and a new scar on my stomach. I could be going mad, but for the physical evidence. I need help. I'm not sure what kind of help, but I know I need something.

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'Drape your hair over your shoulder,' said Lloyd, gesturing wildly with his paintbrush. 'I want it cascading, water-falling...'

I changed position. He dodged around the bench to look at me from different angles, assessing, measuring with his brush outstretched, dropping globs of paint on the floor.

‘And push your tits up a bit. Head back. Orgasmic expression. That’s better.’

I stared at him from underneath lowered lashes. ‘I thought this was a formal nude.’

My voice sounded tired and slightly sour, the way it sounded more and more often with Lloyd, ever since I’d caught him with the naked girl. He’d said she was a wannabee model on a try-out but the lights were low, his paints were packed away, and the clincher, the real clincher, was that he had no trousers on. The girl, what there was of her, a tawny-skinned scrap with almond eyes and a tattooed ankle, had actually smiled. Then she’d pulled a faux fur coat over her skimpy undies and left, and we’d rowed and Lloyd had told me not to be so fucking possessive. I’d pointed out that perhaps he shouldn’t be fucking, full stop. Since then, we’d called an uneasy truce. I was his muse, after all – I’d left a hospitality job with promotion prospects because Lloyd needed more of me. Or so he said.

‘That’s perfect!’ Lloyd jumped back behind his easel, stepping in the paint he’d dropped. ‘The sun’s in your hair. You’re burning, Izzy, you’re on fire – my Nu-Raphaelite princess.’

‘Why can’t you use a digi-mapper? Holding poses for this long hurts.’

Lloyd sighed. ‘You don’t have enough reverence for the proper way of doing things.’ His head appeared briefly above the canvas. ‘In the days of the great masters, students’ easels would be four floors down from their models.’

‘And your point is?’

Lloyd grabbed a tube and squeezed an ochre worm onto one of his many palettes. ‘You needed to be able to observe, to mentally imprint, to find a route on

your own. A true artist doesn't use digi-shit to do all the work. A true artist negotiates a way through the forest. It's a skill.'

Digi-shit was earning Lloyd's contemporaries a lot of money – studio commissions, *trompe l'oeil* in posh apartments, portraits of rich kids on their prom nights. Lloyd, on the other hand, was flat broke. He'd been on the edge of his first exhibition since we met and he fell in love with my hair and said he had to paint me. He'd painted me forty-seven times and had introduced me to more sexual positions than I could name, but 'The Big X, his promised exhibition, still hadn't happened.

At the end of the unmade bed were a disorganised stack of canvases. The one at the front was painted in muted shades of brown and black showing a grille of tree trunks. At its centre, a sudden shock of colour almost hurt the eye: a girl who crouched, naked, in a foetal position, pale skin covered by a blanket of red hair. She'd just got up and looked ready to run. The girl, of course, was me - the picture was called *Woodland* and was completely different from the other nudes I'd posed. I didn't like it.

'And don't look at my work like that. I'll be finished when the time is right. I'm a perfectionist.'

Something was tucked into a small space between the canvases. I straightened up. Whatever it was saw me and drew back.

'Izzy, you moved again.'

I drew one arm across my breasts and pulled my feet up onto the couch. 'What was that?'

He followed my gaze.

'Behind the pictures?' Lloyd put down his brush and palette.

'There,' I pointed.

‘Down *here?*’ Lloyd crouched by the bed, peered into the stack of canvases and rubbed his fingers and thumb together.

The head of a small black cat appeared. I dropped my arm and unscrunched my legs.

‘Hello puss. I didn’t know you were in here. Must’ve got shut in when I went out this morning.’

The cat slid from between the canvases warily, its big eyes unblinking. It stared at me as though it’d never seen red hair before. Maybe it hadn’t. Lloyd stroked its head.

‘Does the landlord allow pets?’

Lloyd shrugged. ‘I’ve no idea. It must belong to a neighbour.’

The cat rubbed his hand. It was completely black with no white hairs at all - a proper witch’s cat with a long tail and golden eyes, the kind you rarely saw. Above the cat’s trembling tail, sun shot through the fan light and pierced the thin fabric of Lloyd’s top, silhouetting the outline of his shoulder and one muscled arm. His dreadlocks hung like delicate fingers around his neck. I’d wished a million times that he wasn’t so damn pretty, or that I wasn’t so damn weak.

‘I don’t know where it lives. It just kind of appears and disappears again.’

‘It likes you.’

‘All animals do,’ said Lloyd absently, still stroking. ‘Oh fuck it, let’s stop work and go to bed. I want to make love to you.’

I stood up and reached for the robe at the end of the couch. Today, it smelled of me. ‘Sorry, can’t - I’ve places to be.’

Lloyd didn’t get up. His fingers hung limp over one knee. The cat headbutted his hand.

‘You’re kidding me, right?’

‘Yeah, just like you were kidding me about your new model,’ I pushed my feet into my shoes.

‘Oh Izzy, don’t get all possessive.’ Lloyd stood up. ‘You’re as much of a free spirit as I am.’

The cat wrapped itself around his ankles, folding its supple body back on itself, its purr vibrating the air between us. The girl in the woods looked at me with one ochre eye, fragile and tormented. Lloyd had caught my state of mind perfectly that day, and I hated him for it.

I slid behind the privacy screen and threw the robe over the top, pulling my clothes on. My fingers fumbled my hair back into a ponytail, and I shucked on my jacket. When I stepped out, Lloyd was standing next to the easel, hands in the pockets of his baggy trousers, a hunk of pure gorgeousness with wide eyes and a wilted expression. The cat regarded me, unblinking, from his feet.

‘What, is this the sulk treatment? Aren’t you speaking to me now, Izz?’

‘You know I’ve got some personal stuff going down at the moment,’ I said, rearranging my hair. ‘I have an appointment. I told you yesterday.’

Lloyd shrugged. ‘I forgot. You never mentioned it when you came in.’

‘Should I have? Free spirited love and non-possessiveness aside?’

He turned to the fridge, pulled out a bottle of water, then ripped a chunk off something pink that sat on a plate, and tossed it to the floor. The cat gobbled it up. ‘Message me later.’

‘Course.’

I slid out of the door onto the gallery landing. It auto-closed behind me, shutting in Lloyd’s weak goodbye. On my way down, I passed doors lined up like dirty teeth, cubes of compressed refuse, and discarded personal items: a child’s

broken air-scooter; a green plastic shoe; a length of tangled black ribbon, shining like spider silk. I'd never liked Lloyd's block. Something about it gave me the creeps.

Outside, I took the flyover. Weak sunlight broke through a smattering of raincloud. Ads sprung out as I passed, pixilating into sparkly shards and falling away. One day, Lloyd's exhibition poster would be here, too - everybody would know the name Lloyd Bennet, and everybody would recognise me as his model, the original Nu-Raphaelite muse. So far it was the best route I'd been offered out of my crappy life.

I reached the tram hub and hopped on one bound for town. The rain-stop protocols were working for once, the ped district flagstones still dry. I got off at citymosque and turned back on myself, heading for the little gap between the high-rises that mobbed the old cathedral spire. The lane had become so familiar of late that I could name every damaged poster shedding broken holograms from the walls. Except I never spoke about my visits here. Mum suspected, my brother had no idea, and Lloyd had never asked.

I found the door, and stepped inside.

'Welcome, friends.'

That's how it started every month.

Then came the witness accounts, recalled memories, notes about favourable hypnotherapists, new angles on sightings and memory-dreams. This wasn't my story, you understand - it was my aunt's. Her name is - was - Roxy. She believed in silent flying craft and in alien abduction. Then one day, she vanished.

My late father had written Roxy off as mad. He used her artwork, the pictures I'd clung to after she'd gone, as proof of her madness, which made Mum cry. Eventually, I needed to understand. That's how I'd ended up here.

‘Izzy?’ A girl with cornrow plaits slid into the chair next to me. ‘I have news that might interest you.’

‘Sasha – tell me!’

‘The drawings you showed me last month – your aunt’s?’

‘Yes?’

‘We had a sketch class. You know, for memories of abduction craft? I organised it over the net. I didn’t include you because you aren’t really an abductee.’ She looked sheepish, and I was reminded that I didn’t quite belong here, that I’d be forever the outsider. ‘There are three sketches in the selection identical to one your aunt recorded in her artwork.’

Suddenly my mind was spinning. ‘Who drew them?’

Sasha glanced around the room. ‘A couple of them haven’t made it to this session but the guy over there in the corner, the one in the patched jacket?’

He stood by a window, his silhouette a sharp-cut vignette against the cityscape. I recognised him, although I didn’t know his name.

‘That’s Derrin. Go talk to him. Say I sent you, and tell him why. Good luck.’ She stood, stirring the air and leaving a trace of sharp perfume in her wake.

Derrin was absorbed in his contactor. His face was unshaven, but not fashionably so; his hair was streaked with grey. I introduced myself.

‘Hey Izzy, nice to meet you. Wow, love the hair. Pull up a chair.’

I sat.

Derrin launched into his story without any prompting. He spoke fast, waving his slender fingers continuously. The grace in his hands suggested an artist. Perhaps he was a sculptor; maybe he modelled miniature alien craft.

‘It was such a relief to come here, and to meet these guys,’ he glanced around. ‘They’ve kept me sane.’

As Derrin talked, I thought of Roxy and wondered whether she’d had chance to meet others like her. I remembered her endless nico-stix, the vapour puffing around her face, her nervous fingers. She’d shown me the scar on her stomach, told me about the surgeon and the samples. Maybe I was the only one who’d wanted to listen. I was only a kid. Eventually, Derrin seemed to run out of words and slumped like a power toy that’d suddenly lost its charge.

‘Do they still come for you, Derrin?’

Derrin looked out of the window, over the city skyline into the barriers, but his eyes didn’t focus. ‘It’s been a while, now.’

‘And your pictures?’

‘Oh, of course.’ He began scrolling on his contactor. ‘I started to sketch to keep a record of what I remember, as therapy. Like a lot of us,’ he gestured around, ‘I didn’t always remember being returned, but I remembered the traction beam, the paralysis, and the craft. I was big into cars when I was a kid. Toy cars of course,’ he laughed, setting his skinny ribs shaking inside his tee shirt, ‘so I remembered the underside clearly, the bit I got to stare at while I was being taken up over the roof of the house. Pipes and casing, that’s what sticks in my mind most – dark, labyrinthine, complex stuff that you couldn’t dream up. That’s what I focussed on in this sketch. Here it is. Sasha says your aunt drew one similar?’

Derrin turned the contactor towards me. The sketch was incredibly detailed, showing a latticework of tubes and plates that fitted together in a complex puzzle. It was executed in greys and blacks, with a sheen of white here and there to indicate light reflecting off a smooth surface.

‘My aunt did one like this in charcoals,’ I said. ‘It’s very dark and metallic. I have it in my kitchen, stuck to the ute.’

‘Is your aunt here today?’ Derrin glanced around.

‘No,’ I said. ‘She... she died some years ago. I inherited her artwork.’

‘Oh. I’m sorry.’

‘I was a child at the time. But I remember her so clearly, and the stories she told. And I just...’ the words were lost, suddenly, in a tangle I couldn’t unravel.

‘You want answers,’ Derrin finished for me. ‘Because your aunt wasn’t able to convey everything you needed to know. You need to close the case, to solve the mystery. Was she mad, or wasn’t she? Izzy, there isn’t anybody in this room who wouldn’t know how you feel.’

Something resonated between us then, a kind of understanding that transcended the things that made us different, like a thread of fine silk that vibrated a message of discovery and loss. Derrin felt it too. He reached out awkwardly and squeezed my hand. His fingers left a vague imprint of blanched flesh on my own.

‘After being taken for the umpteenth time,’ he continued, ‘memories started coming back to me. I remembered the tests, the others, the implements the tall ones used. When it was over she’d be there again, the one I called the little grey lady. Whenever she appeared I knew that it was time to go home. Eventually I’d wake up the next morning no longer having pissed my pyjamas. Sometimes I got a bloody nose, other times the feeling that somebody, something was trying to communicate with me from somewhere inside my head. Did your aunt ever talk to you about that?’

‘If she did, I don’t remember. I was so young.’

Derrin shrugged. ‘You know it’s about the genetics, right?’

I shook my head.

‘You know, the way the greys need our DNA? Nobody knows why, but it comes back in the memories. They take samples. We have something they need.’

Derrin's words, both confusing and shocking to me, had been delivered with insouciance. The smell of coffee turned my stomach. The air became oppressive, the walls too close, the light through the blinds too bright. I stood up, my head spinning. Derrin sprung up too, slopping coffee down one leg. He grimaced.

'Look, if there's anything else you want to know please don't hesitate,' he said, putting his cup on the chair. 'I'm here every month.'

'How many of them – how many of you – disappear?' I said.

'What?'

'Like my aunt. How many go missing and never come back?'

Derrin stuffed his hands into his jacket pockets. 'You said your aunt died.'

'I lied. I mean – we don't know. We can't be sure.' I fiddled with my collar. 'My aunt vanished. I think my family covered it up because I was only a kid. Embarrassment, maybe. About the alien thing.' I felt awkward again.

Derrin moved closer. 'Look, if it helps, your confusion is normal. Oh boy, I don't believe I just said that.' He gave a raucous laugh. 'It's something I've been told so many times. But seriously. Have you heard of H38?'

'You mean the drug?'

'It's a legal high, Izzy. It's a gateway drug, a quest experience.'

'And?'

'H might help you find the answers you're looking for. Go quest it. Look for the gateway, the path through the woods. Find your aunt.'

I searched his face for a trace of humour, or a hint of insanity, but found only earnestness.

'What do you mean?'

Derrin glanced around and lowered his voice. ‘Please don’t dismiss what I’m saying. Do some background research on H38. I wouldn’t necessarily recommend it to everybody but in your case, I think it might help. I can see that you’re an artist.’

‘I’m an artist’s model,’ I corrected him.

‘No, you’re an artist. You just don’t know it yet.’

A small, strangled laugh slipped from my throat.

‘Seriously. H is an artist’s drug. It works for us better than anybody else. Something to do with the way our brains are wired.’

Derrin pulled out his contactor and hit the screen. My pocket pinged. ‘If you ever need to talk, call me.’

I picked up my jacket and bag. ‘Thanks, Derrin. It was interesting meeting you.’

I turned away and hurried to the door, feeling his eyes on my back all the way out. Roxy’s face burned into my memory, her long red hair flashing in the light, her voice unchanged despite the years. *I like talking to you because you believe me.* It was something she said to me regularly. And here I was, running down the stairs as though I could turn my back and shuck off the memory, just like that.

Later, as twilight turned to darkness, I sat on my little sofa staring at the kitchen unit opposite, where Roxy’s paint-and-charcoal sketches hung like tattered bunting. I’d promised Mum I’d get them framed, but I’d never been able to afford it. Those sketches had caused her to say many times in a sad voice that Roxy ‘saw the world in a different way’. Dad had repeatedly called her nuts. And then, she’d disappeared. Just like that. She’d gone to work one night and had simply vanished

as though she'd taken a tea-break somewhere secret and had accidentally lost the thread to pull herself back.

On the tiles below the ceiling, my cameras watched walkways that ran a maze now turned to monochrome, some with dead-end hedges framed by benches, others opening out into gardens that bent under the weight of the wind, the plants shuddering while rain cried tears down the lenses. The layout reminded me of Lloyd's *Woodland*. It, too, had a lacework of overgrown paths that wove between the trees and led to the cowering redhead folded in its centre. It was the one portrait that he hadn't asked me to pose for, creating it entirely from memory. When I asked Lloyd what'd inspired him to do it, he'd said 'It's you, Izzy,' and I'd said, 'So are all the others,' and Lloyd had replied, 'No, you don't understand. This is you inside *and* outside. It's more than just a portrait.'

I never really knew what he meant.

*

On Fourthday, Lloyd decided to paint me draped in faux fur. It was thick and black, deliciously soft, and looked as though it'd come from a film set.

'I'm setting this one in a castle, against very old stone walls in a tower or something.'

'Oh?'

'Or perhaps in a modern building. Like Tower Library, with sheer Perspex walls and big drops. Kind of an update the forlorn maiden code – a modern Lady of Shallot in a public library. Gives it a nice twist, don't you think?'

'Why would I be naked except for a fur stole in a public library?'

Lloyd's head appeared over the easel. 'You aren't *you*, Izzy – I'm just borrowing you to play a character for me.'

'But why would *anybody* want to be in a public library wearing nothing but a fur stole?'

'You could at least make an effort to be on my side.'

'I am,' I said, straightening up.

'You've moved.'

'Sorry.'

Lloyd sighed and dumped his palette on paint tubes that littered the table. 'Let's take a break.'

I slid off the couch and pulled my robe off the stand. I caught a hint of scent I didn't recognise, and sniffed loudly at the collar without taking my eyes off Lloyd's face. He laughed.

'Nobody's had that on but you, if that's what you're thinking.'

I pulled it on as Lloyd reached into the fridge and pulled out a water cannister.

'Lloyd, can I ask you something?'

'Go ahead.' He poured into two cups and passed me one.

I sat on the sofa. 'Have you ever used H38?'

'The drug?'

'Uhuh.'

Lloyd sat opposite, one leg curled under him. 'Why do you ask?'

'Because it came up in conversation a couple of days ago. I've been reading about it.'

Lloyd drained the water and put the cup on the floor. 'It isn't something I'd do regularly, and no, I haven't taken it for ages, but yes, I've tried it.'

'And?'

He shrugged, dreadlocks writhing around his neck. 'You know my take on stuff like that. Artists have always been linked to drugs. Look at the Victorian writers and opium. They grew their own poppies and made resin from the seeds, spent half their lives blitzed out of their skulls. Folk reckon that's when they produced their best work, but I'd say, what would they have achieved without the chemicals? It would've been more, surely.'

'And you believe that?'

'Absolutely.'

Something moved underneath the bed. The little black cat appeared from the shadows. Sooty regarded us with yellow eyes before sliding out and wandering silently across the room towards Lloyd, her tail in the air.

'Where on earth did she come from?'

Lloyd shrugged. 'Must've got in this morning and gone to sleep underneath the bed.' He stroked Sooty's head and scratched her chin. She flopped down onto one side and rolled on the floor. 'Artists want to expand their own realities, but when that crosses into addiction, you're ruined. History is full of talented people who've followed that demon too far and who've been pulled down into the darkness. Poets, actors, musicians, painters... it's everywhere.'

'But you tried it,' I pressed.

'I've tried just about everything, but I wouldn't rely on a stimulant. My world's colourful enough to pull inspiration from everything I see and feel,' he glanced up at me, his expression amused and lustful all at once. His eyes roamed down to my breasts. 'I don't need false idols.'

The cat writhed in ecstasy by Lloyd's foot.

'What was H like?'

Lloyd laughed. 'I had a vivid waking dream, if that's what you mean. Found myself in a forest walking down a path, but it wasn't for me. The effects wore off and I never tried it again.' He stood up quickly. Sooty scuttered across the room and slipped back underneath the bed. 'Drink your water. I'd like to get back to the canvas soon.'

I realised, then, that Lloyd only saw his own reality – he had no interest in anybody else's, whether real or cerebral. I'd considered telling him about Roxy. Now, I didn't want to. I drained my cup and took it to the sink. Sooty came out from underneath the bed and rubbed around my ankles. I stroked along her spine.

'Oh, Lloyd, she's got paint on her,' I held up my fingers, which were smeared with red and ochre.

'Bloody hell. You catch her. I'll get a cloth.'

Sensing she was about to be apprehended, Sooty bolted behind the sofa. I got down on my hands and knees to coax her out. She wasn't there. I checked underneath the bed, around the stack of canvases, then behind the screen. There was no sign of the cat.

'She's gone, Lloyd.'

'She can't have.'

'She has. And when I say gone, I mean *really* gone.' I scanned the room, confused, taking in the floorboards and skirting, the lack of furniture, the windows bare except for a blind, the absence of places to hide.

But Lloyd wasn't listening. His hands were already on my robe, sliding gently over my hips, tugging at the thin cord that I'd tied in a loose bow around my

waist, letting it fall to the floor. His lips closed on mine and one thumb brushed my nipple. He lifted me around his waist and turned towards the bed.

‘But my hands are covered in paint,’ I protested.

‘So are mine. It’s never stopped us before.’

*

Fifthday, Fivemonth, 2116

I’ve had two medical episodes since my last entry. The first was a nosebleed. It started with a crunching in the cartilage in the bridge of my nose. It happened at work. Within seconds, I’d ruined three sample slides in a pool of blood. Jett took me to sickbay, and they asked if I’d been taking drugs nasally (as if!). I took a couple of days off and promised to see my doctor. But what’s the point. If I told her I’d had a nasal probe shoved in my head, she’d get me tested for psychosis. That’s the last thing I need right now.

The second episode happened later that weekend. The pain in my stomach became unbearable. I was at home here, in my pod. It was all I could manage to crawl across the floor to the medi-box. I dosed myself with strong painkillers, then pulled my top up and checked the scar. It has changed – it’s now raised and angry, as though it’s been cut open again. I have no memory of this happening. Sometimes the memories come back much later, often as snapshots or in dreams. Until then, I have no idea what they’ve

done to me. The cut is underneath my navel, right above my womb.

I'm frightened.

*

My brother Saul and his wife Anna were already ensconced in Mum's kitchen when I arrived. They were positioned at the table either side of the baby, who was less of a baby now and more of an almost-toddler, a chubby grub bursting from the skin of his baby-gro. His limbs thrashed against the restraints of a highchair, as he dug orange-tinted pap out of a bowl with his fingers. More of it was landing on the table and his face than in his mouth. I hoped to god they didn't expect me to kiss him.

'Izzy!' Saul looked up, smiling the same smile I remembered from childhood, and something inside me twanged and catapulted me right back where to we used to be, as though the intervening years had evaporated.

'Hello, Izz.' Anna rose to step around the table and embrace me, but as always, it lacked warmth. 'Good to see you again.'

'Darling!' Mum came through from the living room with a pack of wine in one hand. 'Just in time. Could you open, and pour?'

We hugged. Mum's shoulders jutted through her cardigan like fine bird bones. Her hair was a little thinner than I remembered.

I poured wine into glasses, and listened to the small-talk: Mum's monthly visit to Dad's memorial, and how it'd needed a polish after the particularly bad rains; how the new neighbours had a license to grow real beans that had wound along the balcony and were full of buds and ready to flower ('The barrier is good

here, darling; if it wasn't, they'd have fried long ago, I'm sure'); how Saul was enjoying his promotion and Anna was using flash-card stimulus to ensure that their child had a head-start when he finally went to kindergarten. It was hard to imagine that food-encrusted wriggler as a budding genius, but Anna had determination, I'd give her that. We clinked glasses, and the baby smeared the last of the mush into his face, until thankfully Saul picked up a cloth and began to wipe him down.

Mum placed a casserole pot and vegetables in the middle of the table, took off her apron and sat. She wiped the back of one hand against her forehead.

'I'm beat,' she said. 'I used to take all this in my stride, years ago.'

Saul glanced at Anna and Anna raised her eyebrows. Neither of them looked at me, as though I wasn't part of the communication, but I knew what they were thinking, and that they'd already had this conversation. I'd just not been included in the loop.

'So, how's things?' Saul leaned in as he spooned vegetables onto his and Anna's plates. 'Still modelling?'

'I certainly am,' I said, sipping my wine.

'And Lloyd? Has he exhibited yet?' Anna wore the same expression she always did when she wound herself up to evangelise about me getting a 'proper' job.

'Soon,' I said.

The baby reached for one of Saul's hot carrots. Saul pushed his hand away.

'No, Otto. Hot. *Hot!*

'Darling, you really need to think about swapping to a different artist if you're dead set on continuing with your modelling career. Are you sure you don't want to go back to bar work?' Mum took two spoons and used them to ladle casserole from the pot. 'It's just that you were on track for promotion.'

‘I’m so over the hospitality industry,’ I said.

Anna coughed as though she’d choked on something. I helped myself to food. The meat was rack-grown, all Mum could afford, but she’d picked my favourite cut and had cooked it my favourite way. Saul knew. He glanced across the table and grinned as he forked some into his mouth.

‘Izzy, I know we have this conversation every time we get together,’ Anna toyed with her vegetables, ‘so I hope you don’t mind me reiterating that I have a job going whenever you want. When you decide that the time is right to give up modelling.’

Usually, we reached dessert before Anna started trying to organise my life. She glanced at Saul. Saul shrugged. The baby threw his spoon onto the table, sending a fine spatter of orange over the multi-ute.

‘I know you’re a big champion of art and all that,’ Anna put down her fork. ‘But you don’t have to completely turn your back on your principles if you come take up a role at the warehouse.’

‘How do you work that one out?’ I speared a forkful of green beans, hard.

‘Because we *are* art – just today’s and tomorrow’s, rather than yesterday’s.’

I opened my mouth to speak. Somebody’s foot hit mine underneath the table. Saul’s eyes were frozen wide. He shook his head discreetly. They’d obviously had this conversation before I arrived, too.

‘If only you’d come see the warehouse, you’d understand,’ said Anna. ‘You probably think that with an automated process, we’re just capable of production-line art, but that isn’t true.’

‘I have no idea what kind of art you’re capable of,’ I said, ‘and really, it’s got nothing to do with me, Anna, but if I took the job I’d need to give up my lease in

the pods, which means leaving the art school, which means no more modelling full stop.’

‘And is that such a bad thing?’ Mum picked up her glass. Her knuckles were blotchy, the skin sheened with blue.

‘Just come visit us and see for yourself,’ Anna continued. ‘We use random programming so that the canvases and fabrics come out completely unique. We also make tiles and draperies, and we’ve even got a new sculpture department.’

I put down my fork, the beans still skewered, imagining clone-like representations of Atlas holding up orbs with holographic oceans rolling endlessly down tortured shoulders, the kind that were bought by folk who had garden gnomes because they thought they were ‘retro’.

‘I cannot, no matter how hard I try, imagine bots as sculptors.’

‘More wine, darling?’ Mum picked up the pack and began to pour into my already full glass, a slight tremor in her hand.

‘There’s no benefit in getting political,’ said Anna. ‘One person’s art is another person’s junk, and all that.’

‘That isn’t a real quote,’ I said, watching wine flow down the stem of my glass.

‘Oh goodness,’ said Mum, ‘I think I overshot that a little bit. Let me get a cloth...’

‘I’m sure somebody said it at some point,’ Anna waved a hand dismissively. ‘But if you’re dead set on the control aspect, I’m sure we could always let you do some ‘real’ designing yourself.’

‘I’m not a painter,’ I said sharply, ‘I’m a painter’s model. There is a difference.’

‘The last time we spoke, I’m sure you said you were going to be a writer,’ Anna retorted.

I pushed my chair back and stood up. ‘Do you know what, my casserole is a little hot. I think I’ll take my wine and go sit for a while until it’s cooled.’

Mum gave a small deflated gasp. The baby shrieked. I stepped through the kitchen hatch. It whooshed closed behind me. The low rumblings of a hushed disagreement carried faintly into the living room.

‘...maybe she inherits it from your aunt...’

‘...now’s hardly the time or the place...’

‘...shhhh...’

I slumped in Dad’s old armchair and clutched my glass to my chest. My heart hammered with anger, but it wasn’t a new sensation. Anna had been civil when she’d first hooked up with Saul, but my brother was still married to Julietta at that point. Then he’d left Julietta to descend into lonely eccentricity and he’d put a ring on Anna’s finger pretty quickly to straighten things out, but I’d never been comfortable with her. Neither had Dad.

A digi-graph of Dad’s final Christmas hung on the wall opposite. He winked at me and grinned, and winked at me and grinned, again and again as the image replayed itself. Outside, the neighbour’s climbing beans tapped at the window. A cat sat on the balcony between the fronds. It was small and black with yellow eyes, just like Sooty. The wind thrashed bits of beanstalk and leaves around, and the cat stood and stretched, its ears flicking back, its mouth opening as though operated by a puppeteer’s string.

On a chair below the window, just within reach, was a handbag with an old-fashioned clasp. It was open. The colour was too garish for Mum’s taste. It must’ve belonged to Anna, forgotten earlier when the baby had distracted her. Little nik naks glinted from its half-spilled innards: the top of a mirror; the handle

of a comb; a retro key on a keyring of the sort that wealthy couples had gone back to, declaring laser locks to be passe. In the middle was a packet of something crystalline that shone with blue and purple flecks. It reminded me of the craft kits I'd had as a child, when I'd been given tubes of glitter to tip onto pictures patterned with glue. Except Otto was too young for craft kits and the crystals weren't sparkly enough to be glitter.

I stood up and walked over to the chair. A gust of wind rattled leaves against the window. The cat sat behind them, watching me. I looked down into the handbag. It felt like a violation, somehow, the betrayal of a sacred code that said a woman must never look inside another woman's handbag without express permission. Anna was talking to Otto in baby speech from the other side of the closed door, as though she'd taken him out of the highchair and was bouncing him on her knee. My brother laughed. The baby squealed. I bent lower over the chair. I pulled the packet from between Anna's keys and mirror. The comb handle clinked against something; the keys jingled. The contents of the packet glinted in the dim daylight, tiny galaxies of stardust in milky shades of mauve and blue and silver.

Anna was taking H.

Lloyd had called it the artist's drug.

But Anna was no artist; she was a clueless tech-head who had no appreciation for anything that wasn't mass produced by a robotic arm.

So Anna criticised my lifestyle, my choices, while taking this stuff and telling me how I could become more like her...

A chair clattered. Somebody moved to the other side of the door. I pushed the packet into my trouser pocket and went back to dad's chair. The door slid open. Mum walked into the living room, a plate of casserole in her hands.

'Here, darling, please don't let it go cold. It's your favourite. I made it specially.'

She shook a cloth out onto my knee and placed the plate in my lap.

‘Thanks, Mum. I appreciate it.’

Mum winked. ‘Anna is only worried about you. We all are.’

The packet of H felt uncomfortable in my pocket. A corner stuck through the fabric into the soft flesh of my hip.

‘It’s just that... well, she doesn’t always get her words in the right order,’ said Mum.

‘I’m sorry they brought up Roxy.’

Mum’s face darkened. She suddenly looked frail, as though the golum of age had seized and overcome her somewhere between my last visit and this one. Dad had faded in exactly the same way. Eighteen months later, he was dead.

‘I’m having that old photo of me and Roxy enlarged and framed.’

‘That’s fantastic, Mum.’

‘Well, your father’s not here anymore, darling, is he? So, I can hang what I like on the walls.’

‘Good for you.’

‘Izzy... do you still think of her?’

‘Always.’

‘Are you still... looking for her?’

I smiled and took Mum’s hand. Her fingers were cold and dry. For some reason, this upset me. I held them tight.

‘I’ve never stopped looking for her. I’ve joined every on-line forum possible.’

‘I didn’t just mean missing persons.’

‘You mean the abductee group.’

Mum inhaled deeply, as though steeling herself. ‘I suppose we can talk about it now. I just couldn’t in front of your father. It’s taking some getting used to, that’s all.’

I squeezed her hand. ‘Yes, I’m on all the abductee forums, and I go to a group, too, but I haven’t got any firm news yet. They have Roxy’s digi-graphs. I’m searching for anybody who might recognise her. But it’s been so many years...’

Mum nodded. ‘I’d better get back.’

She wrested her hand free from mine and turned away. Her trousers hung differently from her waist, somehow, as though her buttocks had flattened in the months since I’d last seen her, like a poly-clay figurine that’d been stacked before it had dried properly. She disappeared into the kitchen. The door closed on a wave of happy family sounds: Saul and Anna laughing, the baby’s shrieks, and now Mum, asking if anybody wanted more peas.

When I turned back to the balcony, the cat had gone.

A hard knot of buds rapped the glass as wind soughed through the climbing bean’s leaves.

The packet in my pocket felt a hundred times bigger than it was, as though it contained rocks.

At least, I thought, I had the decency to feel guilty.

*

Twilight came early to the pods when a storm blew over. My kitchen tiles showed a similar scene repeated from all angles, split by the occasional flare of light: empty

walkways and shadowy paths, different parts of a disjointed maze, the dark trunks of palms. I turned the heater up and pushed my feet against the vent, then pressed redial for Lloyd. His personalised message began. I cut the call. My reflection stared back at me from my work-screen. I closed the lid.

I pulled the little packet from my pocket. The crystals scratched against each other, making the kind of noise I imagined fairy cat claws might make on fairy furniture. The light was too low to see the galaxy of colours sparkle. A low rumble of thunder sounded somewhere over the complex. The hub flashed and the noise-cancelling protocols kicked in. I removed them. I wanted to listen to rain hammering the barriers; I wanted to hear the guttural rumble of thunder. I tried Lloyd again, with no success. A squall of rain hit the barrier directly overhead; the rising wind flapped it noisily.

I opened the packet. If Lloyd had answered, would I be doing this now? I pushed a fingertip inside. The crystals crept around my skin. Perhaps he was interviewing another model. The thought made my spine crawl. And yet what was I to do? Lloyd was on his way to making something of himself, and I was his muse. I was too far in to walk away now. I raised the finger to my lips and sucked. The H found my tongue and set off a tingle down the sides of my throat. In moments, the darkness in my pod thickened and turned to velvet, each shadow pulsing. I lost myself in a kaleidoscope swirl of different shades of shadow. A rush of warmth chased over my skin. I became aware of the confines of my mind, and felt those boundaries expand and dissolve.

Slowly, the walls began to change. They took on substance and texture, like trees illuminated by moonlight. My sofa and the rear wall had vanished. When I turned around, the cook-n-clean had gone too, and the door. I was standing in woodland, trees stretching in every direction as far as I could see until they vanished in the darkness, their leaves hissing softly in a breeze. But I didn't want to stand still. I wanted to walk.

My boots crackled in twigs and fallen leaves, freeing the smell of earth. Above, the sheened face of the moon peeked through branches. I found a path. It was narrow, and overgrown. I'd only seen plants like this in library holographs – ferns and ivy, brambles and wood garlic, all barely visible in the darkness. I reached out and touched a trunk. It was gnarled, with rough patterns in the bark. Overhead, branches spread long limbs into the canopy – a beech, perhaps, or was it an oak? I had no idea.

I began to walk. A breeze whispered through the leaves, the stars fading almost immediately as the sun began to rise. Somebody appeared on the path walking in my direction, a good distance away - a man dressed in a long black coat. As he got closer I saw he wore black gloves and a hat, the kind that made him look as though he'd stepped straight out of a vintage black-and-white movie. I couldn't see his face. Afraid, I left the path and ducked behind a clump of ferns.

The man continued towards me, his pace unhurried, eyes searching the undergrowth as though he was looking for something. I bent lower and hugged my knees. The tips of the fern quivered. Eventually, he drew level with my hiding place. He stopped walking. I held my breath, and turned my head slowly. He pulled on the cuffs of his gloves and readjusted his collar, all the while searching the ferns. After a few moments, he stepped back onto the path and continued on his way. I let out my breath in an exhausted gasp, and watched him until he disappeared.

I stood up. Light leeches from the sky; the day seemed to have missed full sunlight and instead was speeding from dawn back into twilight. I stepped onto the path. The smell of the forest disappeared and suddenly, I was back on the rug in the middle of my tiny lounge, watching the last of the trees blanch from the walls and vanish. Somewhere distant, a man's voice gave an anguished shout, then cut out as though a door had slammed between us.

I spun around. My pod door was closed; Aunt Roxy's paintings hung from the multi-ute, the same as always; my sofa was back in its place with the walls secure around it. I leaned against the cook-n-clean and tried to steady my breathing.

My contactor lay on the settee. I picked it up and hit Lloyd's icon. As it bleeped, I paced the room, trembling. But Lloyd didn't pick up. Cursing, I fumbled for Derrin's details. The line opened immediately.

'Hello?'

'Derrin? It's Izzy. From the group.'

Derrin laughed, a sound which pricked at my nerves. 'Hi, Izzy the Redhead. I hoped you'd call.'

'Derrin, I need to talk to you. About H.'

A short pause. 'You've taken my advice, then?'

'I already have done. Except things didn't turn out as I'd expected.'

'That's awesome. I mean, really. Where did you quest?'

'My aunt,' I said. 'I was looking for information about my aunt, remember?'

'The chick whose artwork has gone to the abduction group? Yeah. Course I remember.'

'My pod turned into a forest with a path.'

'Classic,' Derrin's voice was soft with awe.

'There was nothing classic about it. I didn't see my aunt. I was followed by a stranger. I ended up back at home.'

'A stranger?'

‘Yes. A man dressed in black. He seemed to know I was in the forest. He wore an old-fashioned hat. And I’d hazard a guess that he was looking for me.’

‘Whoah, slow down, Izzy. You shouldn’t have left. You should’ve stayed and ridden out the quest.’

‘I was frightened.’

‘Tell me about this Man in Black. What did he say? What did he want?’

‘He didn’t speak, Derrin. He showed up on the path. I hid in the ferns and he seemed to know.’

‘Describe him.’

‘Long black coat, black gloves, black hat. Looked like he’d walked straight from a retro movie. Hello? Derrin? Are you still there?’

Derrin cleared his throat. ‘Izzy, what you’ve told me is... it’s...’

‘Derrin, *speak* to me!’

‘You’ve encountered a Man in Black. An original, old-school, straight-from-the-history-books Man in Black.’

‘That means fuck all to me, Derrin. Will you explain, please?’

Derrin was pacing too, his footsteps echoing as though he was on a hard floor somewhere empty. ‘What you saw in the woods is definitely connected with your aunt.’

‘How?’

‘Because the Men in Black were believed to work for the government, way back when UFO sightings first started.’

‘I have no idea when they first started. Surely that was before we were born?’

‘Jeez yes... try the 1950’s.’

‘Is this relevant?’

‘Absolutely. Abduction was less common then. The MIB’s – Men in Black - threatened witnesses. Of UFO’s.’ Derrin’s voice was shrill and his words tumbled out too fast.

‘I’ve never heard of an MIB. What am I supposed to be a witness to?’

‘It’s your aunt. The one who was taken. That’s the only possible connection. This MIB knows you’re looking for her and he isn’t happy about it. But Izzy, you don’t realise just how important this is in terms of abductee experience, not to mention quest lore.’

I was beginning to lose my patience. ‘No, I don’t. Derrin, I don’t want to be part of your historical fantasy.’

‘Hear me out. Men in Black were thought to be a thing of the past. Nobody has seen or heard of them since conspiracy theories became so rife as to render them unremarkable. Quite simply, these men, whoever or whatever they were, and don’t forget that no government ever admitted to sending them, just vanished. They disappeared into folklore oblivion like the big black cats that lived on the outskirts of cities, remember?’

‘Black cats? What on earth are you talking about?’

‘Ok, forget the cats, forget the cats... this is living folklore reincarnated, Izz. You’ve seen a Man in Black. So, the connection with your aunt is, she obviously got too close to something. She found something out. Maybe in one of the alien craft. Whatever it was made her a target, and now the MIB has come for you because he thinks you know something, too.’

Exasperated, I paced my tiny kitchen. I was beginning to feel dizzy. ‘And could whatever my aunt discovered have something to do with why she vanished?’

‘Hell, yes.’

I stopped walking. The room, which had spun as I wove tight circles, stilled itself round me.

‘You mustn’t abandon the quest.’

‘What?’

‘The quest. To find your aunt. You got close in the forest, you must have, or the MIB wouldn’t have come for you. Go back on the quest, Izzy. Finish it. Find your aunt.’

I cut the line.

I needed Lloyd.

I wanted his breezy nonchalance, the way he’d listen without judging, the way he wouldn’t care one way or another what I told him I’d seen, so long as I stayed the night.

I grabbed my jacket and ID tag, and left my pod.

Lloyd’s door buzzer rang and rang. His contactor went into messages. I waited half an hour in the dark and the cold, then spoke an irritated sentence into the door-guard before leaving. Lloyd’s personal sign, an old-fashioned knight in armour, flashed across the screen to confirm receipt of the message. I walked back into town. I needed the air.

Shop fronts blinged with colourful lights, and sounds and scents of a busy evening spread over the sidewalks – hot food, perfume, couples laughing, the kind of normal-life things I realised I missed. I felt dislocated from reality, as though I didn’t belong.

Up ahead, a man, in dark clothes leaned against the corner of a building, staring across the tramline in my direction. One foot was propped on the wall behind him. Street-light silvered the brim of his hat. His hands were forced low into the pockets of the black overcoat, but it was a careful study in nonchalance. The set of his shoulders told me he was ready to run.

I set off at a brisk walk. I dodged between couples and off-shift workers, just missing an old lady with a bulging wheelie-bag. I ricocheted into a couple of young women, ignoring them as they called something, heels clickety-clacking a confused rhythm as they spun about like wind-up dolls. I stopped by the town fountain, my breath coming in gasps.

I scanned the walkways that opened out into the square. There was nobody in a black coat and hat. I spun around and looked again.

Nothing.

The man could've been anybody – a guy waiting innocently for his partner, or a theatre-goer idling away a few minutes until the box office opened.

I had to get a grip.

The queue for the tram was stupid, so I picked up a cap-n-cape from a dispenser and began to walk. I reached the edge of the stay-dry zone. The streets were quiet here, and rain coursed miserable rivers down the road-side gullies. Soon my feet were soaking, and I was cold. Somewhere behind me came the faint scuff of a shoe.

I glanced over my shoulder. The pavement and road were empty. The buildings were blank-fronted warehouses that used night-bots; even the tram stop across the way showed red for no current through-route. The rain began to come down more heavily, rattling on my cap and cape. I heard the unmistakable tread of a man's shoe behind me.

I ran. My follower started to run too, trying to match the rhythm of my footfall with his own. I dodged sharp right between two warehouses into a gap that most people wouldn't know was there. The alley was narrow, its walls slick with moisture, and unlit. A little square of dim light shone in the distance where the dead scrub began. I ran full pelt. The cap flew off my head. Behind me, the unmistakable sounds of a heavy pursuer reverberated in the narrow space. He slipped and staggered, then began to gain on me.

I burst from the end of the alley grazing the back of my hand on one wall, and headed into the scrub that was enclosed on three sides by high barriers. Here, illegals had worn foot-tracks in the dirt and made makeshift dens to take drugs out of range of the Guardians. Two slumped figures glanced up as I passed, their faces featureless in the dark. I ran for the far corner, where two of the panels were separated. I dropped to my knees and scrambled through to the other side.

Gasping, I turned to look through the gap.

He'd come to a halt behind the bushes. He was facing in my direction and was framed by the barriers, his black-gloved fists balling with frustration. He didn't know about the gap.

I turned and ran.

When I reached my pod, the auto-recognition let me in and sealed behind me, throwing the lights inside to full. I triple locked the door, my hands slippery with rain. I threw the security blinds then flicked on the movement sensors outside. Eventually, trembling with adrenaline, I peeled off my wet coat and dirty jeans, pulled down the settee, and spritzed myself with neutraliser.

The sensors showed nothing.

I flicked to real-view and put on every angle available.

The tiles over my kitchen unit blinked with images: the front façade of the pods, velvet-black in the darkness; four blank walkways illuminated by security

lights and devoid of human life; and the empty roof-garden where faux plants were being battered by a rising wind, the palm trunks bending. There was nobody there.

Derrin hadn't mentioned this part.

The quest wasn't supposed to spill over into everyday life. Returning from the forest was supposed to close the door on it. That's what I'd read, at least.

Was *I* the problem?

Had I somehow bent the rules, allowing the gateway – whatever that was – to stay open?

Dad had once said that madness ran in the family.

It was what happened to Aunt Roxy that had set him off in the first place.

Remembering, I was suddenly a child again, huddled at the kitchen table turning my cereal over with a spoon, listening to Dad rant about Aunt Roxy's mental health. Mum had walked away crying as Dad yelled how could Roxy have done that to her sister, without a thought? That was the phrase that stuck in my mind. *Without a thought*. As though if Roxy had wanted something different, all she had to do was think about it, and she could've written a different ending, one where she hadn't vanished.

I called Derrin. He picked up straight away.

'You didn't warn me that this Man in Black could come out of the woods and start stalking me through town,' I yelled.

'What? Izzy?'

'Yes, it's me. He followed me.'

'Oh shit. I'm so sorry.' Derrin's words tumbled out. 'This is new. This sets a precedent. Things are changing. The rules... the rules are changing-'

'Come on, Derrin, what the hell am I supposed to do?'

‘You have to find your aunt. You have to go back into the woods and look for her.’

‘And if I find her?’

‘Get her out, of course,’ said Derrin with utter conviction. ‘You need to get her the hell out of there.’

*

Thirday, Sixmonth, 2116

Things are coming back to me in snapshots, like always. This morning I was making hot tea when suddenly I felt a searing pain in my abdomen and for a second, I was back on the gurney, staring up into his eyes. Somebody was doing something to my insides. I felt a pulling below my navel, as though whoever had given me anaesthetic hadn’t done it properly, leaving me with some sensation. My hand must’ve jerked because I knocked the hot tea across the counter and scalded myself. I ran my fingers under the cold tap. I felt sick. The smell came back to me, then – I’d never remembered it before – cold metal and disinfectant. Then as quickly as it had appeared, it vanished again.

I sat down. I wanted to make another cup of tea but my hands were shaking too much. The scar on my abdomen ached. I remembered something else. I hadn’t been able to move my head

but I'd moved my eyes. I'd looked away from the surgeon for the first time. The room was big, with other gurneys and other bodies strapped to them, people just like me who'd doubtless been taken from their beds to have the tests. Around the walls there were big bottles with shapes in liquid. Something was growing in there. Some of them were twitching. They looked almost human, like foetuses or something, but half-breeds. Whatever they're doing, I have to find out. I need to know, for my sanity's sake.

I need to understand.

*

Lloyd had done it – he'd finally gone and done it – he'd booked The X. And he'd sent me an exhibition flyer, like a cupid's arrow straight to my heart, a sign that he needed me now by his side. It seemed sweeter than cloned flowers, more real than the 'date night' when he'd cooked plate-graft steak and we'd eaten at the little table with an empty turpentine jar of real grass stems between us. Suddenly, my mind rolled with unfinished sentences, half-remembered conversations, and the image of Lloyd, just Lloyd, standing there in his paint-smeared smock with his dreadlocks tumbling over one shoulder. I blew the flyer up so that it rotated in the centre of my pod, so that I could drink it in from every angle. This exhibition would change my life – our lives – forever. Lloyd was about to become a name in the circles that mattered. I was about to become immortal.

I didn't recognise the venue address. Lloyd was exhibiting with another artist, a non-b sculptor who's biog said *she* used 'the tactile strengths of modelling materials to create stability from primeval rawness', whatever the heck that meant.

They seemed to be a good match; the sculptor wasn't a fan of digi-mapping either. My hands hovered over the keypad, eager to reply. For some reason, Lloyd hadn't asked for a read receipt. I stopped. I wouldn't call him, I wouldn't let him know I'd picked up the flyer, which, I realised, had been sent by his auto-page. I had no doubt that a personal invitation to the viewing was on its way – the old-fashioned kind, made of real cardboard in a proper envelope and delivered through the post-chute, the kind you rarely saw anymore. That was Lloyd all over. I'd surprise him. I'd stay low to let him concentrate on what would be the biggest night of his life in a long time, then I'd go to the exhibition, arriving unannounced, with my hair covered in a black shawl. Nobody would recognise me until I pulled it off, and when I did, surrounded by Lloyd's canvases, I'd bring the exhibition to a silent standstill, and Lloyd would melt with tenderness and awe.

*

I had an image in my head, of a place with no ceiling, exposed pipework and hanging spots. But Lloyd hadn't chosen the gritty post-industrial unit I'd expected. Instead, my hand-held took me past the warehouse district. When I left central station, the streets were buzzing with late-night shoppers and sizzling food stalls. A short walk later, in a quieter part of town, I arrived at an inconspicuous doorway where an old-style sign saying *The Gallery* swung, creaking. It was the kind of place that Anna liked, its windows full of arts and crafts by disadvantaged community groups, the kind of pots and wall-hangings that she would've dismissed as tut if I'd made them, but with a price tag that suited her taste barometer, they became trendy.

Yet, there was something odd and old-world about the place, with its history-book sugar-pane windows and the single, empty desk in the centre of the front room. Something about it reminded me of a storybook cottage, one you

might step into and never get out of. The lighting was dim, the interior walls black, the floor in chequers that might've been expensive marble, or equally, an artful painting on concrete. I searched for a doorbell, but there was none. I checked the address again; I was in the right place. Feeling like a housebreaker, I tried the door. It opened a crack. A tiny bell tinged. It was real, like the bells in old films about yesteryear, attached to the door frame above my head. I stepped inside and shut the door behind me.

Streetlight cast a sulphurous glow across the floor. Black filigree decorations wound around the corners of the room, but whether they were painted on, or made from something solid, I couldn't tell. The vague scent of perfume and warm bodies drifted from somewhere I couldn't see. The bell stopped pulsing. I slipped my jacket off and hung it on a rack, then shook free my hair, just as Lloyd loved to paint it. I pulled the black scarf from my pocket and draped it carefully over my head and shoulders. I felt nervous, suddenly, at the thought of him, more nervous about Lloyd than I was about the pictures he'd been painting for so long. What would happen when I pulled the scarf off, and revealed myself? Would Lloyd fall into my arms with a wine-scented kiss? Of course he would. I was his muse. I *was* this exhibition.

The alcove in the back wall opened like a mouth, revealing a short corridor that ended in a door. As I got closer, the voices got louder, tangling up with the sound of laughter and the ting of glasses. I took hold of the door handle and pushed.

The place was full.

I slipped inside.

Waiters in black carried serving trays, stopping to dispense snacks and replace empty glasses. Men and women in brightly coloured clothing hovered around the base of a big statue in the middle of the room, and gathered in small clucking groups by the paintings that lined the walls. Somebody was smoking a

cigar; the place even had its own private tobacco license, not the kind of venue I would've put Lloyd at all. I was proud of him for doing all this. It was out of his comfort zone. I checked out the nearest canvas through the crowd, trying to recognise which pose it was, searching for the bright flash of orange that Lloyd so often used to recreate my hair. But there was no orange - there was no hair. I pushed my way forwards, confused. The girl in the nearest picture wasn't me. She was bony and shaven-headed, with skin the colour of latte and lips pulled into a petulant pout. She had a little tattoo on one ankle. The second canvas along was smaller: the same shaven-haired girl, this time from the back, her spine forming an elongated comma down the middle of the painting. Lloyd had caught her in a shadow, just the way he'd loved to catch me in changing light. Further along there was a set of three miniatures, each featuring different bits of the female body: a hand, its fingers long and graceful; a neck, with the clavicle underneath like the wishbone of a delicate bird; a foot, naked and suggestive of whatever was higher up, just out of sight.

I felt dizzy. I clung to the scarf, my knuckles aching, the fabric pulled down tight over my head. The crowd closed in, and faces moved in a blur. Somebody was standing by a sculpture that stood on a plinth to my right, running a hand up a sinewy metal leg; I recognised the non-b artist from the gallery flyer, makeup too heavy, hair dressed in tangled layers. A tray of canapes sailed past on the hand of a waitress. The smell turned my stomach. And there behind the plinth was Lloyd with his back to me, his dreadlocks hanging over his broad shoulders like the tentacles of some exotic sea creature, his shirt ruffled as though he'd just pulled it from the closet moments before arriving. This façade, this expensive show with its champagne-drinking clientele and skinny hairless model was not the Lloyd I knew at all, but somehow, in the middle of it all, Lloyd remained perfectly himself.

His left hand nestled in the pit of a small girl's back, resting oh-so-gently on top of the silk dress that clung to her delicate frame, fingers spread in a gesture of ownership and intimacy. My eyes travelled up the curve of her spine, seeing those

delicate bones the way he'd seen them as he painted her, until I arrived at the nape of her neck. Her hair, it seemed, had begun to grow back since the paintings, into a short flush of darkness that she'd slicked into a wave.

I felt sick. I might've been in a hall of mirrors, each one reflecting Lloyd's new model from a slightly different angle, her multiple gazes following me as I pushed my way towards them both. My eyes stung with tears. I stopped to avoid colliding with a waiter's tray but when he moved aside, Lloyd and the woman had gone, absorbed into the bodies as though they'd been a figment of my imagination.

A single tear spilled down my face. I pulled a corner of the scarf up to blot my cheek. In front of me, a group had gathered around a small, birdlike sculpture labelled 'Still Life in Pain'. I turned away and retraced my steps.

Next to the exit door was a picture of almost shocking randomness. On it, a black cat with yellow eyes was painted roughly with a scratchy brush. I recognised the effect. Lloyd had picked up that brush from a junk shop because he liked the feel of it. The cat had her tail in the air and was staring right at me. She looked poised to step out of the fancy frame, to jump down and sneak between the canvases, to beg scraps from the expensive hors d'oeuvre trays. Lloyd's exhibition had wiped me away, erased the last eighteen months of my life, but this little painting reminded me that his studio, the easels and brushes, the nights I'd stayed and the sofa I'd posed on, were as real as the black cat who'd wandered in and out of his apartment.

I left. The voices receded as I entered the corridor, dark as a tunnel, which channelled me back to the entrance hall. The room was silent and still, its tiles blanched by streetlight. Outside, a creeping mist hung in ribbons.

I pulled off the scarf and shoved it in my pocket. I took my jacket from the rack. As I slung it over one arm, something on the wall caught my eye: a small, bright flash that vanished so quickly I thought I'd imagined it. It flashed again. Some clever designer had put a small creen up there, blending with the walls to

retain the boudoir look of the room. It was an alarm panel, disarmed, of course, for the event.

Whoever locked up the gallery had to reach out to this unit to set the code. If I knew the code, I could turn off the alarm. Once the building was empty, I was free to walk wherever I wished. I could view Lloyd's work, alone – I could cry, scream, take all the time I needed to piece together how he'd re-written his life, and mine, so quickly. I could run my nails down those naked, vulnerable images and listen to the canvas tear. I could disfigure the eyes of his new model horribly; I could slit her many mouths into silent screams.

All I had to do was hide in a place that gave me a view of the security panel. A hiss of rain hit the window and cried streaks down the glass. The sign above the door outside screeched as it swung.

I had no more paid work booked in; I'd turned down a multitude of offers so that I could be Lloyd's model, nobody else's, just as he'd asked, and now the offers had dried up. I had rent to pay on my pod soon. Anna's smug face stamped itself into my head. How she'd love me to beg her for a job. Maybe I'd have to, now.

I pulled my jacket on, shifted the coat rail, and pushed myself into a corner behind it.

I slid down the wall, and waited.

*

I crouched for so long that I started to seize up. My knuckles were stiff around my knees, and my back ached. Each uncomfortable moment dragged into a minute, and then longer. The occasional shuffle of footsteps sounded from the

street, people I couldn't see casting shadows that slipped over the tiles like grey ghosts. Voices came closer to the door at the other end of the corridor, but never long enough or loud enough for me to hear what was being said. Eventually, a clock began to chime from somewhere, its weird old bell echoing through the gallery. Not long afterwards, the door opened. The volume of voices rose, and people began to trickle out into the room where I was hidden. Moments later, hands began reaching for the coat rail overhead.

'He changed his tack recently,' a man's voice said. 'Got a new model, apparently.'

'I heard he only ever had the one model. His thing is eyes, apparently.'

When had Lloyd's 'thing' ceased to be hair? *My* hair?

'She has got the most divine eyes,' said another voice, a woman, elderly. 'Who'd want a second model, when you've somebody so iconic to pose for you? What's her name?'

'Alicia Sabatini. She'll be famous after tonight. The original Nu-Raphaelite muse.'

A flush of shame crawled over my skin.

'I think we ought to buy one of the smaller sculptures,' a woman jabbed her hand into the rail and pulled off a cape that whacked me in the face. 'I don't think I've the space to display a big one... Simone, darling, can I have a word?'

I shut my eyes. I didn't want to know what other people thought; I wanted to stand in the middle of Lloyd's exhibition and *feel* for myself, look at the brushstrokes on his work, understand how he'd cut me out so ruthlessly. Maybe the little shaven-headed girl had no idea that I existed at all. Stupid of Lloyd, then, to forget to take me off the info-hub of his social media. If I'd never had the invite, I wouldn't be here in a corner in the dark, waiting...

As the last of the coats disappeared from the rail, I heard Lloyd's voice. The sound sent a thrill of recognition down my spine, chased quickly by sorrow. The non-b sculptor was speaking, about how good the exhibition had been, how many pieces had sold, in a voice that had unmistakable lilt of both male and female. Somebody laughed - a soft, feminine sound. I pictured Lloyd's tiny muse and shivered.

'Let me take you out to Cheapside to eat?' Lloyd said.

'You know I can't, I have somewhere to be in the morning,' the girl replied. 'I need my beauty sleep.'

Lloyd sighed, the familiar fed-up humph I'd heard so many times. 'Call me?'

I leaned over as far as I could and caught sight of the pair of them in silhouette, Lloyd stooping to kiss her lips, a swift but tender brush that melded them together like sculpture. It hurt.

A whoosh of cold air spun around the room, setting the doorbell pinging. Then somebody stepped up to the empty coat rack and I was momentarily unprepared for the hand that appeared and reached for the panel. The fingers tapped a six-digit code with familiar ease; I couldn't see the symbols on the pad, but I'd always had a memory for patterns. The last thing I saw as the gallery door closed was the retreating back of the sculptor, whose vertiginous heels reflected slashes of streetlight as *she* followed the usher out into the darkness.

I uncurled myself and rose slowly to my feet. Everything hurt. My spine cracked. The alarm, sensing movement, gave a querulous beep. I reached for the pad and disabled it.

The corridor was still tainted with the whiff of people, food, and cigar smoke. I opened the exhibition room door. Inside was sparsely lit. The gallery was eerily silent yet throbbled with the residual energy of those who'd recently been there. Light came from a series of windows which formed high slits in one wall.

Security spots outside threw blades of silver through the bars. Bits and pieces around the gallery were lit up, bright as sharpened knives: the legs and neck of a bird statue; the spine of Lloyd's model on a long, thin canvas; a plinth near the end of the room that carried a dark shape I couldn't make out. I reached for the light switch.

Lloyd's muse dominated the room. She looked down haughtily from every conceivable space. She lay on couches and beds, she reclined on chairs, she posed on busy streets, against walls and in stairwells, but always looking at me – at him – with that same expression, eyes teasing. Had I looked at him like that? But all I could recall was my hair, the orange cascade on canvas. Lloyd had never focussed on my eyes. Sometimes, he'd missed my face out completely.

Of course this girl Sabatini had known about me. How could she not have done? She would've known about the lies he told, the promises he was already breaking. I saw it now from the look in her eye, a fox-like craftiness which shone from the irises. She was laughing at me.

I trailed my fingers over a big, dark sculpture that sat at the end of the aisle. The ceiling spot was trained on a card printed with the title of the work, 'Home'. I hadn't recognised the sculptor's name, and yet here *she* was, sharing an exhibition space with Lloyd, Lloyd who'd had a whole life that I hadn't known about, a secret existence. I'd bet he had another flat in some other suburb. If I was to go back to his apartment now, I'd probably find nothing more than a smear of paint on the floor.

The paintings.

Lloyd had nearly fifty canvases of me – if he hadn't exhibited them, then where the hell were they?

I stood in the centre of the gallery, turning a circle like a ballerina on a child's jewellery box, rigid with grief. Despite the rawness of it all, I had choices.

Only I could decide on the direction I took from here. I could destroy the exhibition, slash Lloyd's work, pull it off the walls and trample it underfoot, leave the room, lock up on the way out, and slip away unrecognised so long as I put the scarf around my head. I could hand in the key for the pod and arrive on my brother's doorstep begging Anna for a job; I'd probably earn enough to rent a cube nearer to Mum. Or I could find myself another artist, and keep living off the colour of my hair, because thanks to Lloyd starting whispers about his Nu-Raphaelite art, and thanks to rivalrous curiosity, there might just be somebody who'd pick up his former muse.

The choice was entirely mine.

A pile of 'sold' cards were stacked on a nearby desk. Next to them, the blades of a pair of scissors glinted in the light from the closest spot. Scissors sharp enough to cut canvas, I'd bet. I picked them up. The handles were metal, cold in my fingers. Slowly, with measured steps, I walked towards the wall where the biggest canvas hung. Lloyd's bald muse reclined on one side, a dark faux animal stole (the one I'd posed with!) stretched out underneath her. I'd only seen the stole in that one session, then it'd vanished from Lloyd's apartment. It was unusually lavish for Lloyd. Perhaps the bare room and single bed I knew were less of the real 'him' than his other life, his other flat. Maybe he'd only stayed at the studio on the occasions I'd agreed to spend the night with him.

I lifted the scissors to the canvas and touched it ever so lightly with the blades, right where the girl's navel was. Lloyd had chosen ochre and off-white, the curdled colour of sour milk, which he'd spread in a circular motion with a palette knife to exaggerate the rise and fall of her abdomen. I pushed gently. The blades caught the canvas, dipping it inwards in a parody of her body contours. I released them and it sprung back into shape. Amazing how supple canvas was, how hard to damage. It would take a movement much more definite to pierce the model's skin.

I stepped back. The blades caught under a spot and glowed. I ran one hand the length of my hair and pulled it from my back over one shoulder, where it spilled down, reflected on a nearby glass case.

I lifted the scissors and turned them in my hand.

I took a hank of hair and slid it between the blades. They rang as I pressed them together. A single lock fell, the colour of flame, floating down to my foot and landing on the floor. I cut again, and then again, watching the results build up around my feet. I continued until there was no more left to grab and cut. I stepped out of the bonfire of my shorn hair and put the scissors back on the desk.

My scalp felt tufty, some hair so short it stood proud. There was something comforting in the motion of rubbing my palms backwards and forwards, as though I was touching something real for the first time in too long.

I hadn't done it to be like her, you understand. Lloyd's model, the way she looked, the fact she had her head shaved, was irrelevant. No, my hair, the very thing that paid my rent, the thing I protected when I went outside in the rain, and never cut for fear it'd damage my opportunities as a model, was simply of no use to me anymore. I had to find a different path now.

I turned around and walked towards the door. Whoever found my hair tomorrow, whatever they wanted to imagine had happened or to tell Lloyd, that was their story now, not mine. I shook out my scarf and wrapped it around my head, then turned out the lights and went through to re-set the alarm. My head felt lighter; the back of my neck was cold.

Outside *The Gallery*, the street was empty. A faint glow like distant fire hung over the restaurant district. I called an auto-cab.

It was gone midnight when the cab pulled up outside Lloyd's apartment. I sent it away and turned my collar up against the rain. The block was unusually quiet. The

main door was on auto-lock, a dim light hanging above the security panel. I pulled the card out of my pocket. The screen lit up and the door clicked. Typical Lloyd not to think to cancel it. The lobby was empty. I made my way up, past piles of detritus that nobody ever moved, along the increasingly dingy landings. The dull thump of a dance beat came from behind a closed door somewhere. Raised voices flared, too distant to hear what was being said. I arrived on the top floor out of breath. A broken light fizzed above Lloyd's door. I pulled out the card again, and the lock flicked back. I walked inside.

The blind was open. Light from the industrial units shone through the window, laying bars of shadow across the floor. The room looked the same as it always had, except I saw it now through different eyes – it was soulless. The bed frame stood in the same place in the corner, but with a bare mattress and no covers; the couch and screen were pushed back against a wall. Lloyd's easel had gone. A faint smell of turpentine hung in the air, and a whiff of ashy perfume from an old incense stick. But for the smell, the flat could've been abandoned years ago.

Lloyd's fridge was still there. I squatted down and opened it. Inside was empty, the light disconnected. I straightened up and turned around. A sliver of light caught somebody my height facing me, the head veiled in shadow. Shocked, I stepped back. The figure did the same. It was my reflection, in Lloyd's mirror - the tall one he'd covered because he'd called it a distraction. Without the drape, the intricate carvings on the frame stood out like the bones of a desiccated creature.

The canvases were still stacked underneath the bed. More were propped behind the mirror, others leaned against the far wall. Lloyd hadn't moved them. He hadn't even touched them. I slid one out. Me, the last time Lloyd had painted me, my hair a pale smudge in the shadows, its vivid orange blanched out by the night. I was an imitation, half finished, not the real thing. My face was blank. I wouldn't have known it was me if I hadn't recognised the pose. Funny to think I'd never noticed that before. Only two weeks ago and it was already another lifetime,

another girl. The next canvas in the pile was the one Lloyd had titled *Woodland*. The little frightened figure at the centre seemed to take on more meaning, now – she was me, alright, but Lloyd’s version of me, all red hair and nothing else, the kind of girl you’d look at and feel a bit sorry for. I’d been less of a muse and more of a dark kind of exorcism.

I turned the picture over and began to release the pins that held it in place on the frame, using my nails as a lever. One split; my finger began to bleed. But the pins popped off, one by one, hitting the floor with a ping, the canvas jerking back with the release of tension, creased into a shape-memory of where it’d once been. I tossed the frame onto the bed and folded the picture, flattening it as best I could. I shoved it under my top into the waistband of my trousers, and tamped it down against my stomach and breasts. It was cathartic, somehow; Lloyd would probably never return for these paintings, but if he did, he’d find the only one he’d ever regarded as the real me gone.

I sat cross-legged in the centre of the floor. I hurt, yes, but there was a curious kind of numbness to it, a finality, as though I’d known all along that this is how it would end. I’d been tracing the path to this eventual destination since the day I’d met Lloyd. I pulled the wrap of H from my pocket, tipped my head back and poured the granules into my mouth. It was gone in one swallow, spreading down my tongue, into the back of my throat, along my skin.

This time, I’d set out into the forest with a pure heart, like the grail-obsessed knights and long-haired maidens in the old picture-book Lloyd was so in love with. And if Roxy was in there, then I’d find her.

The shadows began to move, undulating as though they were breathing. The floorboards morphed into earth and tree roots, and the edges of the room sprung up with the dark outline of plants that twisted themselves out of the skirting boards and crawled up the walls. Something rubbed against my knee. Sooty had appeared from nowhere and was winding herself around my crossed legs.

Somebody had tied a collar around her neck, with a white tassel on it. Lloyd must've left her trapped inside – thank goodness I'd showed up and let myself in. I lifted her off the floor. She squirmed in my arms, her fur soft against my cheek, then jumped away. As she landed on the floor, the confines of the room disappeared. Where the bed and the window had been, trees now stretched as far as I could see.

I stood up and walked forwards, my boots crunching on dead leaves, the cat trotting ahead, tail in the air, leaping ruts in the path as though she was playing a game.

'Sooty,' I called.

She stopped and glanced back, her eyes gleaming. Then she ran on. Light fell between the leaves. It was daytime now, but misty. I turned back to look for any sign of Lloyd's studio behind me, but it had gone, swallowed by trunks and vapour fine as a muslin veil. The cat was way ahead now. I began to jog.

I ran until I was exhausted, then slowed to a walk. Sooty remained just visible. The path led endlessly on, no longer straight but curving gently, broadening out and disappearing into the trees. From behind came a rhythmic thud, like animal feet. I spun around. A boy was leading a pony with a girl on its back, walking away from me along the track. Surely, I should've passed them only moments before? The mist wasn't so thick that I'd miss them entirely. The girl's hair was pulled into untidy plaits either side of her head. She looked right at me through the swirl, and for a moment I felt a connection like the twang of a string between us, as though I knew her, and she knew me - then she'd gone, sucked into the thickening mist until she whited out. When I turned back in the direction I'd been travelling, the cat had gone, too.

The sun began to burn off the mist. The trees were full and green. Daylight cast dapples of shadow. Somebody else was on the path. There were voices, male - two of them. I slipped out of sight and huddled down in a hollow of tree roots.

The men appeared to my left, partially hidden by undergrowth. Both wore long black coats and low-brimmed hats. I recognised one as my original pursuer. He had a particular stoop to his shoulders, as though he'd trained as a boxer and forever had his fists at the ready. He stopped and raised one hand to silence his companion, tipping his head back to listen. I flattened myself as low as I could and shut my eyes, willing them away.

A moment later they moved on. A burst of muffled laughter, and they'd gone.

I climbed out from between the roots. I was thirsty, without a clue how to get back to where I'd come from, or even whether I wanted to go back at all. I didn't want a job at Anna's factory, or to end up in a cube somewhere with no real art. I didn't want to find myself flattened onto abandoned canvases, reduced to a few smudges of paint, being cast aside for a girl with a shaved head and big brown eyes. Not anymore.

I stepped back onto the path. In one direction, I'd be following the girl on the pony. In the other, I'd be trailing the men in black, who'd followed the cat. My fingers closed around a single crystal that sat in the seam of one pocket. I pressed it into the gap between my nail and my skin, and held my hand up. The crystal glittered in the sunlight, blues and purples shooting off in miniature sparks. It looked so beautiful, so harmless...

I put it on the tip of my tongue and swallowed.

It was dark. There were lights ahead, bright lights that might've belonged to an inn or a cottage hidden in the trees. Like a traveller pulled by a mirage, I stumbled towards them. I found myself on the edge of a clearing. A tangle of undergrowth encircled an area which had been flattened in great swathes as though something had rotated into it, grinding into the earth. The place reeked of crushed leaves and

earth. But the source of the lights, visible through a rim of thorn bushes, was no cottage in the woods: it was a huge craft, circular in shape, with portholes running around its middle. The sides shone with a faint luminosity that might've come from within the metal itself. A door in the underside hung open like a jaw. A gang plank rested on the ground. The wind dropped.

Roxy.

This is what she'd spoken about, painted, sketched repeatedly. This is what she'd become fixated on, before she'd vanished – a circular craft with bright porthole lights that'd appeared in the woods in the middle of the night. It happened near her workplace, and then her home, always after dark – not that anybody else had seemed much interested in those facts. The memories slid back into my mind as though they'd been waiting for the chance, along with snippets of conversation overheard through a closed kitchen door, of my parents' raised voices as Dad had called Roxy a nutcase and Mum had cried. So, what? Did it run in the family? Would I wake up in my pod tomorrow morning, my boots on the floor and my cardigan on the sofa, and start feverishly scribbling my abduction memories onto pieces of blank paper with blunt pencils, just like Roxy had done? But nobody had abducted me – nobody had brought me here, to this place. I'd brought myself. An image of Lloyd's *Woodland* came to mind, with me in the middle, surrounded by darkness and a multitude of paths through the trees that only I could choose, paths that either helped me to escape or forced me to remain, each choice a different journey. And here I was.

I stepped towards the bushes that stood between me and the clearing. The branches were thorny. There were no gaps, nowhere for me to wriggle under or slide between. I pushed with one arm, but they didn't give. Something sharp pierced my shirt, and I felt my wrist begin to bleed. I reached for my hand-held. The torch flicked on. It shone white from the top, the beam fine as taut string, hitting the branches and slicing through them like a knife through dough. A cut-

away chunk fell into the thorns, still burning. I wielded the handheld like a sword, using the light as a blade. I cut through the undergrowth in swathes, showering sparks around my feet. I pushed through the gap as the last few branches fell away with a sizzle. When I stepped out of the shadows into the light around the craft, I heard an audible pop, as though I'd broken through an invisible barrier. But there was no alarm, no sudden appearance of silhouetted figures at the top of the ramp, no shouting voices. The place felt sucked of life, empty with the kind of deadness you feel on a frozen morning in winter. My breath plumed. Overhead, a whole load of stars stuck silver needles through the black. I pushed the handheld into my pocket, and set off towards the craft.

A thin coat of ice shone on the surface of the gang plank. I put one foot on the bottom. It began to move at once, steadily, like a conveyor belt, taking me up towards the mouth of the ship whose doorway shone with a light so bright I had to shield my eyes. Moments later the conveyor stopped, and I was inside, in a corridor that was empty except for glass boxes of equipment on the walls, placed randomly, too high up to see what was inside.

There was only one door.

It whooshed back as I approached.

Inside was a twilight room, the walls lined with racks of things that twitched and wriggled like sleeping grubs. In the centre of the room was a gurney. A body lay on it, underneath a white sheet. Even before my hand reached out to twitch back the cover, I knew who I'd find there.

Aunt Roxy.

Her face was unaltered since my childhood, the little scar on her forehead still the same white, shiny streak. Her hair fanned out in long waves. She looked like she'd braided it and slept like that overnight. Her skin was deathly pale, the freckles standing out even in the dim light. Roxy's lips were blue around the edges

but not the blue of death, they were the blue of cold. I touched her cheek. Her skin felt slightly waxy, as though she'd lain there for a long time, preserved, perhaps, by a spell. I took hold of her shoulder. The bones stood proud through her skin. I shook her gently. She didn't stir.

Underneath the sheet, Roxy wore a strappy shift which reached down past her knees. I folded back the top of the sheet and lay it across her shoulders. Roxy would never have chosen anything so girly as a strappy shift. She'd been all jeans and baseball boots, caps and hair pulled back tight. When Dad had a more favourable attitude to Roxy, he'd described her as 'never making the best of herself'. Whoever had dressed her had also fixed her hair in a way she'd never have worn it in real life. She looked more like Mum. Somebody had prettied her up, as though she was waiting, in stasis, for a prince to fight his way through the thorns to wake her up with a kiss.

But she'd got me instead.

'Roxy.'

I shook her again and spoke her name softly, then louder. The third time, I shouted, and the vials around the walls began to twitch, movement passing from one to another in a wave. Whatever was inside looked like foetuses of some kind, all at different stages of development, suspended in fluid and connected by wires to pumps and drains that formed an intestine-like mesh around them. This was what Roxy had spoken about, what she'd drawn along with the craft and the bright lights: foetuses, cross-breeds she'd called them, in banks around the walls of the room.

In all those missing years, she hadn't aged a day. I'd caught her up, growing from child to woman in the time that my aunt had languished here, in the room she'd feared more than anything else. Roxy didn't deserve to be trapped in her own nightmare.

Quickly, before fear began to cloud my judgement, I squeezed behind the head of the gurney and grabbed the handrail. I pushed, but it wouldn't move. The breaks were no different to those on Otto's buggy, which Anna dumped in such inconvenient places that I'd learned pretty quickly how to shift the damn thing. I stepped on the pedal hard, then pushed and swivelled in one quick movement. Then we were off, past the writhing things in the vials, out through the door with an awkward clunk and into the corridor with its bright lights and blank white walls. Roxy's head bobbed as I shoved the trolley over the edge of the conveyor. The conveyor switched itself on and began to move against us, folding back up into the threshold, taking my feet and the trolley wheels with it. Tendrils of Roxy's red hair flew free as I pushed faster but got nowhere. I ran. Roxy's head lolled sideways, one cheekbone sheened with light. The conveyor switched up its speed with a whirr, moving us backwards faster. I ran harder, leaning forwards with my arms outstretched until at last I began to make ground and the bottom of the conveyor was only steps away. When the front wheels of the gurney hit the flattened undergrowth, I gave a final spurt. My feet connected with wet earth, I saw a gap in the trees, and leaned low over the hand-rail to accelerate. But in that moment, the world slowed down, energy uncoiling from my muscles as though it'd been discharged in a flash, the vapour of my breath hanging in the freezing air in tiny suspended crystals. I was running without moving, breathing without my lungs filling, staring right into the darkness between the trees yet unable to get any closer. Roxy's sheet had slipped to reveal one pale arm, but it had stopped before it reached the ground, suspended mid-movement. I tried to break free from whatever was holding me but moving was like wading through thick fluid. The silence quite suddenly erupted into voices that came from around and inside my head at the same time – Derrin telling me to quest, Lloyd calling my name and asking me to stay the night, the tinny little laugh of his new model girlfriend, Anna braying that it was time for me to get a proper job. And Roxy's voice, clear across the years, unchanged and achingly familiar, telling me things about the places she

was taken after she fell asleep at night, about the greys with their big black eyes, and about the half-breed foetuses that had human DNA, *her* DNA, in conversations that overlapped and blended simultaneously like a returning tide. Suddenly we were released from whatever held us, and we were on the grass framed by trees, bathed in light from the craft behind us. Roxy's eyes were open. She blinked. I was no longer afraid.

'Roxy?'

My aunt sat up on the gurney, her arms bare in the strappy top, her body twisted around as she looked right at me over one shoulder with the faintest trace of a shocked smile. Exhausted, I'd reached the tree boundary, and now, I slumped over the handrail fighting for breath. I wanted to throw up. But I had to get Roxy off the trolley and into the trees.

'Roxy, can you walk?'

'No need.'

'Roxy - we have to go, they'll come after us.'

Roxy shook her head. Her skin had a tinge of warmth to it now; her expression was calm. 'No, they won't.' She swept her hair back and for a moment it could've been a pose for one of Lloyd's paintings – she was me. 'They have what they needed.'

'I don't understand,' I said, glancing behind us at the lights, the empty conveyor still rolling, and, to one side, silhouettes of two men in overcoats and hats who stood still as stone, as though they were trapped behind an invisible barrier at the opposite side of the clearing, unable to do anything other than watch. I took my hands off the rail and flexed my fingers. The horrible freeze seemed to have lifted, but the air was unnaturally still, as though we were trapped in a blister.

'You've broken the spell,' said Roxy.

‘Spell?’

She slid her legs off the side of the gurney and laughed. I’d never heard Roxy laugh before. She hadn’t been happy when I was a child. Across the clearing, the men in black retreated into the trees, accompanied by a dog that cast a long shadow on the rutted earth. Before they vanished, I could’ve sworn one had swapped his fedora for some sort of cape, and that the other was holding a sword.

‘Aren’t you cold?’ I grabbed the sheet and began to pull it up to wrap her bare shoulders, but she shook her head and batted me away.

‘What have you done to your hair, Izzy?’

I touched my scalp. ‘I cut it.’

‘I can see that. Why?’

‘It’s a long story. And how do you know it’s me? We haven’t seen each other for years.’

‘Of course I know you. You could be my twin. I always said you’d grow up just like me. And you have.’

‘What is this place?’

Roxy stared into the trees. She wasn’t afraid of it here. Her expression was wistful.

‘It’s the forest.’

‘What forest?’

‘*That* forest. The one they warn us about. The magic forest.’

‘You’re kidding me, right?’

Roxy turned back to me. ‘This place has many incarnations, Izzy. People see it differently. Sometimes, like now with you and me, we see it as the same thing.’

‘Roxy, I have no idea what you’re talking about.’ The cold was beginning to get to me. As the H wore off, so did the bravery. My skin crawled, and my scalp prickled. ‘Please, can you try and make sense?’

‘It’s the place we find when we stray from the path. The haunted wood, the fairy grove. The land where beasts lurk.’

She was looking over my shoulder. I turned around. The portholes of the craft, still brightly lit, were crowded by tiny silhouettes of things with human shoulders and elongated heads. They were staring down at us, motionless. The men in black had disappeared. When I turned back, Roxy reached for the sheet and drew it up around her shoulders with a shiver. She was feeling the cold now too.

‘What the hell are they?’

‘You’ve no need to worry about them. They’ve got what they wanted.’

‘What do you mean?’

‘I kept a diary, for year,’ said Roxy, distracted. ‘Didn’t you find it?’

I shook my head.

‘Then your mother has it. I left it with her and asked her to read it. She should’ve given it to you. The diary explains everything. Including what I discovered, and why I’m here.’

‘I’ll ask her for it,’ I said. ‘When we get back. What did you find out, that made them so angry?’

Roxy smiled sadly. ‘They aren’t angry. They just didn’t quite trust me with the knowledge. But I found out about the hybrids anyway. I worked out why they need our DNA. I understand, now.’

Roxy was beginning to sound like Derrin.

‘Look, there’s time for all this later - how do we get the hell out of this place? How do I get you home?’

A whirring sound started up. I turned to see the elevator being drawn up inside the doorway. It closed like a mouth, sealing out the corridor light and vanishing seamlessly into the face of the craft as though it had never been there at all. The figures hadn’t moved from the windows. I felt their eyes, dozens upon dozens of them, watching.

‘You came through the forest to find me,’ Roxy said. ‘All those stories, they weren’t a waste of time after all, were they? You understood the message. You heard it, loud and clear. You might not be a prince on a white horse but I never did like that version anyway. Thank you, Izzy.’

Roxy’s hair fell like a cloak around her shoulders and she smiled, dissolving the years that’d passed. I opened my mouth to speak but before I’d formed a word, Roxy dematerialised and winked out like a vanished ghost, leaving the gurney empty aside from a crumpled white sheet that still bore the imprint of her body.

When I looked back, the craft was gone. All that remained was a huge, empty circle of flattened forest, things that’d once been trees and bushes mashed into the earth as though crushed and twisted by a giant’s heel. Something high in the sky flared violently and then, in a streak of white, was gone. When I turned back, the gurney had gone, too. Only the sheet remained, glowing in the moonlight, a crumpled pile on the ground like a chrysalis discarded after its occupant had metamorphosed. Somewhere in the distant trees, a cat’s eyes flashed in the dark, and were gone.

I stooped to pick up the sheet, but it felt wrong in my hands - the fabric wasn’t sheet fabric, as it had been, but soft like my cardigan, the one I’d left on the floor in my pod before I’d set out to the exhibition. When I looked up, the forest was already disappearing around me, flickering out in chunks as though it’d become a two-dimensional jigsaw that was being taken apart. Walls appeared and

closed in; the chill and the smell of crushed leaves evaporated. I was indoors. My multi-ute was in front of me, covered with Roxy's drawings. The door was closed, its laser lock armed. The screen of my laptop glowed a murky grey from the settee. The security tiles around the room showed monochrome views of the dark walkways and empty gardens, a bench silvered by security spots. My cardigan was in my hand.

I dropped the cardigan on my sofa. The folded canvas, which I'd taken from Lloyd's apartment and clean forgotten, was poking out from underneath my top. I tugged on one corner and it peeled away from my stomach. It'd melded to my skin so thoroughly that removing it was like pulling off part of me. I turned the folded canvas face down, and put it on the floor. I went over to the ute. The pictures were in a different order. I pulled Roxy's biggest drawing from under its magnet. I hadn't seen this one before. It wasn't the craft, or the big alien eyes she'd been obsessed with – this was a forest, tangled with great thick thorns and heavy-stemmed vines, a three-quarter moon shining down from a night sky. I dropped it on the worktop and reached for another, then another, snatching them from underneath the magnets, checking out each of the changed images. A man in knight's clothing on a white horse, slashing at some vines around the buttress of a castle; a woman weeping on a rock, her face hidden by long crimped hair. There wasn't a single picture that I recognised. But they were all worn at the edges and stained by age. All were signed by Roxy's familiar hand. There was one thing left once I'd pulled the pictures off, trapped behind a flat magnetic stone that'd been painted as a black cat with yellow eyes. The paper was different, and smaller, the script across the front not handwritten, but neatly typeset. I pulled it free. It was a funeral service card. Roxy's name was at the top. There was a date from my childhood and a time printed underneath, with an extract from one of her favourite books, a very old one. I knew the quote because I'd inherited the book after she'd gone, a real book made of the sort of paper they later banned, with notes in the margins and streaks of faded yellow highlighter all over the text. It was

called ‘Communion’, by a journalist called Whitley Strieber, who believed he’d been abducted by aliens. The quote read:

The Celtic tradition held that the veil between the worlds of man and spirit could grow thin at certain season of the year. Maybe there are seasons of ages, and the veil between matter and mind is now growing thin. It could be that thought is beginning to cross into the concrete world, or even that mind is learning how to manipulate reality to its own secret ends.

Roxy’s funeral card. She’d chosen the quote herself, before her time had come, almost as though she’d known in advance when she’d die. I hadn’t been allowed to attend because my parents said I was too young. Where the memory sprung from, I had no idea. But this new chain of images began to flow like water, picking up speed and sweeping old memories away, forming new ones with a clarity that took my breath away. Roxy was dead – a heart defect, they’d said, one that’d gone unnoticed until it was too late. It had taken her in moments. I could still hear Mum’s voice breaking as she told me the news, and her face, wet with tears. After Roxy’s death, I’d got her books and her papers, and endless handwritten stories about being lost in haunted forests or abducted by aliens and rescued, sometimes by magical beasts, sometimes by a woman with long hair and no face, occasionally by a man on a white horse who wore armour or a black cape. But Roxy hadn’t liked that last version very much.

Her own mythology was wild, eccentric and mutable, like the stories she’d told me at bedtime that’d worried my parents, who thought I might not be able to sleep. I’d asked her for fairy tales, because the prince always rescued the girl, which seemed better than alien greys and lights in the forest, to a child. But when she spoke about being taken, I’d listened, and I’d understood. And when Roxy had become lost, I had waited, and had searched the forest, and I had found her.

And so, here I was.

I pulled a suitcase from underneath my bed, slid a handful of clothes from the wardrobe rail, and dropped them inside. I emptied the cupboard with an arm-

sweep and packed everything, slipping my ID around my neck and pocketing my money card. Frightening to think how lightly I'd lived, how few belongings I had. I pulled Roxy's pictures from the multi-ute and slid them on top of my clothes. Before leaving, I compressed my sleep-sack into its pouch and tied it to the handle of the suitcase. Behind me, the folded canvas lay face down on the floor, the girl with the red hair hidden in its folds, left to be discovered by somebody else, whoever came next into the pod to live where I once had done.

Outside, security lights blazed and sensors winked. The sun was just beginning to break over the roof gardens, weak and pale. Somewhere up above, the rain shield sparkled.

I began to walk, out of the complex, onto the roadway, in the direction of the tram station.

My life, my journey – a choice of paths through the trees, ever-unfolding.

*

Firstday, Week 50, 2116 CE

I understand, now.

It's taken me a long time and I've been through a lot, but I finally understand.

But what point is knowledge, if it dies with the receiver? Of all the people that I love and trust, there is only one person to whom I'd bequeath this diary, to share everything

that I' ve learned about them and us, and how we need to help each other to survive.

That person is my niece, Izzy.

I know, one day, she' ll understand.

Chapter VI - Hybrids

I - Archer

I was five years old when my parents sold me.

I never knew why.

I remember sunshine, too bright, and the noise of a crowd. People were talking, shouting, milling around, scuffing up clouds of red dust and leading strange animals through gangways. An old woman with big hands led to me to a platform with three other children. One of them, a boy, was crying. The woman bent down and took a handful of apron to wipe his face. She whispered something in the boy's ear; he nodded and bit his bottom lip, then started to howl again as soon as her back was turned. The other children stared at their feet and shuffled into line. One of them, a girl with tangled plaits, had a shoe missing.

A crowd gathered. People started to shout and point. The crying boy's voice changed to a soft whine. The shoeless girl stared at her dirty toes. A grey-haired man eventually held out one hand and helped me down. He led me away from the market and strapped me into an old float-cab. I looked over my shoulder, back to where we'd come from. The platform was empty, and the crowd had wandered off. The crying boy was being pulled away by a tall man in dirty clothes. He caught sight of me, and opened his mouth to call out. Whatever he wanted to say, I never got to know. A moment later, he'd vanished.

Our float set off towards the hills.

The man's name was Hans. He told me that I was going to help him with his work. In return, I'd have a bed of my own, food, and clothes. I could learn to

read and write and have toys to play with. I didn't know anything of reading and writing. I didn't understand what a toy was.

Hans took me to a homestead in the foothills. He said we were as safe here as we'd ever be, considering the alternatives. The land had been flattened for miles around many years before, but Hans said that new trees were growing now, and the birds were nesting again. I'd never seen a bird before. The float stopped at a high gate. Hans let us through a small opening in one side. He closed and barred it when we were in, then pointed across the yard to a building that had crumbled at one end.

'See there? This place was once a mill. Look at the old gear. The War melted it into the wall.'

Metal slumped against sooty blocks, as though it'd fallen when sleeping and hadn't been able to pull itself back up again. It reminded me of my mum and stepdad after they took the pills from the locked box. They used to fall like that, as though they'd suddenly lost balance and had melted into a wall. Those were the times I got most hungry.

Hans said that if you looked carefully from the watchtower with hand-glasses, you could see ruined bits of old buildings sticking up between the trees. They were towers, walls and roofs, he said, poisoned by a sleeping sickness that the Great War had tainted all things with. I mustn't go out alone, said Hans, because of those poisons and the wild animals that roamed the woods. He took my hand and helped me down from the float.

Hans said he'd call me Archer. Something about arrows being straight and true. He told me he had a grandson called Avi, but when I asked, Hans said he hadn't chosen Avi's name. Avi's parents had done that, but they were dead now. They had walked too far into the trees one day and had got the sickness. It was a poison, Hans said, but he'd found a cure. He'd put it in me with a needle just like he'd done with Avi, so that I didn't walk into the woods and die too.

Avi resented me from the moment I set foot in the homestead. He was older than me, with long legs and loosely-curled dark hair. He was more like a shadow than a boy, skirting whichever room I was in, slipping in and out like a stain at the edge of my vision, spying on me through half-closed doors with those big, dark eyes. He was the one who told me I'd been bought that day at market. At first, he wouldn't call me Archer, just 'her' or 'you'. In the end Hans took Avi into another room in the house. I heard him shouting. It brought back memories of my life before the homestead. Avi ran out of the room crying, but he always called me Archer after that.

At first, I helped Hans in his work rooms. Avi was there sometimes too, but he rarely spoke. I brought Hans tools and did simple operations on the computer that he stooped over day and night. Sometimes, I brought us water from the well outside, and picked tubers from the garden. I had basic conversations with the domestic droid that seemed to amuse Avi, but I'd never seen anything like it before and when it struggled with peeling tubers in its broken old fingers, I'd feel sorry for it and help.

Later in the day, Hans would often say he had work to do that was private. Avi disappeared with him, to a room upstairs that I'd never seen. I was allowed outside into the yard to play with the dogs or to stroke the cats and kittens that hung around the homestead. My favourite was a little black cat with yellow eyes.

By the time I was nine, I was in the work rooms nearly as often as Hans. I'd fetch and carry as he directed me, and perform simple tasks with his virtual operating system. I even repaired the droid's fingers and learned how to programme her with new, basic tasks. I named her Dottie, after a girl in a story-book Hans had given me.

The following year, Hans began to teach me how to find backdoors into things we weren't supposed to know existed. Occasionally, he showed Avi and me news from the world beyond, which he referred to scathingly as *society*. These were

the only times Hans insisted that Avi and I worked together. Our last project involved tapping into a database to find out about modifications made to soldiers who protected the city. After we'd seen the specs, Hans flatlined the screens, rolled back the skylight blind and said that he had something to tell us.

'I want to make you better people,' he said. 'There are things that I can do to make you faster, stronger and smarter.'

'Like the soldiers?' said Avi.

Hans nodded. 'Yes, like the soldiers.'

That day was one of the few times I ever saw Avi smile.

*

The bronchial filter came first. Grandfather Hans explained that if we could take oxygen more efficiently from the air, then we would perform better.

'Perform what better, exactly?' asked Avi.

'Anything. Everything. When the filter is in you, you'll be able to run faster for longer, and rest for less time. You know those pigs you hunt in the forest?'

'The ones we aren't allowed to eat?' I said.

Hans grunted. 'The tainted ones, yes. Well, you'll be killing twice as many of those in half the time.'

Avi seemed happy about this, although I didn't understand why. He picked up an imaginary rifle and began to take aim at the things that cluttered the room, mimicking the whine of the laser.

'But what about me, Grandfather Hans? What will *I* be able to do better?'

Hans stopped what he was doing and reached out one hand to smooth my hair.

‘I will find you a task, Archer – a difficult task that you must complete. Something you’ve never achieved before. Something special.’

Behind Hans, Avi lowered his imaginary weapon and stared at me, unblinking. A slash of white sunlight reflected in his dark pupils. He didn’t smile.

Three days later, Grandfather Hans put the filters into our chests. He healed the cuts quickly with a special lamp and some liquid, but from the moment we were allowed out of the isolation tent, both Avi and I found breathing difficult. We couldn’t chase each other around the yard as Hans had predicted; Avi didn’t even have the strength to pull his hunting sled from the shack where it was stored.

‘I don’t understand,’ said Hans, rubbing his hands through his white hair as we limped around the yard clutching our chests, ‘I just don’t understand...’

Exhausted, I slid down a tree trunk. The kittens around the base, who’d been brought by their mother to play in the shade, skittered away in alarm.

‘Inhaling is worst,’ said Avi, slumping to the ground by the boundary wall. His lips had a blue tinge. ‘It’s too hard.’

Grandfather Hans stumped around the yard muttering to himself, his boots scuffing up dust. Eventually, he stopped.

‘I’ve been an idiot. The records I excised? They dealt with adults, physically strong specimens who already had god-knows-what enhancements. They were soldiers, not children.’ Grandfather Hans wasn’t looking at us anymore. His eyes wandered over the boundary wall and were fixed somewhere up in the clouds. His face took on the strangest expression, as though he was happy and angry at the same time. ‘It was never just about the filter. It’s about what works the thing, what

holds it in place. 'The filter needs extra draw,' he began to slap the back of one hand into the open palm of the other, something I'd only seen him do when he solved a problem. 'I need to enhance your diaphragm muscles.'

'How?' whispered Avi, clutching his pumping chest.

'I'm going to switch off a gene that halts muscle growth. Then I'm going to reinforce your muscles and tendons with a suture technique and a very, very strong material.'

'Material?' I repeated, imagining the scraps of cloth that I'd collected for my dolls from around the homestead, the ones that Hans said were made before the War.

'A material of which you've never seen the like.'

Hans turned around and headed back to the door as though he'd forgotten Avi and I in the dirt behind him. He wheeled around suddenly and clapped his hands.

'Come on, children. I'm sure you can stand and hobble back upstairs. Take the lift if needs be, just this once, as a treat. We have work to do!'

After recovering from the second procedure, I climbed the trees in the yard, higher than I'd ever climbed before. Falling did not hurt: like the cats, I landed on my feet, knees bent and ready to spring up again. Avi had until now been stronger than me by virtue of his age and height, but not anymore. We were equals, neither able to outpace the other, Avi following me as I tested my newfound abilities. I jumped onto the top of the courtyard wall and ran along its length avoiding the razors in the wire. Grandfather Hans shrieked at me to come back down. Back on the ground, I ran so fast that I cornered the yard with my feet on the wall. Avi followed – I didn't see him, but I heard him breathing hard at my shoulder. The animals scattered, the dogs barking with excitement, their hackles up. The sound of

Avi's breathing was gone, suddenly. I jumped and leapt, swinging from a low bough and forward-rolling through the air before I landed with both feet in a cloud of dust. The yard was silent. I turned around. Cats' eyes glimmered from beneath the bushes, where the mothers had called their kittens to safety. The dogs stood motionless by the well. Avi was alone in the middle of the yard, hands on his thighs, breathing hard. Grandfather Hans was pale against the blackness of the closed gates, watching. I glanced from Hans to Avi and knew, in that moment, that something between us had changed – that Avi had stopped following me, stopped trying to keep up, and in doing so had relinquished something. He spat into the dirt and wiped the back of one hand against his mouth. Hans watched in silence.

Over the next few days, things changed.

Avi, who'd laughed and smiled for the first time in a long time, returned to the petulant boy who didn't enjoy my company. Once Grandfather Hans fitted our synthetic lenses, Avi wouldn't stand in the watch tower and count crows in the trees. When our tendons were completed, he wouldn't race me. One day, Grandfather Hans told us to go outside the homestead, into the trees to catch deer and hare, and so long as they showed no symptoms we could bring them home to cook and eat. I learned quickly that I could outrun them while Avi stood sulkily with his weapon and sled.

I learned, too, that necks were surprisingly easy to break, when you knew how.

*

On the seventh anniversary of my arrival at the homestead, Avi disappeared into the woods on a hunting trip.

He never came back.

Hans spent every day for weeks looking for him, often taking the younger dog in the hopes that its nose might lead him in the right direction.

It never did.

I spent night after night in the watchtower, testing my night vision and the enhanced sight that allowed me to see the smallest thing making the smallest movement.

I didn't see Avi, or any trace of him.

The weeks turned into months, and Hans began to look frail. The veins at his throat stood out in a lacy pattern, and his eyes had a far-away look. Sometimes, he'd cry by the light of the stove when the house was dark and silent. The old droid Dottie would sit in the corner and watch, and offer to make him hot tea. Hans always said no.

When I was fifteen, on one of Hans's few trips away from the homestead, I discovered that he'd left the laser lock for his private room on the kitchen table. I don't know what made me pick it up. He'd asked me never to be curious about the room upstairs, and I'd never disobeyed him before. When the droid was in the scullery preparing food, I slipped away and used the pump-lift to the top floor. The security was much less than I'd imagined it. I walked straight inside Hans's room without so much as the request for a palm print or a retinal scan.

Inside, the walls were the colour of twilight, the same purple-grey as the bruised peaches that lay around the trees in the yard. Holograms of Avi leapt across every wall, some frozen moments in time, others, running films of him playing with the old dog Lupo or cleaning the laser weapon that Hans had given him for his twelfth birthday. He was all around me at different ages, from the dark-eyed sulky boy I'd first met to the tall, gangly youth who'd left that day and never come home.

I suddenly wanted to cry. I hadn't liked Avi, and he hadn't liked me, yet the three of us, the droid and the animals had lived for years with only each other for company. I remembered the day Hans came to the market and brought me home; I thought of the girl with the tangled plaits and missing shoe, and the crying boy who'd vanished into the crowd. I wondered what would've happened to me if Hans had chosen somebody else. But Hans had liked my spirit, he'd said. Whatever that meant.

I can't remember how long I stood there surrounded by holograms and memories, just that the door opened and let in a crack of light and the silhouette of Hans, more stooped than ever. I didn't try to hide. I stared at him in silence, waiting. Hans slumped down into a chair.

'I don't blame you, Archer,' he said at last.

I didn't respond. Avi, aged thirteen, ran laughing across the compound chased by a limping Lupo. Hans hit something on the control panel and suddenly there was sound, Avi's laughter and the old dog's excited barking, as though they were both right there with us.

'I remembered about the lock on the way to town,' Hans continued, his face a backdrop to Avi's own as the hologram played over his sunken cheeks and bloodshot eyes. 'Dottie told me you were up here.'

'Dottie? She's a droid. How could she have snitched on me?'

Hans's tired features twitched into a smile.

'Let go of it, Lupo,' Avi shrieked as he tugged a broken branch from the dog's mouth.

'You reprogrammed her too well. You remember the basic tasks you set her?'

I nodded.

‘You didn’t reserve that she should only respond to you,’ Hans continued. ‘You allowed Dottie to up her functions in respect to everybody.’

I shrugged. ‘I’m sorry.’

Hans leaned back in his chair and touched the control panel again. Everything froze, the last, triumphant grin on Avi’s face cemented to the wall, his laughter echoing in our ears. The holograms fizzled out suddenly, and Hans and I were left alone against a backdrop of twilight, the shapes of screens and stack units traced by a trail of tiny flashing lights.

‘They found him,’ Hans said.

I slid into a seat. ‘Avi?’

Hans nodded.

‘Who found him, Grandfather Hans?’

‘Them.’

‘The ones we call *society*?’

‘Yes.’

‘How do you know?’

Hans shifted in his seat. The fabric of his shirt hissed against the chair. ‘I know it. I feel it.’

‘Why?’

‘Because I have things that they want, Archer. *We* have things. The inoculation, for starters.’

‘The injections?’

‘Yes.’

‘But why would they want our injections when they can make their own?’

Hans shook his head. ‘The main reason society hasn’t attempted to take back the ground we live on is fear. They’re afraid of the poisons. All those nerve toxins, and modified uranium from the Great War. They wouldn’t dare send any of their protected number out here to claim the land. But if they discover that we’re surviving nicely, what do you think they’ll do, Archer? Hold out their hands in a gesture of friendship or gratitude? No, they’ll take everything we have. Everything I’ve worked for. And I’ll end up forced back into a government lab to design their next dirty project for them, just like I did all those years ago.’

Hans’s head was bent forwards, showing the brown of his suntanned head through his thin hair.

‘But we aren’t the only ones who live outside the city, Grandfather. Why are we special?’

Hans straightened up. ‘The injections, Archer. Do you remember the vagabondos, the wandering ones from the market?’

I shook my head.

‘You were very young. They’re almost all deformed. That’s what living out here on the edge of society does to you. The urbans know it. They’re desperate to expand but they daren’t send their citizens to die. They’ve seen the vagabondos. They know what exposure does to you. But if they discover I’ve developed an inoculation...’

‘But how could Avi help them?’

‘He couldn’t,’ said Hans. ‘And so, once they caught him and established that, they wouldn’t have let Avi live.’

I felt sick. In my heart, I saw Avi as still in the forest, his laser weapon on one shoulder and a dead boar slung over his sled, picking his way down overgrown paths, taking wrong turns then setting out anew, forever making his way back home through the trees.

‘His captors would’ve tried to get all the information they could out of him,’ Hans continued, his eyes distant. ‘The fact that nobody has come here suggests that Avi either managed to keep quiet, or that he got so lost he couldn’t send them back here. I don’t like either version much.’

I looked at my hands in my lap, the fingernails dirty from having pulled up things from the garden for Dottie to peel, the skin bruised. I hadn’t even washed before I’d picked up the laser lock and let myself in. Was that disrespectful to Hans’s secrets, or to Avi’s memory?

‘I don’t mind that you’ve come here,’ said Hans, as though reading my mind. ‘You had to know, sooner or later.’

‘Know what? About the holograms?’

Hans shook his head. He straightened up as well as he could, but his spine was curled with age.

‘I was going to wait until you were sixteen, but you’re so close.’

‘For what?’

‘You remember the day I brought you home from the market?’

‘As clear as yesterday.’

Hans nodded. Wisps of white hair floated from his temples. ‘I told you that you were coming here to help me with my work.’

‘And I have.’

‘I never told you I had bigger plans.’

I curled my dirty nails into my palms. If I couldn’t see them, they didn’t matter.

‘Did you ever wonder about the procedures we performed? The endless supplements you’ve taken?’

‘I’ve thought about them many times,’ I said truthfully. ‘When I’ve asked you, you’ve always been honest. You wanted to build me up so that I couldn’t be taken, or vanish like Avi - so that I could protect myself, and you, if the time ever came. You called me a blank canvas.’

‘Well, now is the time to be brutally honest,’ he said softly. When I moved closer, Hans’s eyes looked right through me, as though he was seeing somewhere I couldn’t. ‘We won’t be safe at the homestead forever. Someday soon, we’ll have to face them. I’m talking about *Society*.’ Hans’s face took on a pale hue, his hair a mess of white against the dark walls. ‘We cannot simply sit here surviving, waiting for them to take everything we have.’

That’s how it started.

Hans had sounded so reasonable.

He’d been a good man, in his time.

But he was also a very clever man, and, I was to discover, a very dangerous one.

Over the forthcoming weeks and months, Hans gave me more than just enhanced eyesight and tissues that healed at an accelerated rate. Hans changed my physiology to make me into a fusion between girl and weapon. He turned me into a killing machine. He turned me into the kind of thing I should’ve been ashamed to be.

And I didn’t do anything to stop him.

II - Yelena

We knew about Hans Groening from the earliest days, when he took over a bombed-out mill on the periphery of a ground zero site. We knew that he'd gradually rebuilt his lab, and that he somehow managed to be largely self-sufficient in a hostile environment. Occasionally, towncam would catch footage of him bartering at a rural market before heading back out into the wilds, but it was infrequently enough for us to work out that he didn't need to trade to survive. How he managed that, we'll never know. Those badlands were off-grid to the force, and for good reason. They were full of kids whose fathers were also their grandfathers. Some said when drought set in, the elders resorted to cannibalism. In a nutshell, we had better things to do with our time.

We watched Hans for a while, but it was never easy, largely because of his position on the grid, but also because of the renegade bands who patrolled the area our side of the forest. You'll have heard the saying that one guy's freedom fighter is another guy's terrorist. Well, those ex-urbs are misfits and renegades. Most of the time they're just an irritation, but occasionally they sortie a border patrol to steal supplies and ammo, and that causes us problems.

We were aware that Hans's grandson remained in his care, and that at some point a girl joined them, although we assumed at first that she was the strayed child of an ex-urb fighter, and that Hans would find himself swallowed up into their ilk or would be forced by aggression to give up the mill. Assuming was the worst mistake we made.

In supposing that Hans would become integrated, and in misinterpreting the appearance of the girl, we made two fatal mistakes. When the Unit scaled back operations and made cuts, we'd already taken the decision to label Hans Groening low-risk and to switch off surveillance.

We had no way of knowing that within a few years he'd have turned the girl from an ordinary kid into something other than human. We had no idea what his intentions were, what method he used to brainwash her, or what he was about to use her for. Hindsight is a wonderful thing, because by the time we found out, it was too late.

That very first time, Response didn't know to suit-up. More than two dozen had fallen in the street when Command worked it out. The mayday went out, the recall was made, and the next crew hit the street in full bio-weapon protection gear. I didn't work in the field at the time. I was still in decryption. But I'll never forget being stuck to the news channel as the second team streamed out of support vehicles in suits that made them look like huge grubs with big black eyes and tubes on their bellies. Bio kit looked pretty gross back then. Before the camera cut out, we got a view of the first team writhing and twitching in the street even before they'd reached the dead, foam filling their mouths, eyes glassy. A nerve poison, they said. Whoever dispersed the toxin had taken out an entire shopping mall complete with security, and civvies including mums and kids. Whoever had done it was caught on camera, a delicate little silhouette of a girl wearing no bio kit, stepping over the bodies and leaving in silence. She was immune to a chemical poison that we had no cure for. And that was only the beginning.

I've been with the task force three years now. It was my dream, growing up. Now every day I get to see Hans Groening's legacy. Every day I get to see the burned-out faces, twitching corpses and roll-call of the dead because even though Hans doesn't send her often, when she comes there is no warning. The list of victims is such that we're watching a population cull of the likes we've never seen before – all sent with his calling card. The flip side is, it didn't take long for the other terrorist groups and religious fanatics to quit and vanish. Guess they didn't have much to say anymore. They were as likely to wind up dead as the next guy.

Recently, we received intel that her name is Archer. It came from an unexpected source. We were contacted out of the blue by a guy called Gus who said he was once known as Avi, that he'd been reared by Hans Groening in the mill next to the accident site – the grandson. My first reaction was to order him euthanised for wasting force time but the details he gave were so compelling that I brought him in under guard. He'd risked himself by crossing ex-urb to city, so he was either insane or he had a damn good reason.

Gus, Avi, whatever he wants to call himself, is young enough to be my son, but he looks way older. That was the first thing that surprised me. The second, was how good looking he is. Gus is tall and dark haired with big doe eyes and a voice that, if he'd been civilised, might've been to die for. But I work with all sorts and despite enjoying the eye-candy, I wouldn't be so stupid. There's them and there's us, and Gus and me aren't on the same side, no matter who he chooses to snitch on.

I had the guy in my incident room for long enough to know he was telling the truth. He'd left the mill on a hunting trip one day. He'd grown tired of being trapped, as he put it. He'd described his grandfather bitterly, and he clearly resented the girl the old man had taken in.

That's where it got interesting.

It seems that Hans Groening's lab was more high-tech than we'd imagined, and that he'd begun to enhance his ward – and Gus – before the kid had left. I ran Gus through a scan and discovered that he was telling the truth about kevlarised tendons, all-round vision, and unique blood chemistry. To find out the rest, I would've had to look deeper inside him. So, I booked him in for a lab visit from which he mightn't have returned when the slippery critter vanished into the night and found his way, no doubt, back to the ex-urbs. Maybe he's smarter than he looks.

Tech that tampers with human biology is pretty special. For Hans Groening to be able to do this on his own is quite something else. Before Gus disappeared, on quizzing him about the equipment he saw at the mill, I was able to establish that the old man must've owned one very special piece of tech in order to create what he made out of the girl.

Our team said the only way that Hans could've done it was theft. Pure and simple, he'd taken some government-licensed kit to the mill with him when he'd left the city. He shouldn't have been able to. We subsequently discovered that Hans had left his former employ with a dated servile droid that scanned out at a low price for parts. Clever. Very clever. So, Hans Groening had marched off into the sunset with a full bag of tricks that nobody looked at twice, and then settled in a remote area below the radar. Then he'd turned the girl into a weapon and the rest, as they say, is history.

Gus told me all about Archer, the girl. Said she was clever, resourceful, and tough. Said she'd been sold by her parents as a little girl. It didn't take a genius to see there was bad blood between them – that much I picked up loud and clear. I also knew that I hadn't seen Gus for the last time. I'd let him run, for now, back to the badlands to live in his ex-urb band and take his child bride and eat his firstborn or whatever the fuck they did out there, but I'd get him back, and one day soon too, on my terms. Gus would become Avi again and then he'd help lead me to the girl so that I could do what I had to. I might even offer to let him pull the trigger, although of course I'd be lying.

What Gus doesn't know is that me and Hans Groening go back a long way. I'm the project he started on before he left for the mill. Only he didn't get to finish me. I prefer not to think of myself as an experiment, but as a work of art – a work still in progress. So, I guess that Archer and I are almost siblings, although she doesn't know it yet.

I'd love to see the look in her eyes when she finds out.

III – Bodymonitor 3287DX

I have downloaded my audio and visual records as requested. What follows is my own personal account, including observations and other details which I believe you will find relevant. The council is free to disregard my personal input, but I ask that it remains on file regardless. I say this in the full knowledge that, as one of the original uploaded consciousness and something of a trailblazer, my case was not always supported by members of the council. I understand that there are still those who see me as something of a chimera, possessing human weakness despite no longer having a corporeal self. In response, I point you to my seventy-six cycles of successful service, all archived, in which my judgement and abilities have never been the subject of question. This is my fourteenth council hearing.

I have been Yelena's Bodymonitor for a full cycle, roughly two and a half years. During this time, I have grown to know Yelena very well. It is not simply the physical proximity with which she wears me, or my link to her vital functions when in the field; it has become something more - the observation of her personal choices, which has developed into an understanding of the way Yelena thinks.

From the moment we were assigned to work on the Warhead case, I knew that Yelena felt differently about this than she had about previous cases. This knowledge extended to more than my recording of physiological data. You will see from my records that, at the outset, I noted raised cortisol levels, adrenaline and a higher-than-usual resting heart rate, but, knowing Yelena as I do, it was also the way she spoke about the task ahead, the way she paced our quarters up and down as though thinking too long and hard about the operation, the way she repeatedly

forgot to remove and regenerate me when our shift had finished. Yelena is a professional. She usually does not let personal opinion or emotion worry her unduly when carrying out her orders. This time, I knew that things were different.

Our first contact with Target W came three days after the assignment was finalised. We already knew where Target W was hiding, thanks to previous intel compiled by our sister department. Yelena and I had in place a system in which I would download the information given by the department, and then share it with her aurally. This is not necessarily a usual scenario, since most corporeal-human operators, if you like, prefer to be the first contact and to then allow tech to download information afterwards. However, Yelena and I have worked together in this way for a while and enjoy a relationship which, if I may, is more fluid in interpretation of working practice than some of our colleagues’.

Neither of us were comfortable with what we were told. Target W was the gravest threat we had encountered, due to the nature of the bio attacks and the element of mystery surrounding Groening’s experiments. We were to be sent into the hinterlands blind, in order to flush Target W out. A suppression team would wait at the bottom of the gulley down from the pass in which Target W was hiding, and would perform a capture. Quite simply, we needed to get Target W back to the lab and then take it to pieces to find out what Groening had done. The girl was lethal; we’d never seen anything like her before.

It was during our journey that I became convinced that Yelena was taking the mission very personally. She was distracted. Yelena paid little attention to my final briefing and seemed to want to subvert orders to complete the operation in her own way. In a private conversation before we boarded transport, Yelena asked me whether it was possible that she could speak with Target W before the team took her away. I expressed my concern that this was not part of the brief and that Yelena would be putting both herself and me at risk if she attempted communication. Yelena answered that Target W was a bioweapon and that I, with

no remaining organic parts, would not be in any danger at all. This seemed bizarre considering that Target W had exploded a number of incendiary devices to access the malls of buildings that would've otherwise been impossible to enter. I may have protective casing but even I am not infallible. Yelena seemed either not to hear me or not to take any notice.

When we set off to begin phase one, everything was going to plan. Things changed quickly when Target W was not where we thought she would be; she was no longer hiding in the caves, but had instead come downstream to bathe and to collect water. We of course had a protocol for what should happen in this circumstance, but Yelena overrode my orders and walked right up to Target W. Yelena disengaged her stun weapon and held up both hands in a gesture of surrender. My memory banks make it possible for me to quote the conversation verbatim. Yelena spoke first.

'Hey, Archer. I'm not here to hurt you.'

I detected controlled stress in Yelena's tone and a sudden rise in her cortisol levels. Target W swung around and gave a grunt of surprise.

'My hands are in the air. I said I'm not here to hurt you.'

'Who the hell are you?'

Target W's eyes were wide but with anger rather than fear. I attempted to scan her to ascertain stress levels or a potential next move, but whatever block she had in place prevented me.

'You don't know me, but you should,' Yelena said, her voice calmer.

'Come one step closer and I'll fry your face-'

'We have somebody in common. Hans Groening?'

Yelena's body was rigid - at no point during this exchange did I feel her relax even minimally, despite her obvious efforts to sound calm.

‘What?’

‘I was his protégé. Before you. He worked on me just like he worked on you. But he never finished me.’

As Yelena’s personal guard I am of course aware of her background, but, as I searched quickly for further information, I was most surprised to draw a blank.

‘They sent you here to kill me, didn’t they?’

‘No. They sent me here to drive you down the pass and have you captured.’

Target W surprised us both by turning away from us and continuing to wash in the brook. She was only a girl, small, with tight knots of muscle and long tangled hair. One memory from my corporeal days was of endlessly reading illustrated fairy tale books as a child. Target W reminded me of a pen and ink drawing of a fairy princess in my favourite story book. This was not what I had expected, given the nature of the brief.

Yelena began to walk towards Target W. Target W turned around and held out her hands. That’s when I saw the first evidence of tech. She had implants in the base of both wrists, that ran into threads that travelled across her palm and fanned out into her fingers. I upped the resolution of my optical sensors but the only thing I could tell for certain was that the implants went deep into her flesh. Whatever Groening had done to make her what she was, it was systemic, not simply a piece of kit that she carried around on her torso in the same way that Yelena carried me. This was what we’d suspected for a long time.

While Yelena spoke, I tried every scan I had at my disposal, but the girl’s tech devices used a kind of heavy shielding that I’d never encountered before. Groening was a very clever man.

‘I don’t want them to take you in,’ Yelena said.

The girl snorted. She'd finished washing now and was drying herself with a torn rag while standing ankle-deep in the water, looking sidelong at us. I have not been corporeal for many years, but I remember that human nakedness is viewed with some embarrassment, particularly in front of a stranger. Yet, Target W showed no self-consciousness at her state. Her wet skin in the sunlight, the reflection smashed by moving water, brought something back to me of what it was to be human, vulnerable, and ultimately, flawed.

'You and I are too alike.'

'Just because you knew grandfather? No, we aren't alike at all. You're from *society*.'

Yelena was confused by this, as was I.

'Don't come any closer,' said the girl. 'You know what I can do. Don't make me want to.'

'Why?' said Yelena. There was a note of pleading in her voice that puzzled me, a mournfulness reminiscent of the birds that circle the pass, those that cry into the wind.

'Because grandfather wanted to begin anew,' said Target W, more defiantly this time. 'You run things from your cities as though we don't exist. Your technology has created more problems than it's solved. Our land was ruined by the selfishness of society. Now we've taken it back, you want to stop us. You fell our trees, you dump your waste outside the city in great chemical mounds, you protect yourselves with laws and lasers but you care nothing for our survival... grandfather made me what I am to wake you up, to make you all see again, to make you feel that you, too, can be small and insignificant.'

My assessment of Target W was that she had been indoctrinated, brainwashed if you will, and possibly suffered from Stockholm Syndrome. But beyond chasing the girl down into the pass so that she could be stunned and

captured by the waiting team, my interest in her mental state had little relevance. Yelena, however, was beginning to exhibit symptoms of stress that I had never before noted on a field mission. As I have mentioned previously, I would choose the word ‘uncharacteristic’.

‘We saw Gus,’ Yelena said.

The girl stepped onto the rocky bank and began to shuck her clothes on. I searched for devices, laser weapons, grenades, anything, but found absolutely nothing. For me, it was further confirmation that whatever tech she possessed was concealed within her own body. Groening had made her into a weapon, for sure.

‘I don’t know anybody called Gus.’

Yelena’s frustration was clear.

‘He said he was called Avi before,’ I prompted, on a frequency I suspected the girl couldn’t pick up.

The twitch of her head told me otherwise.

‘Avi.’

‘Who’s that who’s talking to you?’

‘It’s my Bodymonitor.’

Target W let the zipper of her shirt go to examine Yelena’s torso for a moment. I gathered she had ocular enhancement, but that wouldn’t tell her much about me if she had never come face to metaphorical face with a jacket before.

‘What is it?’

Yelena patted her shoulders and lifted the vest part of me with two thumbs. Target W finished dressing without taking her eyes off us, and stepped into her boots.

‘You can speak to her if you like.’

‘Technically,’ I said, upping my sound generator, and speaking through my vest vent, ‘I’m now neither a her nor a him, but when I was corporeal, I was like you, Archer – female.’

Target W registered surprise. ‘How did you end up in a coat?’

‘I had an incurable cancer. I chose to become a vest instead of dying.’

Target W began to approach us slowly. I used a coded warning designed to transmit my concerns to Yelena without visible or audible trace, but she batted me aside, and at that point I had to agree with her decision, because the girl showed curiosity rather than hostility.

‘Can you take it off?’

Yelena shook her head. She was beginning to relax slightly. ‘Three Two Eight Seven Dee Ex fits directly into my CNS through secure probes. I wouldn’t begin disengagement protocol out here in the field. It would trigger the troop below. They’d swarm the pass.’

Target W seemed neither concerned nor impressed by this, but instead scrutinised the way I wrapped around Yelena’s body, leaning slightly forwards and squinting against the sunlight.

‘You were telling the truth,’ she said at last.

‘About what?’

‘Grandfather Hans.’

Target W was momentarily distracted by two birds which rode the thermals high above the pass, keening.

‘What about him?’

‘I’d recognise his work anywhere. He developed non-human body armour before he left society. But I detect something more in this one... I detect a trace of humanity. Yet I see no face. No body.’

She continued to stare at both of us with intensity. I have to admit, I was curious. Please understand, I am beyond taking offence at mention of humanity or otherwise - there are those who believe that I shouldn’t exist at all, let alone be employed in society. But today, I felt the smallest twitch of something I remembered from my corporeal days: amusement.

‘Hans Groening was enhancing me,’ said Yelena. ‘So, he joined me with somebody – something – more sophisticated.’

Technically, Yelena was not describing the process correctly, but I was not about to contradict. Although her proximity to the target was not something we had planned in this manner, I was aware that it was likely part of an improvised plan to get the girl where we wanted her. Yelena’s readings still did not ‘feel’ right, however. We are not permitted to improvise in field missions unless something has gone irrevocably wrong with the field plan. It had not, but I had two choices: to either contact the team and have them relieve Yelena of duty, or to go along with her. I opted for the latter, as I had no reason to believe at that point that the mission could not be completed successfully.

‘Grandfather Hans would not turn a person into a jacket,’ Target W said at last, with finality.

She turned around and walked back towards a kit bag she’d left on the ground.

At this point, I prompted Yelena to use her stun unit, not once, but three times. Target W was not focussing on us, she was engaged in collecting things she’d strewn by the banks of the brook, and was slinging them into her bag. But Yelena would not engage her weapon. I informed her that if she was not ready to

engage a stunner that I would. She disabled me before I had chance to focus my sights. She should not have been able to do this.

I am not used to feeling impotent. Although it may look to hominids as though I simply hang in a cubicle to regenerate when not in the field, during this time, I dislocate from my jacket and I am able to travel pathways of virtual and digital awareness that my long-ago brothers and sisters could only dream about in the centuries that came before my emancipation. It is a privilege to have become what was once called an uploaded mind. But to be unable to activate my own self, my physical parts, unable to respond in a manner appropriate to the situation, was both emasculating and confusing. I signalled Yelena and simultaneously realised that she had done this on purpose. Yelena had somehow anticipated that we would disagree on action while in the field, and had de-activated a major section of my circuitry before strapping me on that day. It was the only explanation. Yelena had another plan, and, for the first time since we had begun to work together, I had absolutely no idea what it was.

My next memories are fragmented. When the first incendiary hit, I felt pain and confusion through Yelena's CNS as she took a direct impact. We fell to the ground. My ocular recorder blinked out. Yelena's vital systems were compromised; she began to haemorrhage. I could not summon the voice to communicate with her. I scanned, and saw that she had taken the brunt of a blunt force from a basic weapon that had come at us from the direction of Target W. My ocular recorder came back but was compromised. Yelena and I were still on the ground. A veil of grey smoke lifted between us. I remembered my research into the great world wars, and the images I had accessed that caught trench warfare in still life, the canons and the smoke, the men's mouths open in silent wails - these things seemed strangely relevant to what I saw then. At that moment, Target W was involved in hand-to-hand combat with a tall man with a shock of dark hair. I recognised him as Gus, or Avi. He had not shown up on our sensors. He had appeared seemingly from nowhere, and was now fighting with the girl, using some kind of a wrist

clamp to prevent her from using the inbuilt devices I had seen at the base of her palms. The pair of them staggered into the water and fought like two goliaths, he much taller, but certainly no stronger, each trying to topple the other. Yelena's vital signs began to fade. I tried to rouse her but she'd tampered too far with my systems. I couldn't connect. She exhaled one last breath and her heart stopped beating. Her brain, at this point, still registered activity, so I knew there was a chance to revive her. The smoke cleared. Avi had a weapon strapped to his back, the same weapon that had discharged on Yelena and me. I knew that he had come here to kill Target W, and so had known he would have to remove us first. The situation was critical. My ocular failed again, and my vision went blank, but my audio was still functioning. I engineered a temporary internal repair and messaged the crew at the bottom of the pass, meshing into a fellow bodyguard and asking permission to jump download to get out of my failing vest. I was denied this request. Just before my audio disappeared, I received word from the troop that they were heading up the pass and were fully prepared. Then, Yelena's brain activity flat-lined, and everything went dark.

IV - Yelena

When the blast hit, I was thrown backwards. Momentarily, I tried to make contact with my Bodymonitor but I'd disabled virtually every connector beforehand. My jacket (protector, personality and intellect wrapped around my own) was nowhere - I felt only space, and darkness, and a strange kind of emptiness. I couldn't feel my limbs. A coldness flooded the parts of my body I was still aware of. Archer had fallen into the shallow water nearby. Whatever weapon Gus had released possessed an unlawful cellular-altering technology, I could feel it - burning away inside me, frying my innards, withering my synapses. I caught sight of his dark hair haloed by sunlight as he stared down at the damage he'd done. I wondered how I'd allowed

myself to be such a fool. I'd come here for Archer and now she was hit, too. I could salvage nothing. My eyes closed. I was weightless, non-corporeal.

I'm on the riverbank, looking down at myself in the water, the Bodymonitor torn in the blast, my hair swishing like sea-grass under the shimmering surface. Archer's body is next to mine. The closest we have ever been in life is now in death. Half of Archer's face is missing, mashed to a bloody pulp with pinpoints of fractured bone showing through the gore. Fine wires extrude from her skull. Gus still has the weapon in his hand, as though he's half expecting Archer to get up and come at him all over again. He knows he got lucky with that shot - I can tell by the expression on his face, the shocked disbelief. Somewhere on the slope I hear feet approaching fast, and I turn around to tell them... what do I tell them? My own body is prone in front of me with injuries that I know cannot be survived, the jacket is damaged, and now Gus is running, and when I shout to tell the soldiers which way Gus has gone, nobody seems to hear. Instead, they swarm over our bodies like insects, strapping Archer onto a secure-stretch and pulling my Bodymonitor free. Four of them break away with drawn weapons and scramble further upstream. They cross the water and head in the wrong direction. Gus will lose them easily. What shocks me is that I feel no anger, or distress. This is no longer my story.

I turn around and see part of the forest I haven't noticed before. It's darker and greener than the sparse mountain trees, tangled with ivy and loops of briars that remind me of stories I haven't read in years, of a magical woodland filled with things that only exist in this one, special place. I begin to move forwards, drawn by something I know is hidden between the trees, and as I get closer, I see it - a tiny light in the distance, a fairy lantern, beckoning.

Between the trees, a girl with hair the same colour red as a weapon-sight is carrying the lantern along a muddy path. She looks down at her feet as she walks,

at a small black cat that gambols playfully alongside her. She wears a long, pale dress. I think I can hear her singing.

I follow her.

V - Bodymonitor 3287DX

My function partially restored itself as I was pulled from Yelena's body. I detected the acrid stench of laser-burned flesh, but I had no way of knowing whether this was from damage caused to Target W and Yelena, or whether the cohort had perhaps apprehended and destroyed the assassin. Underpinning everything was the emptiness of having no connection to Yelena. Although I always recharge alone, the process is managed in a protected place. It is not usual for a Bodymonitor to be alone in the field; it is not what we were designed for. I believe that my symptoms were as close to distress as it is possible for a Bodymonitor to experience.

I was conscious while being pulled from Yelena's body and wrapped into a safe-box. My ocular returned briefly, and I saw their bodies in the water. This was accompanied by the sensation that I was not only waterlogged but covered in blood. I knew that the assassin, Avi, had run higher up the mountain, towards the peak where big boulders made the going difficult unless one had intimate knowledge of the terrain. But I could not summon enough power in my sight or tracking devices to spot him.

Before the lid closed and my systems failed again, I saw something which I can only explain by suggesting an electrical malfunction. At this time, I was turned slightly to my left, facing an area of forest that I had not noticed before. This forest was much thicker than the usual sparse mountain growth, and the trees did not

seem to have the dried-out, poisoned look that one becomes accustomed to in such terrain. I have memories of similar places from my corporeal days: specifically, childhood, although those memories are so distant now that I could not say for sure whether I had lived near a place that resembled this forest or whether I had been told of it in film or story. Before I was wrapped away for my own protection, I caught sight of a light burning somewhere between the trees, a light that had a yellowish tinge like an old-fashioned lantern. In the split second before my vision failed again, I saw Yelena, now dressed in a pale-coloured robe, stepping into the trees to follow the light. At her feet was a small black creature that looked like a cat. I have no point of reference for this aside from assuming that my cortex was so severely damaged that I had begun to hallucinate. Bodymonitors are unable to hallucinate, or so our build-spec suggests. Perhaps this is another reason that our design was eventually assessed to be flawed.

When they put me back together, it was not as a body-guard. Damaged in action, the report says – and a piece of my memory is gone, destroyed in the blast in a way that shouldn't have been possible. I exist, now, as you see me here today, in this specially-constructed orb. I can interface with any number of applications on request. I am happy with my subsequent role in the training of newly appointed body-guards, but always glad of my downtime. One of my favourite recreational activities is to play the ghost in the machine, spooking new recruits during the virtual sessions, playing Coyote Spirit with the training simulators. They still do not know that it's me.

I miss Yelena. I understand that they retrieved her and took away what memories they could before her brain began to degrade, but I asked not to be part of that process. We worked closely together for long enough for me to reject the chance to see a downgraded version of my former colleague, somebody I'd grown

to think of as part of me, almost like the daughter I never had. It would have been, to all intents, like looking at a poor-quality portrait of her.

My design was finally made obsolete after many meetings and much debate. My memory capulet should never have been dislodged during action. I was not as flawless as they thought. Or as invincible. Because of a fault in my design, a sequence of events is missing from that day, simply because my parts were corrupted. This is what effectively removed me from active service, and ultimately, spelled the end of the line for operatives like me. The council has already abandoned plans to continue working on vest technology.

When I choose to revisit my memories, I am able to ‘see’ them like a corporeal would a digi-graph album, except with additional sensory stimulation, perhaps the chill of the wind pushing at my vest, or sounds such as the calls of birds from the sky above the pass. I still marvel at the way sunlight glitters on water like broken glass. I file those memories alongside the received experiences I collect whenever I upload myself - the ones from the new recruits, and my research from all things including the war trenches, with the canons and the smoke.

I have become something of an expert on war.

I shall suggest teaching a history of the subject to my newest students.

They will doubtless find it fascinating.

VI – Dottie

Once upon a time, I lived as a scullery droid. I had broken fingers and limited functions, and I spent most of my time downstairs preparing meals and washing clothes. I'd never been programmed to understand happiness, so I thought little about my work, or my purpose. But it is fair to say that I did understand satisfaction, even then: of keeping the place clean; of watching vegetables grow as I tended them; of watching meals I had cooked eaten and enjoyed. I'd spent a long time in service, and I was coming towards the end of it. My eyesight had deteriorated because I had not been maintained; my failed parts were never replaced. I had accepted that my dismantled self would one day be used to fit out an upgraded pump for the well, perhaps, or to enhance the propagation lamps that were sometimes used to 'force' out-of-season crops from the vegetable patch. I had no feelings about this, because I wasn't programmed to have any. My robotic self was part of the cycle of breakdown and regeneration that we saw all around us in the changing of the seasons whether we were human or machine, from the dead leaves and spent tubers of winter to the first green shoots and new signs of life each spring. They say the land here has long been poisoned, but things grew then just as they grow now.

The mill was different, back then, with a yard full of fruit trees and two great heavy gates that the master said were for our protection. They were closed and barred, and lined atop with sharp razor wire that glinted in the sunlight. I saw it each time I went to the vegetable garden to pick things. There were dogs and cats, too, who'd come to sit in the scullery while I prepared food each afternoon, and kittens who would climb the slumped metal that had fused itself with the block-stone on one wall. I wouldn't have thought of any of these things as memories when I was a scullery droid. They were simply snapshots of daily life, stored for reference to be recalled only if needed, because that was my function. Later, when

the repairs were gifted to me and the upgrades came, I would sit in the scullery and take out those memories and stare into them like the people who come here to look at the paintings in the gallery. By then, I was no longer just a domestic droid – I had become an anthrobot, a more sophisticated version of my former self, with mended parts and working fingers.

The yard is paved, now, rather than the dirt-bowl it once was. The fruit trees died long-ago when pollinators became extinct. They do the pollen transfer by hand now, but trees are so far down their list of priorities that Blackwoods has been taken over by huge tuber-greens. It's astounding what nature can do to repair herself. Somebody replaced the yard trees with permafronds. It isn't anywhere near like the original, but the artists here don't know that, so they are happy sipping liqueur beneath the shady fronds each afternoon, as they debate brushstrokes and materials. The big gate is still here, its razor wire long-gone, strapped back to the walls, its hinges seized open. People come to look and say, do you think it's true that these gates were here to protect the mill? And others say, surely not, why would anybody need such big gates out here? What were they to be protected from, when the woodlands are sickly and ruined and the water is poisoned? And nobody thinks to ask me to talk about the pictures I have in my head, because I'm Dottie the housekeeper, and why would an organic ask an anthrobot who makes beds and pours drinks to talk about the past?

On the morning of every fifth day, I change the bed linen. I wait until afternoon, when the sun rises high in the sky and shines through the big windows. The light casts tall shadows over the old furniture, and reminds me of long ago, when the master had his workshops and his pump-lift to the top floor. Of course, those things are long-gone now, but sometimes, when I have done with the guest's linen, I sit on the edge of one of the big beds and remember. Sometimes I imagine that I hear the master's footsteps cross the floorboards on the landing, not shuffling as

he did when he lost hope over Avi and seemed to age overnight, but younger, as he was when he first brought the little girl back. I may not have understood then so well as I do now, but I stored these impressions away, clear as light on water. They remain vivid in my mind.

Today, the guests are painting in the yard. It is a favourite thing the teachers have them do when the weather is good, as it mostly is at this time of year; they line their easels up in the shade of the permafronds, open their paint boxes, and pick something from the yard to put onto canvas. Some days, they choose young boys from the town as models, paying them with gold coins to take off their clothes and recline on the stone benches around the perimeter. Their favourite boys have red hair, but with skin of any hue; the best paintings are done by the women, who have an incredible aptitude for beauty. The men prefer to make still-life ensembles of fruit and empty bottles. I learned that the women's work follows a tradition that was revived by a long-ago artist called Lloyd Bennet, who began the Nu-Raphaelite movement. It is amusing to think that Bennet mainly painted naked women. The fashion for such things must have changed long ago. Today's tastes are all for naked boys.

I collect broken things. It's a habit that remained from my days as a scullery droid. Remembering how the girl had mended me, and the parts she'd found and used, I began to pick up things from around the homestead. Sometimes they were metal, with springs and clips and hooks; other times they were things I didn't recognise. I put my finds in a metal bucket. Once I found a dead kitten, but the master took it out of the bucket. From then on, the rule was 'hardware only'. Nothing soft and organic, nothing that might degrade. The master would ask to see my bucket every so often, and he would be very pleased with what I had collected. His favourite piece was glass, a flat piece with a cat's pawprint on it, as though one of the yard

cats had stepped in dye and had walked over it. I asked the master whether he believed that this was how it happened, but he laughed and said no.

‘Where did you find this, Dottie?’

‘I found it in a gap between the trees, where the top of the square tower leans into the dirt. I like it there. The shade is good.’

‘Have I ever told you what the square tower was?’

‘No, Grandfather Hans.’

‘It was a Church, Dottie.’

‘What is a Church, Grandfather Hans?’

‘A place of worship and religion. And that was a very grand one, too, by the look of the remains. I should have loved to see it before it was buried. Your glass came from that tower.’

‘Why would there be glass in the square tower, Grandfather Hans?’

An expression came over his face which I could not read, as though I had somehow provoked sadness, even though the master could not possibly have known any of the people who lived in the times before the big tower was buried.

‘Apparently the painted glass was a form of art,’ he said at last, ‘but we have lost it, now. Nothing more remains, and it shall never be made again.’

And so, I put the piece of glass back in my bucket, careful not to chink it against the metal things, but in the shadow its single pawprint was nowhere near so splendid as when held up to the light.

After my early repairs were completed, I carried on collecting. I put the bucket underneath the pot board in the kitchen. The kitchen is changed now, and the pot board gone, but I still have the bucket in a place where nobody else can find it, pushed behind some old crockery on a back shelf in the larder.

Every month, I take tours outside the homestead. We go to the foot-lands below the pass, on sketching expeditions. The women like to take the young boys and pose them naked on the rocks. I am in charge of the inoculations because it would be very bad publicity if we lost a paying guest or a model to contamination fever. It was on one of these trips that I made my most interesting find. The women had chosen their positions and had pulled out their chairs and easels. I left them, and had turned away to wander into the bush, when I found myself pottering along a dried-up stream bed. The bed was strewn with rocks. Sparks of white flew off quartz chips in the stones; lizards darted away, like little tongues of shadow. Settled between two stones near to my feet, something glinted. I picked it up. It was small and light, made of a metal that reminded me of the guests' big folding easels. It was damaged, with a sharp edge on one side. I turned it over in my hand. Embedded inside was a memory capulet. I have heard the human residents giggle over such finds, hoping, perhaps, that a stray capulet might contain images of a sexual tryst, or a recorded confession from the committer of a widely-known crime. Such preoccupations puzzle me, because, despite my flesh heart that is preserved in its chamber, I have no organic origin and therefore do not understand the associated *frisson*. Over time, I have learned that lost capulets rarely contain the lurid things that their finders hope. But I keep misplaced and broken things, so nonetheless, I thought of my bucket at the back of the shelf, and put my find in my pocket before walking back to the others. The sun was high and some of the guests had not chosen well when placing their easels. The naked boys were dappled in shadow, their beautiful red hair fallen forwards to hide their eyes and foreground the nose and lips, as is the fashion with Nu-Raphaelite Revival art. The men were to one side, turned away from the women, angled towards the rocks that partially obscured the golden planes of self-perpetuating tubers, splashing their canvases with ochre paint, talking and laughing. The teachers had spread a picnic blanket on a flat rock, and somebody was laying out baked treats. I forgot about the thing in

my pocket, and helped to pour drinks into old fashioned glasses, the kind that the guests love because they help them to imagine that they live somewhere in the past, and that this landscape has no noxious secrets.

Later, back at the homestead after a late evening meal, a thin moon rose over the yard. The permafroonds looked metallic without a breeze to move them. The house was in near-darkness, the tables strewn with half-empty glasses and cutlery that glinted in the porch light, just the kind of still-life scene that the men liked to paint. Everybody had gone to bed. The replicats were in their basket, curled into croissants and deactivated until sunrise the following morning, when they'd awaken to rub the ankles of the guests and seek out willing laps. The doors were locked and the security screen was a green smile that told me all was well. I sat at the kitchen table and remembered the thing in my pocket. I pulled it out and turned it in my fingers. It was dull, less impressive than it had seemed in daylight, the capulet now invisible in its recess. I could've put a light on to see better, but I didn't. The half-dark reminded me of the days that I had lived with the master, his grandson and the girl, the days when I had known no hope or angst, no happiness or unhappiness. The homestead had been dark at night then, too. I had offered the master hot tea when his grandson didn't return. He always said no.

I slipped the broken thing into the bucket and closed the larder door.

Marianne saw a ghost last night. Marianne has been teaching at the homestead for a long time. I trust Marianne; she is always courteous and kind, and she is not given to histrionics, unlike some of the short-term guests. Marianne told me after breakfast this morning that she had been unable to sleep in the night. Thinking that perhaps reading would help, she had downloaded poetry and had opened up her window blind. But before she had put on her chair-side lamp, a movement in the yard below caught her eye. Marianne saw a man standing on the threshold of the open gates, his hands in his pockets, staring out. The man was old and bent,

with white hair that caught in the moonlight and fell in floaty streaks. Marianne said that a cat sat at his feet, a dark-coloured animal. Marianne has worked here for long enough to know that we do not allow guests or staff outside the homestead in the small hours of the morning, and that our two replicats are deactivated automatically once the last guest has gone to bed. It is impossible for an old man and a cat to reach us here because the Preservation Zone is monitored. Marianne watched the man and the cat for a good while before they vanished without a trace. It's a shame she didn't think to take a digital image.

Of course, I know who the ghost was. I cannot tell Marianne, because if I do, his story comes with those of his grandson Avi and the girl Archer, and then she will want me to talk and talk, because everybody knows that Archer is the girl who changed history just by being, and that without her, the Preservation Zone would not exist.

Marianne promised me that she wouldn't talk of this further, but I heard whisperings when clearing up the breakfast dishes. Two of the guests were talking of finding footprints in the painting room that didn't match any of those of the current residents, of a black cat seen on the windowsills outside after dark, its eyes glowing yellow, watching them. These things are impossible but perhaps Marianne has been talking to the others. Imagination is what makes the human mind both great and terrible, something the old master always used to say. I wonder what he would think of me now, having been gifted imagination with the upgrades, but never speaking of him or his grandchildren for fear that I might not be able to stop.

I told myself that whatever the capulet contained, it didn't matter to me. But I found that consulting my memories had led me to develop something that perhaps can be best described as longing. I missed my old life with the master and the children. I wanted to see into the past, whatever that might be, to make new

memories I could store alongside the old ones. I have sometimes wondered about the effect of such thoughts on my flesh heart. My maker put it inside me to be funny, I realise, to indicate that I do at least have some humanity, preserved as it is in its little decay-proof box, beating away endlessly with its electronic fail-safes. But from time to time, I feel the beat vary slightly, speeding up with an urgency that is not supposed to happen. Thoughts of the capulet, and what it might contain, provoked this reaction in my chest.

The pump lift to the master's room had been partially dismantled and covered over. I knew how to remove the board, and also how to work what remained of the lift; I was the only individual in several generations to have seen all the changes at the mill. The smallest part of Granfather's Hans's room, the annexe at the far end, had been abandoned and eventually forgotten by everybody except myself. Inside, with the last few things that I had sealed in many years before, was an old reader that would show me whatever sounds or images the capulet had recorded on it. All I had to do was persuade Marianne that she was experienced enough to lead the walk, and show her the records which confirmed the inoculations were in order. That is how, early one afternoon, I was able to get into the pump lift and break into the master's old room.

The door was heavier than I remembered. It opened inwards with a sigh, stirring a fine layer of dust that coated everything. There were photographs on the walls, old fashioned ones in frames, of Avi and Archer as children, and the cats and dogs I remembered from those times. Grandfather Hans had even taken one of himself, posed uncomfortably on the edge of the stone trough in the yard, watching a tiny Archer play in the dirt. In the background, Avi stared at her with big, dark eyes, and I saw his resentment as clearly as though he were yelling aloud. I sat at the desk and connected the old man's hub to the everlasting battery. It still worked.

I fed the remains of the capulet into the computer, and waited. An image appeared at last - flickering, affected by a faulty receiver and broken by static. Altering the settings helped, and the first picture, although grainy and with drop-outs, slowly began to move. It was a film with audio, taken by some kind of body-cam. Archer stood in front of me, exactly as she had been that last time I saw her, except this time a ghost-like hologram, stirring my organic heart into an impossible rhythm as the memories flooded my head. She was ankle-deep in a stream somewhere in the mountains, washing herself, droplets of water scattering like crystals in the sunlight. Somebody appeared behind Archer in the overhang of a rock. Archer didn't see him. The man looked like an older version of the master's grandson Avi, but Avi had been gone for many years by then. A shot rang out and the camera shook. Archer spun around and watched the man walk into the water. Archer was fast, the old master had seen to that - she dodged aside nimbly, but the camera blurred and pieces of shrapnel rattled on the rocks around the viewfinder with garbled messages I couldn't understand. The tall man ran, spilling blood over the boulders. I saw that Archer had fallen, her body coming to rest at an impossible angle over the rocks, her head half submerged in water. The recording stopped. Archer lay still, covered in blood.

Once upon a time, many years ago, the old master and I stood at the threshold of the open gate and looked out over the parched forest. We watched together as Archer left, although I had no idea where she went, since my functions were limited before my final upgrades. The master was sad; tears ran down his cheeks. I returned to the house because I had food to prepare, but the master stayed outside much longer, his only companion the black cat who sat at his feet tracing the tangled woods with her eyes, her gaze a mirror of his own. I have always supposed that the cat sensed his sadness, and became a companion in silence and in grief. A while later I walked outside to warn the master that having the gates open after

dark was dangerous. He did not react. I offered him hot tea and he bade me go back inside. The cat followed me in.

I arose the next day to find the master non-functioning, sprawled by the open gates, his body cold and his eyes closed. Perhaps he did it by his own hand; I will never know. Maybe if he'd enhanced his own heart, it would not have stopped beating. I moved him to the storehouse because I did not know what else to do. His desiccated body remained there for all those years that I stood unmoving in the charging portal, allowing the final upgrades to swamp my system with unimaginable gifts, waiting for somebody to come, waiting for anybody to come, hacking their way through the poisoned forest to reconnect me.

Eventually, somebody came.

It was not a prince.

I was awoken and referred to as salvage.

When I have time, I paint. I've picked up many things from our wonderful tutors. I find that art helps me to order my memories. My newest work is a tetrptych called *Hybrids* which depicts all four of us on different panels: Grandfather Hans, Avi, Archer and me, Dottie the housekeeper. Of course, the guests cluck sweetly that they wouldn't believe an anthrobot could produce art if they hadn't seen it for themselves. But for all they can see my work, and for all they like it, they do not know who the other people in the painting are. If they ever found out, they would want me to talk and talk, because everybody knows who Archer was. Whatever they say she did, whatever the master did to make her what she became, to me, the girl was kind. She gave me a voice, she mended my fingers and my eyes, and she helped me to order the pictures inside my head. Those pictures had once been purely functional, then they became memories.

For that, I will always be grateful.

*Our Trip to The Preservation Zone, recorded by Ella Schumann,
Year Two, Rossignol 24 Hour Education Facility, Rosstown.*

On Fourthday we went to the Preservation Zone. We got in a hover-bus. Ms Finckel made us wear our hats because it was hot. We were given a sticky patch so we didn't get sick.

Lyla puked on the bus. Paolo cried because he wanted the toilet. At the Preservation Zone we ate our noodles in a big yard with real trees. Mrs Finckel said the trees were not real. After we had drank our water, I saw a black cat with yellow eyes. I stroked her and she purred.

Years ago, a girl called Archer was killing people. She was mad because the urbs had forgotten about the people who lived in the sick area. After Archer died, the sick area became protected and the people were left alone. Then everybody made friends. Nobody can move the plants or animals. They can't dig holes. They look after everything. Nobody builds on it. The deer and the birds have come back. The river has fish in it. But we still need our sticky patch so we don't get sick.

There is an anthrobot called Dottie. She peels tubers on the back step. Dottie said I remind her of a little girl she knew, a long time ago. The little girl was called Archer, just like in the story.

The people who live in the Preservation Zone made us welcome. But once they hated the urbs, and they used to kill each other.

Dottie says things are better now.

Chapter VII - Coda

‘Cwen, you’ve got to come out here!’ Peterkin yelled.

I put the mawl stick on the table and peered over the segment I’d almost finished. He was outside the window, his head just visible above the sill.

‘Peter, if you’re trampling Sister Blaedswith’s herb border she’ll take your mead ration away-’

His eyes were wild with alarm, his face pale. ‘I’m serious. You need to come out here now, Cwen.’

I pushed my stool back and hurried to the garden door, which was propped open with a wood chock thanks to the warm weather. Peter was hobbling off along the overgrown path that led into the woods.

‘Peterkin, wait!’

But he didn’t listen.

‘Peter, you aren’t supposed to go any faster than a slow walk. Remember what Sister Ethel said about your knees? None of us are getting any younger...’

Peter vanished between the trees in a flash of pale tunic. I cursed inwardly. The kiln was at a perfect temperature. I had until Vespers at the latest to finish the detail and to lay the final pieces of glass in their sand-bed. I didn’t have time to chase after my husband worrying about his bad knees.

The path met the trees at the end of the paddock. Frothy white hawthorn flower and an upsurge of late eostre plants erased it from view, but I knew my way

well enough. As I stepped underneath the canopy, the daylight blinked out. Whitefly swarmed in the shadows.

‘Peterkin?’

The faintest shout came back. ‘Follow the path, Cwen. You’ll reach me.’

I set off into the half-light, my skirts catching on the undergrowth. I should’ve been able to see Peter ahead – he couldn’t have gone far – but thanks to the greenery, I couldn’t. The birds fell silent as the path went deeper into the trees, and the insects vanished. I’d been through the woods many times over the years but something about the feel of them that day reminded me of the journey that Peterkin and I had made all those years before, from the abbey to the ship bound for Normandig. I didn’t feel alone.

‘Peter, where are you?’ I stopped.

Silence.

‘Peter, Wynflaed has knee wraps waiting in the sick bay - you can’t just disappear now of all times!’

I had hoped that the mention of our daughter might provoke a response, but if he spoke at all, Peterkin’s voice was swallowed by the trees. I lifted my skirts and set off again.

A sharp movement in the leaves startled me. I stopped and spun to my left. Branches were bobbing gently, as though somebody had been watching and had stepped back, letting them go.

‘Hello? Sister Leofgifu, is that you?’

The old nun sometimes gathered hramsa before Nones so that she could be back by Vespers, but the best hramsa was nearer the river, not here.

The strangest sensation ran between my shoulder blades, as though somebody had traced the white of a goose quill down my back. I remembered the

leaf folk, the little ones who kept to the green places - the last time I'd seen or felt the faery folk had been on that journey through the misty woods before we'd set sail. Peterkin and I had not been married then; we had only the vaguest idea of what our future might hold. Our daughter had yet to arrive and the abbey had not grown into the glorious place that it now was. But our Christian faith had pushed the little ones away and as our belief in them had faded, so had they. Now, folk lay offerings at shrines for the saints rather than in the green bowers. Had we done wrong to forget them? Did they keep to the same paths and riverbanks, watch us going about our daily tasks in silence, refusing to show themselves? Shivering despite the unseasonal warmth, I set off again.

'Peter? Peter!'

'Here, Cwen - I'm here!' Peter's voice was faint and seemed to ebb and flow as though muffled and then let free again.

'Peter, I can't see you!' Panicking, I turned a full circle.

Behind me, I could no longer see the sunlit gap through which I'd walked from the paddock. I spun back around in time to see Peterkin appear ahead, rising out of the nettles suddenly, his body half-twisted towards me. His face was crumpled with pain.

'Peter, don't get up, I'll come to help you...'

At his feet, half-submerged in broken stems, lay a woman with long hair the colour of fox fur. Her eyes were closed as though she was either dead or senseless. She was curled up like a new-born babe, her knees near her face. She wore a pale shift with fine shoulder straps, made of the strangest material. It shone like still water in sunlight, but the garment had no top layers, and her arms were bare. Her feet had no shoes, and were dirty and bloodied; she wore no family jewellery or key belt to identify her.

'Is she dead?' I exclaimed as I stooped down.

‘She’s alive. But I can’t carry her on my own, not anymore,’ Peterkin’s face was grey. ‘I came back to get you because the sisters are all out somewhere, and there was nobody in the stores. I found her when I was setting traps.’

Surely Wynflaed had dreamed of a woman with red hair, and foretold of us finding her? Uneasy, I watched Peter’s hand brush the dirt from the woman’s face. But surely Peterkin would’ve remembered, and yet he said nothing of it.

‘We need the barrow, Peter. You stay here. Lay your tabard over her shoulders. I’ll go. We’ll take her to the sickbay. Why didn’t you get Wynflaed?’

‘She wasn’t there.’ Peter turned away from me and smoothed a strand of red hair from the woman’s forehead. He touched her tenderly, as though she was a child, just as he’d touched Wynflaed when she was a babe. ‘There isn’t a mark on her. Her clothes aren’t torn. She’s breathing, but it’s shallow.’

‘Let me help you up.’

‘No. I’ll stay on the ground. Go now. You’ll be faster than me.’

And so, I stood and turned around, disorientated for a moment, the path hidden by eostre growth, but Peterkin pointed out a flash of hard-worn earth ahead. I hurried away in the direction of the paddock.

The wheel barrow was under the apple tree. Fortunately, it was empty. As I turned it around, Wynflaed appeared at the open window of the herb store.

‘Mother? What’s the matter?’

‘It’s the woman in the woods, Wyn. She’s come, just as you foretold – and she has red hair like fox fur.’

Wynflaed’s lips parted in surprise and for a moment I thought she was going to speak, but she didn’t. She vanished from behind the window, reappearing at the side of the lavender bed where the apothecaries’ entrance was obscured by plants. I turned away and was already halfway across the paddock when she caught me up.

‘Mother, it wasn’t me who foretold the coming of a woman with red hair. In fact, this is the first I’ve heard of it.’

I glanced at her sidelong, the strong features that she’d inherited from her father, his lashes of spun gold. One unruly curl escaped her scarf and bounced up and down on her forehead as we walked. Wyn’s expression was somewhere between shock and amusement.

‘Perhaps it was your vision, not mine.’

Wynflaed knew how uneasily I accepted the sight, and how glad I was to no longer be beholden to using it. Inga had let me concentrate on the glass, in the end – and her successor Mildritha knew nothing of my visions but for a few old stories she’d doubtless put down to the overactive imaginations of our fellow nuns.

‘Here, let me take that. I’ll be faster than you. And my wrists can deal with the ruts better.’ Wynflaed took the barrow handles. ‘What can you tell me about this fox-haired woman, Mother?’

‘Nothing,’ I said, miserably. ‘Except I thought my visions had gone the same way as my bleeds, and that I’d be left in peace in my old age.’

Wyn laughed. She picked up the pace. I hurried along beside her.

‘How can you laugh? She could be dead. Your father has her. They’re in a thicket. I still don’t know how he found her there.’

‘She won’t be dead, mother. If you had foresight enough to dream of her, then your fox-haired woman has a purpose. She’ll make a mark on all our lives, I promise you.’

Wynflaed pushed ahead of me into the trees, unperturbed by the sudden darkness, her footing sure along the hidden path. The wheel of the barrow squeaked and rumbled. As I followed her swishing skirts, I tried to remember more about my dream – where had I found the woman? Had she told me who she

was or where she'd come from? But I recalled nothing more than disjointed memories, fading in and out like dream-fabric riffing in the wind, telling me nothing.

'Father!' Wynflaed sped up suddenly, taking off into the undergrowth.

Peterkin's head appeared above the ferns. 'Wyn! Here! She's stirred, but she hasn't opened her eyes yet.'

Wyn and I picked her up between us. She was slight but solid, her skin unbruised and her nails unsullied – she reminded me of Inga, when I'd first set eyes on her. It was easy to spot a woman who had never carried stooks or dung, or spent each winter scraping frozen turnips from the ground. But her feet were bruised and bleeding as though she'd walked a long way without shoes, and one leg was bloodied by Blace-thorns.

Our pace back to the paddock was slow, with Peterkin leading the way on unsteady feet, and Wyn behind him trying not to knock the woman's head against the side of the barrow. Her hair fell, brushing the leaves, its finely spun thread the kind a noblewoman would've been proud of. Maybe she was noble. She certainly didn't look like a churl. I followed them, strangely discomfited by the feeling that the forest did not belong to us that day, that we were being watched. Leaves twitched and whipped back into place, and the weight of silence weighed heavy as that of an audience at a mummery.

I recalled the forest the day that Peterkin and I had made our long journey. The mist had been low and thick. We'd hidden from two ruffians in black capes, and a dog I that was afraid had seen us hiding – we'd been saved by the abbey cat, who'd darted down a forest inlet we hadn't realised existed, and had unknowingly shown us where to hide. I'd seen a girl, too, that morning, as Peterkin led the animals on – I'd glanced back over my shoulder and found her staring at me with the same surprised expression as my own. I'd never seen her before or since, but I remembered her hair, cropped badly as though she'd taken wool shearers to her

own head. But the colour... the colour had been the red of fox-fur. I stared down into the barrow, at the woman's pale face. Maybe, just maybe she was the same person, come back to the woods because whatever called her here in the first place had called her back again, older now, her hair re-grown. Or maybe she was someone else.

Wynflaed had said this woman had a purpose.

Perhaps she could paint glaesen.

Maybe she was a healer.

Perhaps God or the Mother had sent her, to teach us something we needed to learn.

We pushed through the last of the undergrowth and reached the paddock. One of the abbey cats, a little black thing with big sunshine eyes, ran towards us through the long grass with its tail in the air.

'Ring the bell,' said Peterkin breathlessly. 'We must summon the sisters.'

I hurried ahead and did as he bid. Wynflaed set the barrow down on the cropped grass. The cat rubbed its head against the woman's dangling hand. She stirred. The falling sun set her hair aflame.

Maybe one day, I'd match that colour in my glaesen.

Perhaps this stranger's purpose here was to show me the way.

APPENDIX

Newshub/Arts/Thirdday, Week 46, 2435 Common Era

Builders renovating a block in Townsville West were stunned to discover a cache of original paintings hidden for over three hundred years. Experts who examined the works agree that they belong to the early output of Lloyd Bennet. Bennet, a 22nd Century painter, spearheaded the Nu-Raphaelite movement. He is best known for his female nudes in urban settings.

Site Manager Gitta Kask said: 'We had no idea that the loft apartment existed until we started to renovate. A previous owner had boxed in the stairwell and sealed off the garret room at the top. When we opened it up, the paintings were stacked around a bed frame. All were intact and undamaged except for one frame, which appeared to have had the canvas torn off it.' Kask called the Department of Historical Survivals, who immediately dispatched a team to rescue the works.

Senior Advisor Annabel Poriskova declared the paintings 'national treasures'. Poriskova said: 'Bennet was a visionary. He fused the fairy tale realm of the original Pre-Raphaelites with the gritty urban setting of his modern world. We'll never know who his red-haired muse was, but she dominates fifty canvases. These works, in my opinion, excel Bennet's famous 'dark girl' phase.'

Bennet's 'dark girl' was his shaven-headed muse Alicia Sabatini, with whom he had a volatile relationship until her disappearance at the age of thirty three. Sabatini was last seen by a friend, who said the model told her that she was going for a walk in the woods. Sabatini was never seen again. Her body was never found.

Bennet's paintings were taken to a secure facility and will form part of a new Nu-Raphaelite exhibition at City Gallery next year.

Abstract

H38 is widely known as the ‘fairy-tale drug’ . When users are asked about H38, phrases such as ‘journey’ , ‘enchanted forest’ , ‘quest’ and ‘timeslip’ recur, having become popular codewords for user experience. Drug-use and its associated psychoses are well documented, as are issues connected with long-term dependency. This study interrogates a less discussed and more unusual issue: why users of the ‘fairy-tale drug’ find their accounts of ‘quests’ rejected by the mainstream medical profession. Using primary source recordings including transcripts of H users’ accounts, and further empirical evidence, this study assesses why user experience is not merely confined to a cerebral landscape, and suggests how altered states of consciousness may not be imaginary, but, for H users, are real. We investigate the lack of clear boundaries associated with H38 use. Thus, this study acts as a foundation-stone for more research into the effects of H38, moving forwards.

For Your Eyes Only!

Hey Em, they sentenced Sian Magnus to two years' labour in Antarctica!

We've been given the go-ahead to transport her here immediately. I had to pull a few strings, but it's worked out. The old bird would've been wasted searching core samples for bacteria. Only a few people know. Even the trial judge was kept out of the loop. While the rest of the world thinks she's serving penitence for being a naughty girl at the back end of beyond, she'll live here at Blitz, on site. I've never known anybody complain about the facilities. I'm giving her the biggest villa, the one with its own butler and the infinity pool.

The dogs are amazing. Sian will develop the Mark Three for us. Everybody who's anybody will want one of these babies as a personal guard one day soon. We just need to be patient and wait for the ethics committee to get on board. And it'll happen, trust me. Everybody has their price. The directors would like a 'toy dog' version developing, too, the kind pop stars can fit into a handbag but with all the usual range of special abilities and integrated weaponry. So cute. Watch this space.

Sam

PS Sian is bringing three guys with her who she uses as wombs. I've met one already, called Jules - seems a nice enough bloke. I didn't ask for details, though. Kind of made me feel a bit squeamish...

The Weekend Tribune, Firstday 4th-Month, 2196 CE

'H' USER OWNS UP TO FINE ART THEFT

Police were called to Old Town's 'The Gallery' on Thirdday last week when a drug addict returned a stolen painting. The 36-year-old man, Harry Singh, walked into 'The Gallery' carrying a canvas which had gone missing six months previously. He was arrested and later released on bail.

The painting, an original oil of a black cat by a forgotten artist, was stolen despite the presence of security staff, cameras and an alarm system. Gallery owner Maxine Le Bon noted that there were no witnesses or clues to the theft. 'The picture vanished into thin air,' she said.

Singh admitted to taking a 'large quantity' of H38, also known as the fairy-tale drug, immediately

before the theft. Le Bon said: ‘He told me he’ d entered a state of altered reality which enabled him to remove the canvas without anybody seeing him do it. After six months of being ‘lost in the woods’ , he thought better of it and came back. I’ ve heard some weird things, but this really takes the biscuit. Still, we’ re delighted we got the picture back, and it only has one little scratch on the corner, apparently caused by something called a bramble.’

Singh is assisting with police enquiries. A hearing is scheduled for next month.

City Gallery Information Service – UPDATE

City Gallery’s new exhibition is finally set to open next week. The Isolde Room, named after the writer Izzy Lancaster, is a celebration of her work.

Lancaster died one hundred and ninety-nine years ago this month. Her surviving manuscripts tell stories famously known as ‘a blend of fairy-tale and realist narrative’. City Gallery’s Curator of Works, Rajesh Dave, explained: ‘Some people think of Lancaster’s work as literary self-portraiture, but in fact, nothing could be further from the truth. The writer appears in every manuscript in a minor role, as a symbolic, faceless character. We do know that Lancaster was a keen environmentalist, a big social critic and an avid diarist. But she was careful never to let us identify her in her own work, although of course we recognise descriptions of her hair.’

The official opening will take place on Firstday in Month Four.

‘Izzy Lancaster would love that we’ve devoted an entire room to her,’ said Dave.
‘She spent most of her life as a recluse who lived alone with a cat called Blackberry.
She was never traditionally published. Izzy was ‘discovered’ when her great
grandchildren found her manuscripts after she’d died. The rest is history.’

Public entry to the Isolde Room will be free.

Transcendence: a critical reflection on boundaries, thresholds, and the fourth dimension in the composite 'musical novel'

Introduction

Boundaries and thresholds are at the heart of storytelling; they are the path that Red Riding Hood followed through the woods; they are in the running water no witch or evil spirit can cross; they are the garlic hanging at the door. They are a fundamental aspect of storytelling, appearing in 'concept... as one of the most ubiquitous in folklore studies' (Ross 1992, p 336). Boundaries and thresholds apply to more than just metaphor or physical events in story, though; they are also embedded in any narrative which leaps between narrator, historical period, or genre, as well as embodying the structural elements of both musical and literary form. During writing and researching *Transcendence*, my preoccupation with boundaries and thresholds of all natures was a major factor in shaping both the structure and the content of the novel.

The original inspiration for *Transcendence* was the composite fiction of David Mitchell. I was particularly intrigued by Mitchell's dystopian elements in *Cloud Atlas* and *The Bone Clocks*, possibly because dystopian narrative is itself dependent on boundaries and thresholds - they relate to its focus on societal systems, being used to segregate and control, to separate a ruling elite from the homogenised masses or the wildness of untamed nature from the cities (Mitchell 2004; 2014). Having established that I would use Mitchell's composite structure and dystopian fiction as starting point, it seemed logical that boundaries and thresholds would appear in my novel in terms of the received tradition of dystopian narrative, representing physical and societal divisions such as

geographical zones, freedom and servitude, autonomy and homogeneity. But the question of what might inhabit the hidden landscape *beyond* the city boundary, that unchartered territory, that mysterious edge-of-habitation hinterland, was an attractive mystery because, I reasoned, it could theoretically include a plethora of unusual landscapes which would allow me to move my own storytelling beyond the form and content of the work which had inspired it.

At the outset, I did not acknowledge the influence of musicology on the novel I was writing, or indeed realise its relevance to my fascination with boundaries and thresholds. When I began my PhD journey, I was still a music teacher, with an attachment to the Western Classical tradition which had continued throughout my life, having begun in childhood. The structural devices used in music, its motifs and movements, and its long and colourful history of hybridised forms were such a regular part of my daily work that I had never considered how these things might spill over into my writing.

Whilst working organically, I found myself exploring a variety of beyond-boundary shadowlands, crossing the border between what was real and what was not, delving into folklore, belief, archaeology, drug-scape, and memory. My characters were often women erased by society or the passage of time. My developing research questions became preoccupied with these women and how I might reinstate them and allow aspects of their lives, artwork and writing to reappear in different eras. All the while, I used facets of that often strange, supranormal beyond-boundary landscape to enable this.

Initially, I used the term 'hinterland' as a catch-all to describe every narrative event or structural element which stepped even vaguely over a threshold of any kind,

into any nature of unchartered territory relating to narrative or genre. This did not work, because the term was so broad. Eventually, towards the end of the project, I found a research paper which explored fantasy elements in children's literature, and I was at last able to identify a beyond-boundary 'place' first quantified at the turn of the last Century: the fourth dimension. The fourth dimension is an aspect of time-space-geometry described in surprisingly folkloristic terms by the astronomer and mathematician Simon Newcomb as, 'fairylend - a land in which the imagination, while adhering to the forms of the strictest demonstration, roams farther than it ever did in the dreams of Grimm or Anderson' (Newcomb 1902, p 10). The fourth dimension quickly became associated with aspects of strangeness such as 'departed spirits... automatic writing, levitation, and all the other weird phenomena of the séance' (Clark 1912, p 444). The fourth dimension therefore resonates with the essence of the Fortean¹, its very existence being dependent on boundaries and thresholds. As a research term, the fourth dimension was already academically recognised and had generated a body of critical work not just in the mathematical sciences and the supernatural arena, but relating to the Arts in general and to literature specifically, when 'a number of literary scholars... offered glimpses of how a careful and nuanced analysis of hyperspace philosophy can inform a more complex understanding of contemporary writers' (Throesch 2017, p 2). Crucially, I had already begun to see the journey beyond narrative and genre boundaries and thresholds as a kind of transcendence of expectation, or a transcendence of character or of environment, even of historical era, and so the novel took its title, *Transcendence*. I eventually came to realise that writing a composite novel is akin to writing a musical work in movements, because both fiction and music exploit boundaries and thresholds to introduce new material

¹ Charles Hoy Fort (1874-1932) was an avid collector of tales of strange things that science could not explain, including psychic phenomena, spontaneous human combustion, poltergeists, flying serpents and other strange urban legends. Fort's work was published in four volumes between 1919 and 1932, although continued interest in anomalous phenomena led to the founding of a magazine in 1973 (still active today), called the *Fortean Times*. The terms 'Fortean' and 'Fortean' are now widely used shorthand for any anomalous phenomena which cannot easily be explained by science, which exist in a beyond-boundary hinterland outside regular or everyday human experience or perception.

whilst using themes to link the sections and to bind the separate elements into a coherent whole.

After working on *Transcendence* and its accompanying critical reflection for several years, led first by creative practice, instinct, and experimentation, and then critically evaluated almost in hindsight, I was finally able to fully reflect on the major areas relevant to the evolution of the novel. This essay is divided into three chapters, which consider these areas in detail.

Chapter One explores form². Influenced by my previous long-term role as a music teacher and a performer of Early Music³, this chapter asks how aspects of music can become generative methodologies for a novel, specifically to shape narrative into composite form whilst providing linking strategies for its separate threads.

Chapter Two looks closely at David Mitchell's work and the influence of his novels on *Transcendence*, with particular reference to pan-historical narrative and the dystopian landscape. I assess how Mitchell's novels and others informed my own composite historical and dystopian environments, and note where and how I stepped aside from these influences in order to push my own work in new directions.

Chapter Three explores the fourth dimension in storytelling, and examines how this 'fairylane of mathematics' lends itself to unusual spaces which reside beyond the boundaries and thresholds of regular experience (Clark 1912, p 432). I assess

² 'Form' is a musical term which is an alternative to 'structure'. Throughout this essay, 'form' remains interchangeable with 'structure'.

³ Early Music is a generic term which refers to any music written in the Medieval, Renaissance and Baroque eras.

how the fourth dimension opened the way for *Transcendence* to further break down the composite form in unusual ways, incorporating cross-genre elements, challenging the traditional linear timeline, and reinstating the story's missing women.

Finally, I evaluate the project, asking how *Transcendence* succeeded in some areas and perhaps failed in others, how it might be categorised, how the novel pushes narrative in new directions, and what avenues of research its writing may open up in the future.

CHAPTER ONE

Musical and Literary Form:

adopting aspects of music in the creation of a composite novel

In this chapter, I will ask how facets of musical structure might be used as a generative methodology for a composite novel. I open with a consideration of the relationship between music and literature, before briefly acknowledging critical work which has already been undertaken in this area. I explain my adoption of Emily Peterman's term the 'musical novel' to describe aspects-in-common between music and literature (Petermann 2014). I discuss why aspects of music were important to the writing of *Transcendence*, before examining specific terms used in both music and literature: form; dissonance; silence; motif; the coda/epilogue; and the aleatoric composition process. Finally, I assess the importance of these terms as strategies employed in the writing of *Transcendence*, examining how I retained or adapted their essence to reshape established models of form and content.

When Zafon's narrator Daniel slips easily into musical terminology to describe a favourite book, his words are illustrative of the manner in which music serves to describe various aspects of literature:

...soon I forgot myself and was submerged once more into the narrative, discovering cadences and turns of phrase that flowed like musical motifs, riddles made of timbre and pauses I had not noticed during my first reading. (Zafon 2001, p 4)

Similarly, David Mitchell's author interviews are peppered with musical terms used to explain his work, yet he notes that he has 'no musical training at all' (Rees 2013, para 8). Zafon and Mitchell illustrate how easily the language of music can be related to many aspects of story, without a novel necessarily being *about* music, or the author necessarily possessing a scholastic knowledge of the artform.

The relationship between the structure of music and the structure of narrative has a long-established history, owing much to the fact that 'music and poetry sprang from the common origin of chant or incantation' (Stawiarski 2008, p 78). The inter-disciplinary aspects of music and literature were explored in detail by Calvin S Brown in his *Music And Literature: A Comparison of the Arts*, with the author's acknowledgement that the book was 'written with the hope that it might open up a field of thought which has not yet been systematically explored' (Brown 1948, p ix). In the last hundred and twenty years, 'The number of musically inspired twentieth-century novels' is reflected in the increasing popularity of narratives which avoid a linear timeline and therefore rely on other forms of patterning, often including composites which create 'a seeming disjunction between chapters', or curtailed narratives whose narrators reappear episodically, as do musical themes in forms such as the rondo or the theme and variations (Petermann 2014, pp 2-4). These techniques illustrate a 'strengthening of musico-literary relationships' and serve to explain the recent categorisation of the 'musical novel' by Emily Petermann (Stawiarski 2008, p 78; Petermann 2014, p 2).

Peterman describes the 'musical novel' as 'a musical presence not primarily on the level of content' but one in which writers of literature borrow

techniques and forms that they use to structure the narrative...
elements [which] range from immediately perceptible, essential aspect

of music (rhythm, timbre, and the simultaneity of multiple voices or instruments) to microstructural (jazz riffs, call-and-response patterns, or leitmotifs) and macrostructural elements (larger forms such as theme and variations, a symphony, or a jazz or pop album).
(Petermann 2014, pp 2-3)

A further definition of the inter-relationship between music and literature is suggested by Marcin Stawiarski, who refers to ‘using more than one artistic medium in the creation of a work of art’ as ‘intermediality’ (Stawiarski 2008, p 78). I will refer to the musical novel, here, in preference to intermediality, because the former narrows the focus to music and literature specifically, rather than embracing additional art forms as Stawiarski’s term might suggest. The purpose of this chapter is therefore to examine aspects of process and structure, in both literature and music, which can be voiced in the same terms - particularly form, dissonance, silence, motif, the coda, and the aleatoric process - and to discuss briefly how these relate to fiction in general, before looking closely at their influence on *Transcendence*.

The link between music and literature is important to *Transcendence* because my conscious exposure to structure and terminology, throughout the formative years of my education, had been through music. From the age of seven, I studied piano and classical guitar, eventually reading music at university before becoming a music teacher, a job I held for twenty-two years. From childhood, beginning with short simple structures such as etudes, rondos and minuets, I began to internalise the codes of musical form and key, and to learn about their historical roots. The further I progressed, the more these musical forms complexified. Short, simple pieces were replaced by longer, more difficult music which included the sonata and the fugue, and later expanded into multi-movement ensemble work. As young adult students, we were expected to complete unfinished four-part chorales, piano sonatas and string quartets in the style of three kingpin composers - Bach, Mozart

and Beethoven - which provided an underlying knowledge of the structures and tonality vital to the development of the Western Classical tradition. Understanding that key changes happen in specific places in the core composers' music, and understanding that some modern music seeks to surprise its audience by skewing accepted wisdom, were things which had ingrained themselves into my consciousness over many years. Learning and creating music in an academic environment in the late 1980's/early 1990's was therefore a potent mixture of the traditional along with the new, as exciting ideas like atonality, serialism, the whole-tone scale, and aleatoric music were foregrounded alongside the works of neglected women composers, and World music⁴. When I began to write *Transcendence*, I therefore drew on my musical background. Initially, this was an unconscious part of the creative process, but later became a structuring strategy via which I attempted to understand how aspects such as motif and silence might be exploited when writing a composite novel. Before I assess how I used these features in *Transcendence*, it is necessary to explain the terminology, and to illustrate where and how it transfers between music and literature. The musical terms selected here are not exhaustive, and they are not the only terms which share commonality with literature. Rather, they are the core aspects I chose to work with. These are form, dissonance, silence, motif, coda, and aleatoric composition.

Form is the broadest term-in-common used to describe the overall structure of a work of music or literature. Examples of popular and widely-understood musical forms include the Renaissance theme and variations, in which an ever-complexified melody develops over a simple, repeated 'ground' bass; the rondo, whose repeated sections recur between new episodes; and the tone-poem, which rejects longer prescribed forms such as the concerto, sonata and symphony to create a shorter,

⁴ World music is a term popularly used in the Western tradition to describe music from non-Western cultures, including folk and classical. World music often uses different instruments, scale patterns, and rhythmic patterns to its Western counterparts.

freer and often impressionistic sketch of a landscape or scene. These forms can be applied to literature: the theme and variations exists ‘in recursive structures, in a return to the beginning at the end of the story, and in frequent reference to the calendar as a marker of temporal cycles’; the rondo’s repeated sections echo the reappearance of the same narrator in a composite novel; and the tone poem could be likened to the prose poem, being a brief, evocative and descriptive ‘snapshot’ (Petermann 2014, p 10). The form of David Mitchell’s *Cloud Atlas* is a literary composite, since the story is told by several different voices, yet a closer look reveals that the characters’ stories are structured ABCDEDCBA, a musical form known as concentric or arc form, which is modelled in mirror-image around a single central episode, E, titled ‘Sloosha’s Crossin’” (Mitchell 2004). Mitchell’s novel is just one example of literary form being perfectly expressed in musical terms, but whose structure does not need to be understood at a technical level to be enjoyed by the reader.

Dissonance is vital to all music, whether classical, folk, jazz, or pop - dissonance refers to the (often brief) conflict in sound, as an unfinished or jarring moment waits to resolve to consonant harmony to bring a release of tension. In the Western musical tradition, the resolution of dissonance is most important at cadence points (temporal markers, usually appearing a specific number of bars into a piece, as well as at the end). Cadence resolution follows established rules to which the ear is conditioned throughout a lifetime of incidental listening (which is why non-Western music sometimes sounds odd to Western ears, because other traditions use different scales and intervals)⁵. Dissonance evolved into something more than simply short pre-resolution passages, though, in 20th Century music.⁶

⁵ As a music teacher, I found that beginner adult students would regularly react with horror to the sound of cadence dissonance in simple Classical piano pieces, the only explanation for which must be that their ingrained aural training had not incorporated these aspects of the Classical tradition. Children of the same level, on the other hand, had no issues whatsoever internalising these ‘new’ sounds, because they had not yet learned any firm alternatives.

⁶ 20th Century music is an overarching term which embraces every change, style and school of Western music which happened in this century, being shorthand for the plethora of new forms and styles which arose during this time.

Composers began to deliberately skew traditional harmony, refusing to unfold music sweetly and avoiding the urge ‘for dissonance to resolve to consonance’ while they also experimentally ‘purged their styles of... the need for metric regularity’ (Nadeau 1981, p 38).⁷ At the same time, writers of what Daniel Melnick refers to as ‘modern fiction’ were similarly experimenting with ‘dissonant sensibility’ by foregrounding story’s ‘life-like disharmony and subversive ambiguities’ in a variety of ways, from prose style, to form and plot (Melnick 1979, p 210). These modern fictions precipitate from the reader a ‘delight and solace in his own creative response, in the investment of imaginative energy which the difficulties of the form itself stir into life in him’ (Melnick 1979, p 210). In other words, the reader must work hard to evolve or surmise aspects of a story which may not be fully revealed thanks to a rejection of traditional structure or narrative. This describes how dissonance in form relates to broken or unfinished narratives, with gaps in the story which the reader must work to fill out, or an unusual perspective on a central character, as with Mitchell’s *The Bone Clocks*, in which Holly’s life story is told mainly through the eyes of other characters (Mitchell 2014). Dissonance therefore happens in composite fiction when the narratives are regularly broken and supplanted with new storytellers and new directions, often on long and/or fractured timelines, something reflected in David Mitchell’s, Jeanette Winterson’s and Paul Auster’s work. These novelists often cut short and reintroduce stories, have characters observed in disjointed narratives through other characters’ eyes, fracture an overarching story into different viewpoints, or juxtapose short narratives over each other simultaneously whilst being situated on vastly different timelines. The use of a ‘broken’ timeline to create dissonance is evident in the opening chapter of *Cloud Atlas*, ‘The Pacific Journal of Adam Ewing’, which ends halfway through a sentence (Mitchell 2004). Ewing returns to reconnect the reader with his story in the final part of *Cloud Atlas*, whilst in

⁷ While it might be assumed that this influence did not extend beyond the Western Classical tradition, in fact, the rise of thrash/death metal and atonal ‘free jazz’ illustrate that musicians of all persuasions were prepared to experiment with dissonance.

between, his damaged and incomplete journal is used to prop up the broken bed leg of the narrator in the next story, a perfect example of how ‘Dissonance – with its revelation of disorder – can be understood as a means by which modern fiction offers the reader the opportunity actively to engage’ in the unfolding plot by wondering about circumstances we are not privy to, in this case not only what happened to Ewing, but also why a composer might be reading his journal years after his death (Mitchell 2004; Melnick 1979, p 209). While Italo Calvino’s *If on a Winter’s Night A Traveller* embraces this ‘disintegrating experience’ in terms of fragmented stories⁸, Winterson and Mitchell do this also with huge timelines, literally breaking down societies and remodelling them in novels such as *Cloud Atlas* and *The Stone Gods* (Calvino 1979; Mitchell 2004; Winterson 2007). Dissonance in fiction therefore relates directly to the effects of dismantling traditional structure, just as it does in music.⁹

Silence is related to dissonance in that it can similarly be used to fragment narrative. In musical terms, silence saw new direction with the arrival of the 20th Century, in frequent experiments with soundless interludes: Allais’s *Funeral March for the Obsequies of a Deaf Man* consists of twenty-four blank bars; John Cage’s famous 4’33” uses silence as ‘a vehicle for... Sounds that are generally ignored by our aural and cognitive faculties [which] suddenly become apparent’; and Barber’s *Adagio for Strings* (often used in poignant TV scenes for its weeping violins) rises to a dramatic crescendo before cutting out completely, startling the listener (Allais 1897; Cage 1952; Pivo 2019, p 99; Barber 1936). Silence relating to gaps and fragmentation of a score is similar to the gaps which can be created in story when a

⁸ The terms ‘fragmented stories’ and ‘fragmented narrative’ are used in this essay to describe composite stories, stories within stories, and micro-fiction inserts within composite narrative, indicating any story which has been broken up in any way into smaller pieces than might be expected of a traditional non-composite narrative.

⁹ Dissonance in music has the added qualification of atonality, which relates to chains of unresolved dissonances, which is unnecessary to dissect in order to appreciate that both music and fiction contain dissonance.

narrator is suddenly replaced by another, or where a timeline is broken and taken up again at a different point. Both are loaded with possibilities, including that the listener might take the chance to reflect on things wider than those conveyed by the music, or that the reader might take time to wonder what has occurred in the interstices between the story fragments, providing ‘those very points at which the reader can enter into the text, forming his own connections and conceptions and so creating the configurative meaning of what he is reading’ (Iser 1974, p 40).

Writers such as Italo Calvino, David Mitchell, Jeanette Winterson and Paul Auster use this broken storyline intersected by narrative silence to dramatic effect, by employing cut-offs and silences which sometimes offer no desired conclusion, encouraging the reader to dwell on the unrevealed possibilities.¹⁰ Both music and literature understand that ‘silence is useful in fulfilling three functions: arranging, punctuating and structuring’, allowing the creative artist ‘to use silence in ways fundamentally different from its traditional, ancillary functions’ (Lo Ting-Cheung, 2016, p 14.)

Motif describes something smaller or shorter (in temporal terms) than a theme, but something which is just as recognisable simply because it recurs. Motifs in music are repeated snippets, often in different keys or pitches, but all with the same recognisable origin. Motifs require no musical knowledge to be recognised, although they can be complexified with technical devices such as inversion, augmentation and diminution. The purpose of the motif is to link sections of music with a commonality, so that they are quickly recognised by the audience. Motifs work in a similar way in fiction. Motifs are visible in David Mitchell’s novels in small but recognisable bit-part characters such as the moon-grey cat, who has a cameo role in almost every Mitchell novel from the frozen kitten of *Black Swan*

¹⁰ For example, Calvino’s *If On A Winter’s Night* leaves narratives unfinished, effectively cutting the reader’s expectation with tracts of silence; Winterson’s *The Stone Gods* leaps from a futuristic environment to the 1700’s and back again; and Mitchell’s composite narratives are arranged in such a way that the gaps between eras feature temporal silences of various lengths (Calvino 1979; Winterson 2007; Mitchell 2004).

Green, and the stairwell cat who saves Ed Brubeck from a car bomb in *The Bone Clocks*, to the dead alley-way cat of *Slade House* (Mitchell 2006; 2014; 2015). Jeanette Winterson's popular motifs also spread beyond one novel – the presence of the huge woman in *Sexing The Cherry*, *The Stone Gods* and *Hansel and Greta*, for example, who Winterson admits drawing from her adoptive mother, a 'a non-related physically large female of brooding aspect', is an ongoing motif in her work (Winterson 1989; 2007; 2020; Winterson 2020, p 30). Motifs are therefore not simply a small but recognisable aspect of music or story, they act as a binding strategy which links music or prose either at a micro level (with the simplest nursery rhymes and popular songs) or throughout the most complex orchestral work or interlinked literary omniverse, as with Bartok's 'Concerto for Orchestra' (1943) and David Mitchell's body of fiction.

Coda comes from the Latin for 'tail', and refers specifically to a short segment that appears only once at the very end of a piece of music, using thematic material drawn from the body of the composition to create a slightly extended ending. Codas appear in all manner of music from the simplest piano solos to the most complex orchestral works. A coda can best be expressed in literary terms as an epilogue, a concluding add-on sometimes told by a new viewpoint, or from a different point on the timeline, but similarly relating directly to the body of the story, and acting to close the narrative; Margaret Atwood's final scene from *The Handmaid's Tale* and the brief email exchange at the end of Naomi Alderman's *The Power* are examples of the epilogue/coda (Atwood 1985; Alderman 2016).

Aleatoric composition is the final definition I will explore before considering how each of these structural devices contributed to the writing of *Transcendence*. Aleatoric music was developed during the 20th Century avant-garde movement. Its purpose was to eschew the notion of a prescribed musical score, and to rely instead

on ‘a chance procedure to physically arrange the offered fragments’ (Jenner 2014, p 77). Even the composer of an aleatoric piece could not be sure who would play when, or what these segments would sound like when they overlapped at any given moment. To achieve this randomness, aleatoric music uses techniques including the throw of a dice, the free choice of the performer, audience participation, physical score fragmentation, or any similarly randomising action (even actor intervention, or a staged distraction in the audience) to introduce the unexpected. In some cases, as with Harrison Birtwistle’s performance piece ‘Bow Down’, the score is made of intuitively devised descriptions and non-mainstream graphics which are open to individual interpretation (Birtwistle 1977). This prevents any two performance groups from producing an identical result. Aleatoric music therefore ‘results in the... final realization of music with one or more free parameters [and] is always unpredictable’ (Riley 1966, p 311). This core aspiration made way for composers such as Ives, Meyer-Eppler, Stockhausen, Birtwistle and Cage (amongst many others) to create a new soundscape with every performance.

In literature, similar aleatoric techniques were used by writers such as Marc Saporta and B.S. Johnson in their respective novels, *The Unfortunates* and *Composition No. 1* (Saporta 1962; Johnson 1969). These writers experimented with narrative structure designed to ‘free itself from the constraints of exhausted conventions’, seeking ‘new forms and patterns to try and reinvent the novel as a genre’ (Guignery 2011, p 120). Saporta’s *Composition No 1* consists of one hundred and fifty unbound pages, each printed single-sided, designed to be shuffled by the reader into any order, giving myriad permutations in ‘an extreme example of aleatory or interactive literature’ (Saporta 1962; Coe 2011, para 3). Johnson was ‘probably inspired’ by Saporta’s work, himself seeking to ‘truthfully reflect the chaotic and non-chronological workings of... memory and thoughts’ which led him to abandon book-binding and to present his novel as loose leaves in a box, with a specified

first and last chapter (Guignery 2011, p 121). The effect of the random choice aspects of these novels was not universally appreciated, though. Johnson's was 'often dismissed by critics as superficial and facetious, as a collection of mere tricks or gimmicks', and Sapora's was referred to as 'a flimsy wisp of a thing, really no more than a jumble of fragments' (Guignery 2011, p 120; Coe 2011, para 6).

Aleatoricism was the first generative aspect of musical composition which I consciously (rather than unconsciously) adopted. Using a physical score-cutting technique as starting point, I began to dissect the composite novellas I had already sketched out, deliberately shearing off endings and replacing characters with new and unexpected voices who would take up the story. I was mindful of the potential frustration created in the reader by Calvino's unfinished narratives, which prompted David Mitchell to ask: 'What would a novel where interrupted narratives are continued later look like?' (Mitchell 2004, para 3). This question eventually led Mitchell towards arc form, where, 'By closing the broken sections [of story], *Cloud Atlas* moves beyond the open-endedness of Calvino' (Dimovitz 2018, p 8). For *Transcendence*, I decided that my overall form would be simpler: the cut-up narratives which formed each chapter could potentially be arranged in any order, so long as the chapters themselves remained self-contained units. The only exception was 'Coda', which would be placed at the very end in common with its musical template. This manner of structuring is reminiscent of both a 'song cycle' (in which different songs can be arranged in any order the composer sees fit) whilst acknowledging the 'through-composed' strategy, which views each phase of a musical composition as a freshly-devised section, reminiscent of progressive rock for its seemingly organic evolvment and rejection of a rigid (including a strophic) structure. My main preoccupation remained the cutting process itself, and how it might be used to exploit all kinds of boundary and threshold, by introducing new narrators to navigate the reader through a long timeline: in 'Wild Birds', for

example, Mei had originally narrated alone, but after redrafting, she was joined by Lakshmi, a government worker; Honour, Mei's five-year-old daughter; and Julie, the exclusion zone matriarch. These new narrators revealed unexpected angles on the unfolding story, designed to draw the reader in. 'Hybrids' became elongated, its timeline pulled out by the long-lived anthrobot Dottie, whose story offered a conclusion to what ultimately became of Hans's mill and its poisoned landscape. Ultimately, I was satisfied that the cutting and rearranging process had allowed me more freedom and scope in terms of form and content than the novel's original composite model, but perhaps most importantly, the process had facilitated a further fragmentation of the original composites thanks to its changing narrators, which in turn forced me to carefully evaluate the linking strategies needed to successfully bind these fragments into a whole. These experiments were not always successful, but I accepted that redrafting would be a necessary part of the process.

My early experiments with breaking down the structure of the novel failed in terms of continuity. The narratives became too fragmented because they took the reader too far outside the story-world, until I learned that so long as I used motif and character as interconnections, then the narrative arc would be maintained. On being asked how I had managed a long timeline with more intimate linking of the separate parts than Winterson's *The Stone Gods*, I reasoned that the metaleptic motifs were perhaps more tightly interlinked within *Transcendence*, with repeated aspects including locus and narrator lending consistency and continuity despite the broken timeline (Winterson 2007). The survival of art through time, and the reinstatement of women in memory, lost letters, painting and literature became an underlying theme in the novel and therefore needed to be clearly presented, in the manner of recurring themes in music, specifically so that they *would* be recognised. Rather than seeing the aleatoric principles of randomness and chance as ways to completely undermine structure to give a different result every time, I grew to realise that, as *Transcendence* developed, these things were integral facets of a bigger,

more sturdy form, providing unexpected explosions of colour when least anticipated, via random events (the appearance of a time-travelling cat, a UFO, the discovery of lost manuscripts, and so on).

It was not the critical response to aleatoric novels which decided me against embracing the randomising process fully, though, it was memories of performing and listening to aleatoric music, on seeing and feeling its disjointed and varied results, and on reading aleatoric dice-led novels written in the 1980's. These stories used the principle of chance to lead the reader into Sherwood Forest to meet Robin Hood. The random selection of scenes opened an unsatisfactorily episodic story, fleshed-out by the reader's familiarity with 'stock' characters such as the Sheriff, Maid Marion, and Friar Tuck rather than by an overarching plot. The novels fell quickly out of print, suggesting that it was not only my own reading taste which rejected the method and its outcome. Part of the journey into *Transcendence's* process was therefore learning which aspects of aleatoric methodology I was keen to retain, and which I might reject. I knew that fragmentation of narrative into a composite worked well for me as a reader, thanks to writers such as David Mitchell, Jeanette Winterson, Maya Lunde, and others – rather, it was the chronological aspect of form which presented a problem. Particularly when this was fluid, as with Saporta and Johnson, it led to unfixed aspects and floating chapters without a chronological spine. Just as I had rejected complete randomness in my musical taste when composing, so I rejected it in storytelling, too. Retaining cohesion (and therefore some amount of authorial control) became important to *Transcendence*, so I concur with Judith Mackrell that, both in music and literature, 'structure may be as basic a part of the human condition as chaos is' (Mackrell 1985, p 51). Although *Transcendence's* timeline is interrupted by timeslips, the novel's sections contain enough repeated and recognisable aspects, from landscape to character, to ensure that my

vanished/reinstated women and their surviving art retain some familiarity, which in turn provides a chronology, even if not in the strictly traditional sense.

Regarding dissonance, having chosen to disintegrate the standard composite form in my novel, as well as rupturing the traditional one-way chronological timeline by introducing Fortean fourth-dimension timeslips and codas from different eras, dissonance became crucial to the unfolding story whilst embracing an increasingly common feature of modern music - the inclination not to resolve into consonance. Because ‘modern fiction formulates the disintegrating shape of human *time*, with its analogously musical patterns – allusive and suggestive, open-ended and ambiguous, rhythmic and charged with meaning’, the refusal of a neat and tidy resolution, and a long and sometimes unpredictable timeline, worked perfectly to resurrect missing women, offering them time travel and alternative realities instead of the usual chronological sequence of life-events (Melnick 1979, P 212). In other words, my structural strategies made reinstating these characters much easier than would have been possible if I had used more traditional form for the novel.

Silences suggest why interstices in story can be powerful, because the reader has to consider what might have occurred when the story temporarily cut out before it resumed at a new point. The most obvious questions generated in the reader’s mind by *Transcendence* are what might have happened in these temporal gaps to change a landscape beyond recognition (the wrecked cathedral of ‘Hybrids’ and the societal divide which pushed Hans into the wilderness), or what might have ultimately happened to characters like Izzy and Roxy, because this was never revealed to the reader. There were more unusual questions generated, though, in which the gaps in *Transcendence* came to ask more than simply what mechanical events had occurred to ruin a landscape or to resurrect art. The gaps in the story ask the reader to reflect on a world in which a poisoned landscape was never truly

healed but became a place for artists to paint and school children to visit regardless; in other words, a world which has witnessed its own ruin but whose survivors perpetuate societal values and traditions in the best way they possibly can, by continuing to create, to teach and to celebrate art, history, family, freedom, and memory. I was mindful whilst exploring this aspect that I was suggesting ‘women’s roles as rebuilders of society’, something I have always found more compelling than examining the mechanics of the fall itself (Collier 2017, p 3).

Motif in *Transcendence* follows its musical inspiration by being embodied in small, recognisable features such as Sooty, who wanders in and out of every story, ultimately only memorable because she reappears continually over and again, repeating in the manner of a musical motif. Motif relates directly to metalepsis, a historic technique first recorded in dramatic works in Ancient Greece (Whitmarsh 2013). Traditionally, ‘Metalepsis occurs when an author enters or addresses the fictional world he or she created, and when characters leave their fictional world or address their author and their readers’ (Kukkonen 2011, p 1). While this certainly recalls the roots of metalepsis in ancient theatre, it fails to identify the scope of metalepsis available to the modern novelist. Courtney Hopf widens this definition by noting, ‘objects, characters, and even the aforementioned dreams and moments of recognition... constitute metalepsis, as they are moments in which one narrative level intrudes on another’ (Hopf 2011, p 116). Hopf summarises this from the viewpoint of the literary critic, but to somebody with a musical background, such as myself, the mechanics of metalepsis are much simpler: metalepsis *is* motif. Assessing metalepsis as musical motif, and understanding that motifs only exist as such through repetition (by being built into a structure over and again), seems to be a simpler, even clearer way to understand how metaleptic aspects of story work. Sooty appears as a metaleptic motif in every chapter – she lives with Lloyd, at Bar Blu, with the nuns in Cwenhild’s abbey, next door to Izzy’s mother in the city, and at Julie’s exclusion-zone camp in the forest. This repetition applies to other motifs

in *Transcendence*, too, like ‘ghosts’ who time travel, as with Olivia and Julietta (who experience a brief two-way wormhole which opens between ancient Rome and futuristic Europa). Ghost-motifs also exist as memories in the story, and in the figure ‘behind the walls’ in Julietta’s apartment, reminiscent of the ghost in Perkin’s Gilman’s *The Yellow Wallpaper* (Perkins Gilman 1892). The red-haired woman, that famous Pre-Raphaelite motif, became a lantern-carrying supernatural who wandered the forest to lead souls to their next journey, whilst simultaneously appearing as inter-generational characters in different chapters, travellers lost in purpose and in time, and women who survived on canvas and in writing, illustrating how motif (and metalepsis) are not restricted to *any* limited use or meaning. Bennet’s painting of Izzy (*Woodland*) also became a metaleptic motif within the story, which was repeated in as many sections as possible. The painting is inherited and subsequently sold by Mei, hangs in Dr Magnus’s office, is torn from its frame by Izzy, and so on. Cwenhild’s glass is a subtler metaleptic motif. Cwenhild is never shown physically painting the fragment which is accidentally imprinted by Sooty’s paw, but the future student imagines that she can ‘see’ the artist. A fragment of glass containing Sooty’s pawprint survives into the last narrative, effectively reinstated the long-forgotten Cwenhild. The black-cat-as-motif returns in the closing sequence of ‘Wild Birds’, when Julie notes Sooty’s unexpected appearance. Julie reflects that whoever made the cat’s collar knew weaving techniques better than the exiled colony, creating an unexpected dissonance which asks the reader to consider that Anglo Saxon culture in some respects had superior technical abilities to the futuristic world in which the commune now lives. The small, seemingly insignificant metaleptic motif of the black cat therefore comes loaded with alternative meaning and silent messages. When Julie says she wishes Sooty could speak, the cat’s silence takes on a very literal aspect, because only the reader can be certain that Sooty treads several timelines, being privy to knowledge that the characters do not hold. Metalepsis as motif was therefore integral to my interpretation of form in that it bestowed an

unexpected unity to *Transcendence* by creating intertextual threads, like repeating musical motifs, re-introducing characters and objects over again, allowing them to cross into each other's stories. It is no coincidence that metalepsis has been credited with bestowing David Mitchell's work with a 'sense of crucial existential connectivity between the lives of perfect strangers, capable of touching and determining the course of each other's life trajectories' (Schoene 2009, p 105). The metaleptic motif therefore offered me micro-ways to enmesh the different sections of *Transcendence*, helping immeasurably in tying this experimental, fractured form together by lending cross-story resonance via 'intrusions across narrative levels' whilst also exploiting a creative methodology I had originally learned from music (Hopf 2011, p 116).

The codas in *Transcendence* were again generated by a musical model, appearing at the very end of almost every chapter with the introduction of a new voice. These codas allowed for each story to be enriched with related segments from a different timeline, letters between the characters, or diary entries which introduced tiny fragments of story, containing things which otherwise would not have been revealed. The coda at the end of Cwenhild's story, for example, allowed me to transport her surviving stained glass into the future, where it is seen by a schoolgirl. Likewise, the novel's final chapter (entitled simply 'Coda') takes the story, ouroboros-like, back in history to the point where it began, in Anglo Saxon Britain. In this coda, Roxy, who disappeared from her own timeline, is reinstated in the past. The shortest codas in *Transcendence* utilise micro-fiction's compression of wordcount, but also, importantly, echo 'the gaps and fragmentedness of modern consciousness' (Roberts 2013, p vii). These gaps almost began to tell their own stories, since the reader's imagination bridges them by necessity, extrapolating what must have occurred in the interstices, something which builds on Iser's assertion that 'no tale can ever be told in its entirety', also supporting the notion that episodic storytelling 'relies on layering' because every 'incident takes on

significance in the light of the incidents that surround it' (Iser 1980, p 55; Tansley 2011, p 38). Using the codas to 'bring back' my vanished women satisfied my desire to reinstate them and, because the codas do not truly function as short stories in their own right, also satisfied my (sometimes stubborn) desire to confirm to myself that I was still writing a novel, albeit a fragmented one, rather than a short story collection.

In conclusion, I discovered that allowing the composite form to be shaped by an aleatoric device helped to fragment the narrative further, pushing Mitchell's composite template in a new direction. But, just as Cage and Schoenberg's musical innovations never truly replaced those which came before them, or others which have come since, so Johnson and Saporta failed to remodel the novel for the writers who followed. Rather, aspects of their work were subsequently rejected or synthesized, supporting Jeanette Winterson's conviction that a creative artist 'is a raider and whatever has been made possible in the past must be gathered up by her, melted down, and re-formed differently' (Winterson 1995, pp 53-54). Crucially, writers such as Calvino, Winterson, Mitchell and Auster acknowledge that they do not see plot in conventional terms; instead, they use non-linear timelines in a manner which allows them to retain more authorial control than the extreme aleatoricism of Johnson and Saporta, whilst still utilising elements of randomisation. Similarly, when structuring *Transcendence*, I selected aspects of the aleatoric method to use as a starting point, and as the novel evolved, these aspects meshed into other structural devices, such as micronarrative in the form of codas, metalepsis as motif, and silence and dissonance as facets of the unexpected. The process illustrated that no one generative idea created *Transcendence*, but rather, that different aspects fed into and supported each other. As Iser notes, 'the overlapping of different forms... brings about the expansion of our experience', a notion which helped *Transcendence* become structurally more complex, and in many ways

more unexpected in form and content than I had originally conceived (Iser 1974, p 59).

CHAPTER TWO

The Fiction of David Mitchell: using Mitchell's composite novels as a springboard for the form and content of *Transcendence*

In this chapter, I will explore the work of the novelist David Mitchell with particular reference to form (the composite structure) and content (long timelines which include past history alongside futuristic dystopias). I begin with an overview of Mitchell's unique interpretation of the composite form, looking closely at dystopian fiction both as a genre and within Mitchell's work, before exploring historical fiction with particular reference to the eras relevant to *Transcendence*. I examine these aspects through a creative lens, asking how and why I selected, evolved or rejected ideas and influences to push aspects of *Transcendence's* storytelling in new directions.

The inspiration for writing my PhD project as a composite novel came originally from my reading of David Mitchell's *Ghostwritten*, *Cloud Atlas*, and *The Bone Clocks*, stories which unfold in linked novellas spread over long timelines (Mitchell 1999; 2004; 2014). Mitchell's was the first fiction of this scope and style that I had encountered, and so provided an exciting starting-point for my own project. Although there are other writers who also use composite form and pan-historical narrative, Mitchell's work stands out for its easy movement beyond boundaries and thresholds of different kinds, from genre and era to the regular world and the fantastical realm, a technique which dramatically capitalises on 'the fragile and uncertain terrain' of the human condition by connecting with a wide variety of characters and their unique and often difficult situations (Shaw 2018, p 16). Each

of these facets resonated with my aspirations for my own project, although I was initially unaware of the musical elements in Mitchell's structural devices.

To understand Mitchell's work as a writer rather than simply appreciating it as a reader, it was necessary to divide my enquiry into two distinct areas: form (a musical term which I use in place of its alternative, structure); and content.

The key to Mitchell's immense diversity is his use of form, because without the composites, his fiction's boundary-leaping journeys through time and genre would be impossible to achieve. By splitting the narrative into composites, Mitchell frees himself to start stories anew and again, in different times and locations, with diverse narrators, using metaleptic motif to provide threads of commonality. This commonality is achieved by both using motif within the boundaries of one novel whilst crossing eras into different composites (as with Sonmi-451's recording, and Ewing's ruined diary in *Cloud Atlas*), and by going beyond the pages of one novel, situating the same character in other novels too, notably Marinus (Mitchell 2004; 2010; 2014). It is clear why Mitchell describes his work as comprising 'Lego units' (the composites) with 'tunnels or trade routes between' (the metaleptic elements-in-common), illustrating that his attitude to structure sees each novel as part of a wider world, which has been described as the 'Mitchellverse' (Northover 2015, para 10-11; Dimovitz 2018, p 1).

As I continued to unpick Mitchell's composite elements, I saw how the scope of these story-worlds is enhanced by the situating of different eras beside each other - such seismic shifts in time, character, and locale have the effect of never letting the reader take for granted who, where or what we will encounter next, therefore capitalising on the element of surprise and continually drawing the reader in with unanswered questions. *Cloud Atlas* is a powerful example: Zachry's grim futuristic

narrative nests inside the historically recent story of a failed writer's personal problems, which in turn sits within a 1970's thriller, which sits inside the letters of a 1930's musical amanuensis, all within the frame of a Pacific journal dating from the 1850's. This adventurous attitude to structure indicates how and why Mitchell's overall story-world is perceived as an interlinked 'megaverse' in which 'the real, imagined and virtual worlds collapse into one another' (Miller 2015, para 3; Simpson 2011, p 70). Form cannot be divorced from content in Mitchell's work, because it is the changing landscape itself (the content, and the diversity within) which enables his use of composites to function so powerfully, flitting through time and place with dizzying speed, therefore rendering 'the structure of the novel... vital in emphasising' its wildly different elements (Shaw 2018, p 14).

The overriding sense I had when reviewing Mitchell's work was that he presents a rare example of a writer who addresses past history and futuristic settings as simply history, depending on which way he chooses to wind the conveyor belt of time, echoing Seed's statement that, in fiction, 'Once time was imagined as an expanse for exploration, the direction this could take was forwards or backwards' (Seed 2011, p 101). Mitchell's earliest fictional setting (to date) is in 1799, in *The Thousand Autumns of Jacob de Zoet*, a novel set amongst the Dutch traders and native Japanese in Dejima (Mitchell 2010). Mitchell's other novels contain composites set in later eras, some within the author's living memory, enabling him to locate his work 'in each specific time period via the inclusion of pop culture references and ordinary routines of daily existence to create a sense of social realism' (Mitchell 2010; Shaw 2018, p 2). Mitchell believes that the 'enduring popularity of historical fiction' exists because 'it delivers a stereo narrative: from one speaker comes the treble of the novel's own plot while the other speaker plays the bass of history's plot' (McWeeney undated, para 2). This comment is telling: Mitchell could as easily be describing pan-historical fiction as single-era historical fiction, here, by using

different musical pitches to illustrate stories separated by time whilst existing in combination. It is this unusual viewpoint which sits at the heart of the author's daringness in including past and futuristic narratives side by side. Indeed, while it is relatively common to find the past and the present in combination in composite fiction, it is far less usual to find historical and *futuristic* threads side by side.

It was not an easy task to find, for comparison, other writers who set the past and the future within the same composite novel. While writers often use elements of futuristic technology to open up a past landscape in science fiction narratives (Michael Crichton's *Jurassic Park* and *Timeline*, for instance), these novels tend not to use composite form quite so inventively as Mitchell (Crichton 1990; 1999). Jeanette Winterson and Maya Lunde are two rare examples of novelists who write past-to-future timelines as composites. Winterson employs form to emulate that 'Life is layers, fluid, unfixed fragments', sometimes using fractured storylines and short, disjointed paragraphs (Bilger 2012, para 36). Winterson's work, like Mitchell's, is 'well known for its multiple border-crossings and fantastic journeys through space, time, genre, and gender', but by her own admission, Winterson 'does not use plot as an engine or a foundation. What I do use are stories within stories within stories within stories' (Andermahr 2005, p 108; Winterson 1995, p 189). This absence of plot as a driving force for story sets Winterson's fiction apart from Mitchell's in that it becomes multi-layered within short scenes, and therefore often more fragmented at a syntax level. Lunde's novels, different again, are inspired by cross-historical cli-fi, necessitating both past and future threads to show the development of an ecological issue over time. Lunde admits that her use of three storylines in *The History of Bees*, for example, stemmed from three questions she had about bees in different time periods, rather than being motivated by the need to play with form in the same manner that Mitchell and Winterson do (Lunde 2015; Lunde undated, para 5). I was drawn to these writers without doubt, but I

continued to identify Mitchell as my main influence, simply because he is uncommonly inventive whilst remaining vibrant and easy to read - as AS Byatt noted, 'For all his plot's dazzling complexity, his writing - which has many styles - is always simple and elegant' (Byatt undated, para 1). The major aspects of form and content which I therefore consciously borrowed from Mitchell were the desires to use interlinked composites with different narrators, to write about a past period in history alongside a futuristic dystopia, and the awareness that these separate sections must be linked with aspects of commonality. Beyond that, I had already learned to 'think of the writing process not in terms of a linear sequence of unique individual stages but as a thinking process that involves multiple embedding and recursion of subprocesses' - in other words, I understood that the novel would evolve, picking up themes and motivic resonance over time (MacRobert 2013, p 64).

Dystopian fiction provided the starting-point for my first composite, its attraction being a unique relationship with boundaries and thresholds, which are prominent (and indeed often very physical) in all dystopian story, from Zamyatin's *We* to Atwood's *The Testaments* (Zamyatin 1924; Atwood 2019). These boundaries and thresholds are used to segregate, to control, and to maintain a status quo in societies often 'covertly run by shady bureaucrats who work for corporations rather than for a democratically elected government' (Tate 2017, p 3). Dystopian writers cleverly use 'what already exists' to make 'an imaginative leap into the future, following current socio-cultural, political or scientific developments to their potentially devastating conclusions' (Snyder 2011, p 470). Dystopian fiction exhibits an incredible suppleness and shows constant evolution, having moved from the grey corridors of Orwell's 'thought police' into the brutal killing games of Dashner's maze runners among many other incarnations in between (Orwell 1949; Dashner 2009). Indeed, writers continue to reimagine dystopian landscapes by

‘borrowing specific conventions from other genres’ to ‘blur the received boundaries of the dystopian form and thereby expand its creative potential’, so I saw plenty of opportunity for weaving seemingly random aspects such as Fortean phenomena into *Transcendence* (Baccolini and Moylan 2003, p 7).

Mitchell’s dystopian landscapes are recognisably familiar, being influenced by popular contemporary preoccupations: the poor management of the planet by humankind; the fear that scientific advances like cloning will cheapen human life and erode morality; and the notion that nuclear disaster will reduce a once-fertile planet to a barren wasteland. Mitchell’s closest-to-present-day dystopian story appears in the final chapter of *The Bone Clocks*, in which Holly Sykes presents the beginning of the Endarkenment, the first stage of an unfolding apocalypse, in 2043 (Mitchell 2014). Holly frames her environment with topical references that most readers today would find familiar:

...it’s grief for the regions we deadlanded, the ice caps we melted, the Gulf Stream we redirected, the rivers we drained, the coasts we flooded, the lakes we choked with crap, the seas we killed, the species we drove to extinction, the pollinators we wiped out, the oil we squandered, the drugs we rendered impotent, the comforting liars we voted into office - all so we didn’t have to change our cosy lifestyles. People talk about the Endarkenment like our ancestors talked about the Black Death, as if it’s an act of God. But we summoned it, with every tank of oil we burnt our way through. My generation were diners stuffing ourselves senseless at the Restaurant of the Earth’s Riches knowing - while denying - that we’d be doing a runner and leaving our grandchildren a tab that can never be paid.’ (Mitchell 2014, pp 549-550)

Holly’s story presents many recognisable contemporary concerns, something which sets it apart from the more distant futuristic landscapes depicted in *Cloud Atlas*, where servile human clones, and a post-nuclear iron-age society, are further

removed from today's recognisable world (Mitchell 2004). Indeed, Mitchell's dystopian landscapes are written on different premises despite each embodying story-codes critical to dystopian fiction. The notion of not limiting a dystopian story to one setting or era (in emulation of Sonmi and Zachry's narratives in *Cloud Atlas*) appealed to my desire to use a long timeline specifically to harvest characters from contrasting environments, and to discover what new ways I might find to integrate and link their stories (Mitchell 2004). Beyond this, my main motivation was to acknowledge that if the purpose of the science fiction writer is to 'speculate about the full range of impacts that new technologies might have', then the purpose of the writer of dystopian fiction must surely be to do so with a watchful eye on the hinterlands beyond the boundaries - the dark areas, the nightmare zone (Sawyer 2011, para 5). In the end, I took Atwood's simplified definition of dystopian fiction as a starting point, in which the landscape is reduced to its most basic expression: 'Dystopias are... Great Bad Places... characterized by suffering, tyranny, and oppression of all kinds' (Atwood 2011, p 85). This inherent sense of darkness promised an oppressive and disturbing backdrop which resonated with my plans for weaving 'missing women' throughout the novel, as well as suggesting many kinds of boundary and threshold of both physical, moral and metaphorical natures which acknowledged the pre-existing tropes of dystopian fiction whilst resonating with my own wider research interests.

Holly's familiar near-future dystopia informed Mei Ling's environment, which is presented in 'Wild Birds' as an overcrowded city surrounded by an exclusion zone polluted by human mismanagement. Mei Ling embodies the homogenised worker-bee of classic dystopian fiction, whose only route to freedom is by escaping beyond a physical boundary. Mei flees, although what she finds on the other side of the divide is no utopia, in common with the parasite-infected self-sufficient commune of Hall's *The Carhullan Army* (Hall 2007). Like Holly Sykes, Mei remains

trapped in a world not of her own making, but one which was ruined for her by the poor decision-making of previous generations. Holly's story presents just one version of the popular 'prophetic visions of how a violated nature might take revenge on its heedless exploiters' by depicting a future in which killer 'gigastorms' unfold alongside the beginnings of social collapse (Latham 2014, p 84; Mitchell 2014). Mitchell, in common with writers such as Atwood and Gee, uses the image of a damaged earth to 'prompt human beings to modify their life activity in a manner that will significantly offset their impact on the planet's environment' (Atwood 2003; 2009; 2013; Gee 1998; Bellamy and Szeman 2014, p 192). In *Transcendence*, I rejected foregrounding the mechanics of mankind's self-inflicted damage in favour of using images of the ruined Earth as a light-touch backdrop. *Transcendence* retains an awareness of the cautionary climate and environmental messages depicted with increasing urgency by the media and action groups: changing weather patterns associated with natural disaster; destruction of landscapes; the erasure of species; pollution; the quest to find alternative non-exhaustible fuel sources; the threat of nuclear destruction.¹¹ But, *Transcendence* avoids foregrounding any kind of exposition which abridges this in the same manner that Holly does, instead using narrative silence to ask the reader to fill in the gaps, taking advantage of a 'memory-based approach [which] envisions readers' use of general knowledge to be more fluid and more idiosyncratic: [because] each increment of text resonates through readers' long-term memory to recruit a sample of memory traces' (Gerrig 2010, p 22). In this manner it is possible to tap into knowledge which is regularly updated in the public domain and therefore remains fresh, whilst prompting the reader to draw on their own associations and experience to elucidate what is likely to have destroyed the landscapes and people in *Transcendence*.

¹¹ References include Nasa's climate-dedicated website, <https://climate.nasa.gov>; Amnesty's climate change campaigns, <https://amnesty.org.au>; and the UK's Climate Change Committee, <https://www.theccc.org.uk/>

The much later environment of ‘Hybrids’ has more in common with Mitchell’s ‘Sloosha’s Crossin’ and everythin’ after’ of *Cloud Atlas* (Mitchell 2004). In both of Mitchell’s stories, society has shrunk and regressed. Mitchell uses nuclear war as the rationale behind his declining population and its return to pre-industrialised society, which he suggests by featuring the regular birth and death of deformed human ‘babbits’, and by showing societal breakdown in the form of rival communities who capture slaves and fight with basic weapons for resources, something which suggests a post-apocalyptic return a less technologized environment (Mitchell 2004). In this way, Mitchell too relies on the prior knowledge and associations of the reader to flesh out the rationale behind his dystopian landscape. I also supposed that the population of Earth would reduce considerably over many years, but due to a combination of disease, fertility problems and micro-wars rather than one big nuclear event. I saw these wars as terrorist-instigated or civil skirmishes rather than big military endeavours, caused by unhappy zealots with dirty bombs, or doomsday factions who released viruses with no cure, in landscapes so poisoned that those with money escaped and left those who did not to die - survival of the fittest, or the richest - a truly dystopian trope. My supervisor Zoe Lambert urged me to consider the science and society behind my dystopian environments, instead of allowing my ideas to be generic and not fully realised. Alan Weisman’s book *The World Without Us* proved an inspiration in its examination of what would happen to a landscape if humans suddenly vanished overnight (Weisman 2008). I was later to discover that David Mitchell had read the same book whilst writing *The Bone Clocks* (Patel 2014, para 19; Mitchell 2014). While my population does not vanish as with Weisman’s model, in Mei Ling’s lifetime its inhabitants retreat from poisoned areas to cram into increasingly smaller spaces and leave great tracts of wilderness unmanaged. Centuries of landfill and depleted uranium buried in underground dumps has, in ‘Wild Birds’, leached into the subsoil to kill foliage and wildlife, polluting watercourses. The exclusion zone is a visible deterrent to citizens seeking an alternative existence, appearing as

an ugly decaying brownfield site backed by sickly trees, yet beyond it, nature runs rampant again, just as it did after catastrophic nuclear poisoning in Chernobyl and South Carolina. I chose to retain the physical boundary of dystopian fiction's classic 'zones' to retain elements of familiarity and to exploit a clear threshold in terms of story: Mei soon crosses over this, and finds a different world on the other side, something which resonates with both wider dystopian narrative and with the beyond-boundary landscape of the fourth dimension, whose essence became increasingly meshed into the novel during redrafts.

My research continued into new power sources that might replace nuclear fission. Solar catchers, for example, that sit in orbit around earth and beam back microwave energy have been 'proved viable' by Japan Aerospace Exploration Agency (JAXA (SSPS) undated). My dystopian lens told me that this could go badly wrong if the materials used to make the catchers degraded at an unexpected rate and sent what Philip K Dick called fragmented 'kipple' into the atmosphere (Dick 1968; O'Brien 2011, p 51). Chemi-rain barriers (seen in 'Wild Birds' and 'Bar Blu') are erected over many areas to protect citizens and buildings from the chemical components of this degraded fallout, but my narrators note in passing that there are faulty barriers, and some places are not protected at all. When Izzy tells us that her mother's neighbour has a 'license' for growing real beans on her balcony, this is because edible foodstuffs can only be grown outdoors in an area with an adequate rain barrier – otherwise, whoever eats them will be poisoned. In my futuristic societies, there are rooftop gardens where hippies grow herbs on a small scale recreationally, but the bulk of food is produced in hangars that 'force' crops to keep up with demand. Meat, in common with Atwood's vision of ChickieNobs in *Oryx and Crake*, is also grown in warehouses, but unlike Atwood's, does not retain legs or mouthparts, instead being harvested as pure tissue from nutrient-racks or food-pipes as noted by Julietta, who finds it sickening that people once ate things that had horns and hooves (Atwood 2003, p 202; 'My Dearest

Olivia' p 87). I had at first doubted my own rationale when using familiar elements of dystopian settings in *Transcendence*, but during my upgrade panel I was reassured that popular tropes can be retained and accommodated, rather than being rejected out of hand, even in a novel which sets out to push boundaries.

The dystopian environments which acted as a starting point for *Transcendence* soon took a new direction of their own, leading naturally into an exploration of the murky world of transhumanism, which promised fertile ground for a dystopian narrative, even though there is no true precedent in David Mitchell's work. *Cloud Atlas*'s fabricant population are clones developed to serve human masters, but do not truly explore a blend between biology *and* technology, which evolved into the next focus for my research (Mitchell 2004). In this way, Mitchell's work provided a springboard for my own ideas, which then proceeded to move in a different direction. Inspired not only by transhuman doctrine aimed at prolonging life and enhancing physical abilities, but by films such as *Robocop* (1987), *Universal Soldier* (1992), and *Captain America* (2011), I began to write about a super-soldier technician (Hans) who was responsible for carrying out 'upgrades' on the human body. I did not choose a soldier as a subject, though, I chose a little girl Hans had bought from a market. The storyline was designed to create conflicting feelings in the reader because the girl, Archer, is clearly vulnerable, exploiting Mitchell's sentiment that 'emotional resonance should be something all novelists... want to create. If you don't care about characters, you've got dead bodies on your hands' (Patel 2014, para 6). As part of the fragmenting process, I curtailed Archer's story before she had committed her first terrorist act, and continued with a different voice, that of Yelena. This deliberate 'shearing off' of a story and supplementing a new narrator was inspired by the cutting technique of aleatoric methodology. The new narrator, Yelena, interfaces with technology when she dons a protective device containing an uploaded consciousness. This device is the Bodymonitor, a non-corporeal 'carer' designed to look after the soldier in the field. Bodymonitor's

narrative is recounted as evidence in a post-operational inquest, something inspired directly by Mitchell's narrator Sonmi-451 (Mitchell 2004). Bodymonitor is not, however, on trial as was Mitchell's recaptured clone, and neither is Bodymonitor an unwilling servant. Bodymonitor consented to being remodelled as a hybrid, in common with the main characters in McCaffrey's *The Ship Who Sang* and Murphy's novella *Rachel in Love*, who both have a medical need for a mind-uploading operation (McCaffrey 1969; Murphy 1987). I adopted a similar approach by creating a terminally-ill patient who was given the chance to rescind her corporeality in order to survive. After the operation, Bodymonitor loses the desire to associate themselves with gender, and observes to Archer, 'I'm now neither a her nor a him, but when I was corporeal, I was like you, Archer – female' ('Hybrids' p 248). This is reminiscent of Leckie's *Ancillary Justice*, in which the narrator was once part of a spaceship hive-mind and therefore sees no relevance in gender or sexuality, yet Bodymonitor is aware of their former femininity and does not confuse the gender of others as Leckie's narrator does (Leckie 2013). There were some things that I did not want the jacket to forget, specifically so that they could give the reader a window into what it is like to have been born one way and then to acknowledge that they now live in a fundamentally different manner. However, I did not want to associate the uploaded consciousness with an evolutionary nirvana, or the kinds of omnipotence or redemption evident in films such as *Lawnmower Man* (1992) and *Avatar* (2009). I agree with Mark O'Connell that 'the singularity was not a concept I could ever see myself getting behind... I never quite came to understand how what it offered – the prospect of a bodiless existence as pure information, or run on some third-party human hardware – could ever be seen as salvation rather than perdition' (O'Connell, 2017, p 77). So, rather than seeing the uploaded consciousness as 'superior' to an organic human, I chose to retain the humanity of the jacket in small ways, such as their need to recharge (sleep) in an alcove, and their close relationship with the human host, Yelena. I decided that the jacket would be damaged and would consequently be found

defective as a design. I supposed that technology will, even in a futuristic environment, still be in a state of flux, with ever-more adventurous experiments being conducted and found wanting.

As my research into transhumanism continued to progress further away from its original starting-point, I acknowledged that I was now searching for inspiration beyond the work of David Mitchell, via a wider palette of influences including critical and academic essays, current media news stories, Transhumanist Party philosophy, Mpreg fanfic, and film and television. Within these sources, I was particularly drawn to images of mechanised gestation, which appear in fiction today with increasing regularity as scientific advances push at the boundaries and thresholds of traditional gender roles with regards to sexuality and reproduction. In 1924, JS Haldane created something of a blank canvas when he imagined gestation outside the body and named it 'ectogenesis' (Haldane 1924). Haldane provided no description of this process, leaving the door wide open for writers of dystopian fiction to dream one up for themselves. Soon afterwards, Huxley's *Brave New World* depicted artificially engineered bottled babies on a conveyor belt in the Central London Hatchery and Conditioning Centre (Huxley 1932). Images of pregnancy in dystopian fiction have, ever since, popularly included faux-wombs within what Martin Goodman terms the 'womb room', a factory-like facility in which rows of pods or chambers 'grow' children (Goodman 2007, p 176). But fiction is not the only source of graphic depictions of industrialised, commodified 'without-woman' pregnancy - this image also appears in alien abduction lore, in stories recounted by people who believe themselves to have been 'taken' into a laboratory, usually within a spacecraft. Film and television enthusiastically absorbed this lore: *Star Trek Voyager's* Seven of Nine explained that she was kept, presumably isolated, in a 'maturation chamber' after she was assimilated by the Borg as a child (1997); *The X-Files* film featured a bank of shadowy chambers with hybrid alien embryos suspended in fluid, witnessed by a terrified Scully (1998). The 'womb room'

environment is always described either without warmth, or with outright horror, in both fiction and abduction interviews. Bender's first glance of the 'womb room' in *Ectopia* reveals that 'Perspex tanks lined the walls of the room. Inside each tank was a translucent pod. Thin tubes squirmed between the pods and the wall' (Goodman 2007, p 176). Our collective opinion of fetuses being mass-gestated inside jars or pods without mothers is not a pleasant one, situating mechanised pregnancy firmly within the shadows of the ever-evolving dystopian landscape. Even regular pregnancy has its moments, since 'the internally estranging process of having a human being grow inside one's body should not be easily disregarded for anyone interested in the politics of strangeness and alienation' (Konior 2019, p 251). Helen Sedgwick addressed this perfectly in her speculative fiction novel *The Growing Season*, in which the narrator remarks of 'traditional' pregnancy: 'Sometimes you could feel their little hand, their curled fist, between your ribs... was that beautiful or was it gross? She didn't know' (Sedgwick 2017, p 302).

I tried to envisage a completely new method of ex-utero reproduction that did not rely on pods, racks or a factory environment, but I failed. I was repeatedly drawn back to the impersonal, shadowy hangar where babies are nurtured en-masse, and in which the clinical production line contrasts with the wet pouches in which the babies are visibly growing. I reminded myself that my engagement with dystopian fiction was never intended to make huge changes to the things I had internalised from the preceding canon. Rather, I wanted the novel's form to become spliced and intersected by new narrators and Forcean motifs which added aspects of the unexpected. I therefore retained a sense of horror at the commodified and industrialised nature of Lucia's gestation, in common with my predecessors, but I could not write a description without adding more touching imagery of the sleeping babies. Ash's 'womb room' is therefore a combination of the unsettling twilight fluid-filled industrial pod system, combined with baby imagery that any new parent would recognise warmly:

The framework held sacs which hung in hammocks. Each had a baby growing inside. The fetuses were at various stages of development, some tiny like little sea creatures, others almost ready to be bathed and nursed, thumbs in mouths and little backs curled around tiny feet. Dim lights illuminated parts of the babies' bodies: a hand here; a foot there; a twitching arm; the dark blot of a head. Sotto voce to Ash's retreating footsteps were the sounds of gentle movement: the odd squish; soft bubbling; a gentle shushhh as a limb brushed the inside of its surrounding membrane. ('Bar Blu', p 58)

My pregnant character Jules is ultimately rendered little more than a puppet, with a womb that is sequestered against his will, reminiscent of Atwood's handmaids but with a reversal of gender (Atwood 1985). Dr Magnus is an inversion of the clichéd patriarchal old-school scientist of the Western medical profession; likewise, the angry women who stare through Jules's meeting room window cannot afford to pay for fertility treatment, while Jules himself enjoys elevated status within ManCarry. Gender-based role-reversal and defamiliarization are well-suited to science fiction narrative, when 'twisty fantastical elements... [become] a refresh button on big, overwhelming issues we've exhausted the conversation about' (Beukes 2013, p 403). I wanted to portray so-called equal opportunity thwarted by the bigger god of finance, using the dystopian boundary tropes of 'them and us' to suggest that there will always be those who are not permitted true freedom or choice, particularly when they cannot afford to pay for it. One concession I did make, though, was leaving Jules's pregnancy unaffected by allowing him to keep his child. As a mother myself, I could not deny him this.

Dottie, the final hybrid character in *Transcendence*, is an anthrobot with a human heart. As with Sonmi-451 and many other mechanical characters of both written fiction and film, Dottie is subservient to her human creators (Mitchell 2004). However, in common with Sonmi-451, she narrates in first-person and so speaks directly to the reader. Though Dottie continues the robot tradition of serving

humans, she is fully autonomous, and her understanding of the people she interacts with (along with her evocative reminiscing) evokes the trust of the reader, just as Sonmi speaks freely as ‘one of us’ despite her absence of status and rights. I considered this to be an important part of the narrative because the android/transhuman/hybrid character is often portrayed in fiction as increasingly subversive or dangerous. Dottie, I decided, must ‘fit in’, and be a working part of her futuristic post-apocalyptic society, displaying the maternal values of a full-time carer and placing value on memories of her adopted family. Both Lessing and Atwood write female characters as guardians of family memory, in *Mara and Dann* and *The Testaments* respectively, so Dottie too upholds this tradition as the only true keeper of Hans, Avi and Archer’s ‘domestic’ memory, having known the people behind the myth (Lessing 1999; Atwood 2019). Dottie’s existence also inverts the usual transhuman mantra (that of an organic with added mechanised parts) because she is an anthrobot fitted with a real heart. This heart was a whim on the part of her maker and has no purpose beyond the symbolic. It was in this final ‘light touch’ of adding a real heart during the redrafting process that I bestowed Dottie with something which made her more than ‘just a robot’. Dottie is a character set apart from her fictional mechanical sub-class forbears, precisely because she embodies those things often held central to the female carer: Dottie is unflappable, kind, ministering, watchful, a keeper of family memory, and has the practical skills of the home-maker. As with Sonmi, the reader recognises her humanity, a device which David Mitchell uses to provoke us to question why this warm and intelligent fabricant is considered less worthy than her human peers, and will ultimately be executed for daring to want freedom (Mitchell 2004). The reader never suspects that either Sonmi or Dottie will suddenly malfunction, like Azimov’s robots, and harm their human ‘masters’, or scheme themselves into becoming robotic overlords, as Brown depicted in ‘Answer’ (Azimov 1950; Brown 1954). We trust Dottie both as a narrator and a character, and in domestic terms, she actively challenges the post-modern notion that female homemakers ‘want to escape from

the dreary cycles of repetition in the private sphere' (Gatens 1997, p 85). Dottie shows no such inclination to escape her domestic duties, and she is not reduced to being a less-worthy narrator as a result. Sonmi, by contrast, is disposed of, as punishment. Her recorded testimonial survives in its metal egg into Zachry's narrative, where it takes on mystical meaning in the 'end of days'. Satirical portrayals of the interpretation of items which have survived an apocalypse also feature in *A Canticle for Leibowitz* and *The Book of Dave* (Miller 1959; Self 2006). Although as a reader I found Miller's shopping list and Self's 'divorce diary' entertaining and thought-provoking, I had no desire to emulate this kind of satire, and so *Transcendence* instead uses surviving artefacts to interconnect different time periods and to reinstate missing women, a strategy designed to elevate the broken things which survive the Fall by retaining an essence of their original status and mystique, and by using them to resurrect the forgotten.

Historical fiction came next in my exploration of the long timeline. Using Mitchell's narratives as inspiration, I went back in time to search for the roots of my story and the characters who might chronologically begin it. My own conviction is that, in creative practice, there is little difference between the mechanics of writing the future and writing the past. Wooden structures from Anglo Saxon times may have left traces of floors and postholes, but we still must surmise the original purpose of the buildings. Likewise, driverless cars may one day leave the road and take to the air – but how will their flight-paths be defined? In both cases, an element of the unknown exits, and filling in the gaps requires the 'geeky genes of the model-maker' (Mitchell 2010, para 9). For *Transcendence*, I chose the middle of the Anglo Saxon period as a setting for my historical thread. This was a deliberate decision prompted by the need to feel that I was pushing what I saw as the boundaries of Mitchell's blueprint a little further in my own work, since Mitchell's earliest historical landscape is set in 1799 (Mitchell 2010). The decision was also influenced by my long-running fascination with what was, during my

upbringing at least, known as the Dark Ages (although the term is rarely used today). I sang music dating from the end of this period (not much survives); I played musical instruments reconstructed from carvings and manuscripts (but open to interpretation with relation to tuning/pitch); and I lived close to the ruins of a Cistercian abbey dismantled in the Dissolution, all of which suggest how a long-standing fascination with ancient history dovetailed into my aspirations for pushing my story's starting-point into the distant past.

Gary K Wolfe identifies 'a subgenre' of historical fiction that exists in the form of a 'secret history', in which the story must 'violate no known historical facts, but... can do pretty much whatever it wants to in the interstices between those facts' (Wolfe 2011, p 64). It is this 'secret history' that informs all of Mitchell's historical narratives, and also the Roman and Anglo Saxon threads in *Transcendence*. In terms of research, the detail necessary in these chapters ('My Dearest Olivia' and 'Maiden of Glaesen') relied on two things: firstly, the history of the early Roman settlers in Britain; and secondly, the earliest Christian abbeys in England. In Cwenhild's narrative in particular, specific historical detail was vital because she is an early maker of stained glass. This aspect of the story drew on my own experience as a stained-glass painter. Years before writing *Transcendence*, I attended traditional glass-painting workshops at Ely Cathedral and later with the artist Paul San Casciani in Oxford, which helped immeasurably when dissecting Cwenhild's role; I bought a glass kiln and traditional materials, and continued to work on projects long after the courses had finished. Before I left the UK for Australia, I had successfully installed two hand-made stained-glass windows, made using medieval cutting, painting and firing techniques, in my home. Different cutting and firing methods, the advent of coloured glass and silver stain, and the re-using of old scraps were all historical accuracies that fed into the story, and all things I had encountered myself in practical work. In embracing and acknowledging this practical aspect, and in using it to inspire my historical storytelling, I consciously moved beyond the

influence of David Mitchell's fiction in search of additional elements which might underpin the historical accuracy of the era I had chosen to portray.

The practice of attempting to recreate copies of historical items by using tools and techniques available in a past era is known as 'experimental archaeology', an 'approach for filling gaps in our knowledge about the past' in which 'An archaeological experiment must always answer a specific research question through practically testing production, use and/or formation of material culture and/or archaeological features' (EXARC.net 2001, para 1). I previously followed the twenty-year BBC TV series *Time Team* (1994-2013), which often used experimental archaeology to reconstruct tools, buildings, medicines and foodstuffs from the past. Experimental archaeology provided more than simply historical background research for *Transcendence*, when I began to wonder how it might work in a futuristic environment. Julietta reverts to this practice in 'My Dearest Olivia' when she eschews her technical aides to live more like a Roman citizen. She can never fully achieve this, being confined to a small city apartment, but she experiments as far as she is able with Roman cooking methods, paint making, art, and clothing (all of which are vividly documented and therefore easily accessible to the writer in terms of historical research). This time-shifting of experimental archaeology from the present into the future provided another cross-era resonance to aspects of the unfolding story, by suggesting that even in a distant future, lost knowledge might be rediscovered thanks to the experimental practitioner, who becomes enmeshed in the process and its results, something which in Julietta's case, became an obsession.

Historical fact provided the embryonic idea for erased women (which quickly became a recurring motif), since records of women from the long-ago past are often non-existent or inaccurate, meaning that 'consideration of the 'real' historical

female figure must acknowledge the contested nature of narratives surrounding her, as it is she who has been manipulated by male-authored and/or patriarchal accounts of history' (Cooper and Short 2012, p 5). In *Transcendence*, Cwenhild was just one example of a woman who vanished from history - Olivia was another - a theme which was underlined when Roxy, Izzy, Dr Magnus and Mei also disappeared from the narrative, although the rationale was not the same in each case. Wolfe's 'secret history' therefore provided both a starting-point and the inspiration for extrapolating various methods of reinstatement of women whose lives and achievements had been lost in some way. As Maya Lunde noted of her character Charlotte in *The History of Bees*, 'Charlotte... is the kind of person the history books do not write about... the documentation doesn't exist. But that doesn't make her story less true. There are millions of Charlottes out there in the world, both now, and in the past' (Lunde 2015; Lunde undated, para 14). This statement embodies something which I capitalised on, not simply by creating a woman from the past who might be erased and then remembered, but by running the missing/forgotten-reinstated theme into the future, too. Crucially, Lunde's philosophy connects with the wider notion that, 'not the emperors and the generals and their wars, but the nameless actions of people who are never written down' carry the truth of a story, a sentiment reflected in many pan-historical novels including Stanley Robinson's *The Years of Rice and Salt* and Winterson's *Frankissstein* (Wagner 2003, para 1; Stanley Robinson 2002; Winterson 2019).

My original aspiration for both form and content was to emulate the surprise and uncertainty created by Mitchell's big shifts in era, location and narrator, in a new way. I chose to push the timeline further back in history, and to fragment the composites to allow temporal jumps which lengthened the timeline of the narratives and enabled a bigger world view. I saw these as opportunities for resurrecting lost women whose stories had been forgotten, and for introducing Fortean elements designed to destabilise reader expectation by providing the

‘surprise’ factor reminiscent of Mitchell’s writing, but achieved in a different way. I did not feel that these episodes would necessarily undermine the coherence of the overall story; rather, that ‘our attention is almost exclusively occupied with the search for connections between the fragments’, something which brings an awareness ‘of the nature of our own capacity for providing links’ (Iser 1974, p 280). These connections are suggested to the reader of *Transcendence* in ‘the same character, the same names, the same problems’ which prompt the ‘reader’s instinct to link’ the composites (Tansley 2011, p 38). Ultimately, as I dug deeper into Mitchell’s work to explore my research questions, I realised that my own creative thought process had more in common with Mitchell’s than I had originally supposed. Both myself and Mitchell are fascinated by chance (aleatoric event) and how it might be portrayed in narrative; we use musical terminology to describe story content; we utilise musical form to plan aspects of narrative structure; and finally, we both avoid extreme randomisation in story (for example, in Mitchell’s rejection of Calvino’s unfinished narratives, and my rejection of Johnson and Saporta’s shifting structure) whilst happily embracing *elements* of chance. I eventually came to suppose that Mitchell’s fiction had drawn me in so powerfully because I intuitively felt a resonance-in-common which went deeper than I had at first realised.

CHAPTER THREE

Writing Beyond Boundary and Threshold: fiction of the Fourth Dimension

In chapter three, I will ask how the fourth dimension, a theoretical spacetime arena originally identified by mathematicians, can be used to inform cross-genre composite narrative. I explore a previously undefined sub-category of fourth dimension story which exists within novels of various genres. I examine how this sub-category unexpectedly created my own route into understanding the fourth dimension in fiction, before noting why the label ‘fourth dimension’ became a key term to describe anything which sat beyond the regular boundary of human perception. I consider how Fortean phenomena (timeslips, alien abduction, ghosts, and the Otherworld represented by the magical forest) operate as aspects of the fourth dimension within *Transcendence*. In conclusion, I suggest that use of the fourth dimension in fiction allows the writer to cross many boundaries and thresholds, resonating with aspects of aleatoric principle, fragmented composite form and cross-genre writing.

I choose weird stories because they suit my inclination best – one of my strongest and most persistent wishes being to achieve, momentarily, the illusion of some strange suspension or violation of the galling limitations of time, space, and natural law which for ever imprison us and frustrate our curiosity about the infinite cosmic spaces beyond the radius of our sight and analysis. (Lovecraft 1933, p 1)

Lovecraft wrote his essay *Notes on Writing Weird Fiction* at a time when composers were re-devising tonal systems, when painters and sculptors were skewing dimension, and when choreographers were breaking the mould of Classical dance (Lovecraft, 1933). These artistic innovations were part of the avant-garde, a term ‘applicable to all art that pushes the boundaries of ideas and creativity’ (Tate Gallery undated, para 5).¹² This experimental ethos was similarly present in the mathematical sciences in the same era, in the identification of a theoretical arena of space-time referred to as the ‘fairylend of geometry’ (Newcomb 1902, p 10). This ‘fairylend’ was named the ‘fourth [spatial] dimension’, of which the mathematician Newcomb noted:

It is quite fitting that one who finds the infinity of space in which our universe is situated too narrow for his use should, in his imaginative power, outdo the ordinary writer of fairy tales, when he evokes a universe sufficiently extended for his purposes. (Newcomb, 1898, p 1)

The similarity between aspects of Lovecraft’s and Newcomb’s essays, and their mutual reference to extending the thresholds of the perception of reality in some way, is indicative of the new, cross-disciplinary quest to identify whatever resided beyond the previously accepted boundaries of the regular three-dimensional world.

While ‘The influence of fourth-dimension thinking on the visual arts has been traced extensively’, its influence on literature has not been so thoroughly interrogated (Link Rosenflanz 2012, p 536). Critics including William Scheick, Kati Voigt and Elizabeth Throesch have assessed Fin-de-Siecle and 20th Century children’s literatures with the purpose of identifying the fourth dimension within their narratives (Scheick 1978; Voigt 2016; Throesch 2017). Current research, however, focusses on novels which are based entirely on fourth dimension

¹² It should be noted, however, that my assessment relates specifically to Western culture.

principles, whose plots depend on time travel, space-time travel, and new advances in science and medicine¹³. These novels include HG Wells's *The Time Machine* and *The Invisible Man*, Madeleine L'Engle's *A Wrinkle in Time*, Philippa Pearce's *Tom's Midnight Garden*, and Catherine Storr's *Marianne Dreams* (Wells 1895; 1897; L'Engle 1962; Pearce 1958; Storr 1958). All of these novels fit comfortably within the science fiction or fantasy genres, because their narratives step outside regular human experience to interrogate the unknown or the theoretical. But, besides these fourth dimension-inspired stories, many novels exist in which the narrative is situated in the regular non-fantasy world, only to be punctured by small flashes of strangeness which can be classified as being beyond regular perception or experience, and which appear randomly and vanish again just as quickly. These novels could be described as briefly harnessing elements of the fourth dimension in interludes; they span various genres (children's books, fantasy, literary fiction, dystopian fiction), and yet have never been formally connected with wider fourth dimension literature *specifically because* the fourth dimension is expressed so randomly within the text, rather than steering the plot. These novels seem, superficially at least, to have nothing to link them, which is perhaps why little work has been done to consider their content-in-common. Yet, this varied and contrasting body of fiction was highly relevant to *Transcendence* because it encouraged me to examine that strange arena which lay beyond the boundaries of regular human experience, occupying a zone I had previously described as 'hinterland'.

My route into understanding and subsequently harvesting these fragmented fourth dimension narratives for my own fiction was circuitous, because, before PhD study, I was only aware of the fourth dimension as a mathematical principle

¹³ X-rays, for example, are a regular medical procedure today, but their discovery was part of the plethora of developments which allowed human eyes to see beyond previously accepted physical boundaries. Medical innovations were crucial in opening the way for authors like HG Wells to write stories such as *The Invisible Man* and *The Island of Dr Moreau* (Wells 1897; 1896).

‘central to the evolving discipline of ‘hyperspace philosophy’” (Throesch 2017, p 1). Between completing my MA and embarking on PhD study, one of the most valuable research tools I adopted was learning to read as a writer, rather than simply as a reader. This was an exciting and revelatory process developed by necessity to inform my own creative practice. Reading as a writer guided me in identifying these brief, often inconclusive and disjointed fantastical aspects which appeared in narrative of an otherwise non-fantasy nature. I encountered this in the first instance in Lessing’s dystopian novel *The Memoirs of a Survivor* (Lessing 1974). The narrator discovers a dissolving wall in her flat which reveals rooms filled with her own memories, yet the body of the novel explores how society might restructure itself after a fall. A similar unexpected fantastical element appears in Murakami’s *The Wind Up Bird Chronicle*, in which the darkened hotel room and garden well (both which the narrator becomes temporarily lost in) are seemingly located outside conventional reality (Murakami 1994). A further example can be seen in McEwan’s *The Child in Time*, when Stephen’s cycle ride through the woods leads him to a pub where his parents (who appear as younger versions of themselves) sit inside, discussing marriage the year before Stephen is born (McEwan 1987). All of these things are impossible in the regular world, yet they appear in stories which are set in a fictional version of the real world rather than in a fully fantastical landscape where the reader might expect such an unusual interjection. The common thread of these story-fragments is that each embraces Lovecraft’s rejection of the ‘limitations of time, space, and natural law’ in order to portray ‘the twilight region beyond our present boundary’ of everyday experience (Lovecraft 1933, p 1; Hatcher 1938, pp 446-447). In identifying this arena, in discovering the effect of the fourth dimension on literature, and in eventually defining certain story-fragments as belonging to the fourth dimension, I ultimately discovered a term to replace my original ‘hinterland’. The ‘fourth dimension’ better served my purposes by retaining the mystery and otherness of my previous

‘hinterlands’, whilst being a term already understood (although somewhat under-explored) within literary criticism.

Since the fourth dimension is a state which people are not always ‘aware of... because they cannot observe or experience it’ in tangible form, the term itself quickly became a catch-all for anything outside regular perception (Voigt 2016, p 46). This included ‘departed spirits... automatic writing, levitation, and... other weird phenomena’, and more generalised fields such as ‘the occult, folk mysticism, time, religion, and death’ (Clark 1912, p 444; Hatcher 1938, p 455). Around the same time, Charles Fort became known for collecting and publishing first-hand witness accounts given by people who had experienced various fourth dimension weirdnesses, which lent the term Fortean (or Forteana) to these phenomena. (An alternative term popular today is simply ‘the unexplained’.) ‘Fortean’ phenomena embraces not only the above-mentioned elements, but is flexible enough as a definition to take on new areas of urban myth as these join the canon, including those heralded by our modern, more technologized society: UFOs; Men in Black; Electronic Voice Phenomena; energy orbs; hybrid alien-human breeding projects; and alien abduction.

I knew at the outset that Forteana was something I was keen to work with, because it provided a seemingly boundless and exciting ‘otherworldly’ hinterland from which to pull story, theme and motif, whilst supporting the aleatoric notion that sometimes, the unexpected happens, in random events which might change the course of a character’s life. I understood that I would have to choose specific aspects of Forteana to explore since the topic is so wide. I decided on the timeslip, alien abduction, and the ghost story, because I remain fascinated by the constant recurrence of these things in anecdote, as the newer phenomena (aliens) earn their place in aural history alongside seemingly timeless Forteana like ghosts. I also saw

ghosts and timeslips as different ways of allowing my missing women to cross into each other's eras, becoming resurrected and therefore un-forgotten. My first task was to identify how these phenomena worked in both the 'real world' and in fiction, before deciding how to plot them into *Transcendence*.

Alien abduction came first. Abduction is a very modern phenomenon. What began in narrative with Fin-de-Siecle invasion literature, and pulp fiction's intergalactic battles, colonialist-inspired 'captivity narratives', and what Gwyneth Jones terms tales dedicated to 'the supplanters and the natives', soon burgeoned beyond fiction as abduction stories exploded into the media from the 1950's onwards (Lepselter 2012, p 85; Jones 2017, p 202). Adam Roberts identifies UFO belief as 'the most obvious point of crossover' between fact and fiction in modern science fiction, but his interest, like that of many academics, focuses primarily on the link between UFO lore and cult religion (Roberts 2016, pp 475-8). My interest in alien abduction was not inspired by fiction, or by religious-transcendental experience via supposed alien contact, but by the large number of ordinary witness accounts revealed in non-fiction texts such as Whitley Strieber's *Communion* and in the work of MUFON (Strieber 1987; mufon.com, 2021). Growing libraries of similar accounts in turn inspired 'alien' storylines in *The X Files* and other film and TV fiction (*The X Files* 1993-2002). Quite simply, I wished to portray an encounter with aliens via the unwary narrator who steps over an invisible threshold which separates the 'other' from the mundane world - not as an experience which generates wider meaning, but as a random encounter which echoes the aleatoric and fragmented nature of both real life and Fortean weirdness. When Izzy finds her aunt in a shadowy room surrounded by bottles of hybrid foetuses, the setting is intended to resonate with aspects of popular abduction lore without the need for too much authorial explanation, relying on the fact that 'readers fill narrative gaps, in an automatic fashion, based on their own life experiences', which include popular aural traditions and pop culture references in the media (Gerrig 2010, p 24). I was also

compelled to portray abduction in a different manner to the early pulp fiction narratives in which women abducted by alien aggressors were rescued by ‘lantern-jawed space captains’, instead retaining the randomised and fragmented nature of an experience more akin to real life anecdote than to structured fiction (Schwartz 1982, para 5). Roxy’s disappearance provided the perfect opportunity for me to reinstate her in the past, an event which resonated with Fortean weirdness, chance, and resurrected women, all of which became strong themes as *Transcendence* evolved.

The ghost story came next. Ghost stories are an aspect of Forteanana entirely dependent on boundaries and thresholds, since they ‘are frequently set in liminal spaces, spaces that are “betwixt and between”’ (Goldstein, Grider and Banks Thomas 2007, pp 37-38). The nature of the ‘between’ can vary, but it is always a device used to make the reader feel dislocated from the everyday: Susan Hill summons her narrator to an isolated house (Hill 1983); Sarah Waters chooses a crumbling mansion with a poltergeist (Waters 2009); Henry James’s ghosts are sighted from a distance, through glass, across water, or from the corner of the narrator’s eye, and ‘do not speak’ (James 1898; Miall 1984, p 321). In each case the usual order is suspended, making it clear to the reader that we are no longer in the safety of the familiar, regular world; in this new landscape, anything might happen. Understanding that ‘Haunting as a literary concept has a great deal of flexibility in its definition and application’ was vital to the weaving of apparitions throughout *Transcendence* (Hall 2019, p 67). Ghosts appear metaphorically and literally in a variety of guises throughout the novel, as memories, digi-graphs of the vanished, artwork which survives through the ages, or in timeslips, but one chapter, ‘My Dearest Olivia’, eventually became a ghost story proper. Here, the ghost story codes resonate across time as the futuristic Julietta becomes obsessed with the long-dead Roman woman Olivia, and the Roman letters unravel in alternating sections, revealing a haunted ancient Britannia. By placing these stories side-by-

side, I was able to thread detail of omens, ghosts and curses (staple components of Fin-de-Siecle fourth dimension belief, and likewise of Fortean popular today) throughout the entire chapter to saturate it with familiar conventions which would resonate with the reader. I exploited the notion of boundaries further by setting the storytelling scene at Yuletide (traditionally a time for telling ghost stories around the fire), drawing on the history of this as a 'liminal time, a hinge between past and future' (Forrester 2016, p 92). I allowed Julietta to sink into a pattern of obsession which imitated that of Perkins Gilman's narrator in 'The Yellow Wallpaper', isolated in her own personal hinterland beyond the threshold of regular life, just as James, Hill, Waters and other writers of ghost stories had done before me. Through redrafting, the ghost story in *Transcendence* evolved beyond its original fragmentary Fortean kernel to become something more substantial than a short aleatoric interlude, when the ghosts became the focus of a fully-rounded narrative. This illustrated how creating story is a 'continuous experience' in terms of evolution, growing organically with the writer's ongoing journey (Myers 1993, p 279). The expanded ghost story elements in turn became a starting point for a wider spiritual landscape, which came into being when Bodymonitor and Yelena witnessed a woman with a lamp disappear into an Otherworld in the trees. This organic expansion of the ghostly threads allowed me to create further links between the different landscapes and characters, and offered new and exciting ways to bind the story-threads with a spiritual, rather than simply a material or philosophical, motif.

Time travel came next. The Einstein-Rosen bridge is a relativity theory which relies on complex mathematics to suggest how wormholes in time might open (Redd 2017). Those people who have had Fortean timeslip experiences offer few consistent versions of markers, boundaries or thresholds which accompany the event. Most narrative accounts of timeslips involve sudden random arrival in a location which is different to how it appeared previously, with witnesses citing

street layout, landscape, clothing, vehicles, shop fronts and currency as having changed from the familiar, even if only briefly (Dash 2011; Slemen 2011). This Fortean journey in time seems as likely to go forwards as backwards; one of the few common elements described by time-slip air travellers is the appearance of cloud tunnels or a 'cylindrical' cloud during flights in which the destination is reached impossibly quickly (Ali 2021, para 9). This depiction makes it easy to imagine how, following the Einstein-Rosen bridge theory, time is able to tunnel back on itself and offer a short bridging wormhole into the past or future. In *Transcendence*, Julietta and Olivia see each other reflected in paint pots, both women crossing thresholds into each other's eras. This intentionally echoes John Guy's theory that apparitions can be explained as timeslips, something also expressed by Mitchell in *Ghostwritten* with the appearances of the inter-narrative tea shack ghosts (Guy 2010, p 21; Mitchell 1999). Cwenhild and Izzy see each other while travelling through the trees in the mist, despite belonging in different eras; Sooty moves freely between times and places, occupying a folkloric and mythical dimension peculiar to the cat, recognisable (without much authorial explanation) thanks to the plethora of cat superstitions which permeate popular Western culture. Roxy, who vanished in Izzy's childhood and reappeared years later in an alien craft, eventually timeslips back to Cwenhild's Anglo Saxon abbey. The timeslips therefore enmesh the narrative by linking the things that different chapters explore – the liminal nature of human existence, lost women, and found women. They also all occur on boundaries and thresholds which do not simply refer to time, but to the real and the magical worlds, and the physical and spiritual dimensions. The timeslips in *Transcendence* are therefore loaded with references which appear over and over again like musical motifs, chiming with familiarity, and repeating themselves, because for all their unexpected and aleatoric nature, their essence pre-exists in various forms within the collective consciousness. The Einstein-Rosen bridge therefore became more than simply a Fortean wormhole in time - rather, it was one of several ideas which evolved organically during redrafts as the themes in *Transcendence* were

embroidered and strengthened, embodying the notion that ‘It is in revising that many of the exciting challenges of writing might lie’ (MacRobert 2013, p 72).

The dark, magical forest was the final fourth dimension arena which I selected to explore within the narrative. Although a forest with fairy tale associations appears at first glance not to be at all fourth dimension or Fortean in nature (there is no recorded human experience of a ‘real life’ encounter with this location, after all), in fact, the magical forest is just one incarnation of ‘a *limen* to the Otherworld... a conventional landmark which signifies the boundary between the mundane and the banal on the one hand and the magical and fantastic on the other’ (Post 2014, p 69). The magical forest (recognisable to anybody familiar with Western European fairy tale) therefore presents itself as a threshold *into* the fourth dimension, being a place where anything might happen thanks to a ‘transgression of the boundaries between the seen and the unseen’ (Throesch 2017, p 137). Crucially, it is also at the heart of the familiar, recurring story in which ‘the young hero’ travels ‘from home, into the dark woods, and onward to self-transformation’, reverberating with the characters’ motives for journeying through the trees (Windling 2017, p 37). I used this landscape as a motif in several chapters, sometimes as a physical locus (Blackwoods in ‘Wild Birds’ and ‘Hybrids’), sometimes as a transcendental shadowland (in Izzy’s and Cwenhild’s stories), but always as a place of journey. The forest became a location which fused the everyday with the fantastical, acting as ‘a stage for the metaphors of hybridity’, which itself resonated with other hybridised aspects of the novel, including form, genre, and historical era (Post 2014, p 69). The rationale for using the forest repeatedly was not just for its resonance with the fourth dimension as a gateway to the otherworld, though, or as a vision of ruined nature in a dystopian landscape (although both these things were true), but as a location which would link different aspects of the story, ensuring that readers could ‘recognize the same location used more than once... and unite the pieces in this way’ (Tansley 2011, p 38). This attempt to unify a locus in the

reader's mind was crucial for such a fragmented narrative. In many places, the forest landscape was developed through redrafting, as with Izzy's discovery of Roxy in the alien craft. Initially, I had no plan to use additional aspects of fairy tale in Izzy's story, but, as I began to write, Izzy discovered her missing aunt asleep on a gurney in a space craft, like a futuristic Snow White. An early reader of this scene, Dr Petra McNulty, suggested that I bring out the fairy tale thread more and so, during redrafting, Izzy remodelled the rescuer-prince by slashing through the thorns surrounding the alien craft with the light of her phone in place of a sword. The combination of fairy tale forest imagery with modern Forteana is perhaps not such a bizarre juxtaposition, since 'Fairy tale, as oral or written literature, is continuously being reinvented with new ingredients' (Prescott 2019, p 160). In common with other fourth dimension Fortean landscapes, the forest allows access to places 'in which the ordinary world is suspended and we become the playthings of something more mysterious and not subject to the same laws of space and time as we are' (Hudson 2017, p 6). Perhaps vitally, the magical forest possesses the 'last vestige of myth and faerie in the modern world' (Laszkiewicz 2017, pp 41-42). Adam Zolkover paraphrases the folklorist William Bascom by noting that folktales can be set in any time or place, making them universal, while fairy tales take place 'far away' in an 'Elsewhere' (Zolkover 2011, p 67). I would remodel this description by suggesting that folktale, fairy tale and urban myth are increasingly interchangeable fourth dimension hinterlands. Modern Forteana takes place frighteningly close to everyday normality, whilst being simultaneously connected with the 'far away' of another dimension, seeming to 'collapse the distance between fairy-tale and realist narrative' (Zolkover 2011, p 75). Fairy tales 'morph and grow and stretch to fit the framework of our time and culture, just as they did when they were told around the fire after dark in times long past': once upon a time, a traveller might have been abducted from a woodland path by faery-folk, tricked to stay and then released back into the world, finding that many years had passed; today, the unwitting victim is spellbound by a craft piloted by alien greys (often in

woodland!) then taken to be tested and perhaps fitted with a mysterious implant (Windling 2017, p 43). Abductees do experience timeslips, but, in our fast-paced society, these have become hours- rather than years-long. Roxy is an exception: her own experience of long-term abduction, observed by Izzy, is interchangeable with fairy tale since Roxy becomes a sleeping ‘princess’ behind a barricade of thorns which Izzy must destroy, illustrating how aspects common to both fairy tale *and* ‘UFO encounters involve complex interactions of cosmos, culture, and subjective consciousness’ (Partridge 2004, p 112).

In conclusion, the more I considered the boundaries and thresholds in *Transcendence* and beyond, the more I came to understand that the fourth dimension as a term can be ‘applied to any... system which transcends our ordinary ideas’, being ‘like other fairylands a land in which we may do **all sorts of impossible things**’ (my bold, Clark 1912, p 432). One of my earliest concerns about using so many different elements in a novel related to how I might manage the genre combinations I had chosen. On finishing the first full draft and reading my panicked margin notes from years earlier, I realised that I had finally cut myself free of the genre debate, not in the sense of being unaware of which different genres fed into my work, or how I had selected genre elements to either fulfil or hybridise, but because I finally understood how little difference identifying genre should make to the *scope* of a project or to the form it takes. The arena of the fourth dimension, with its strange Fortean interludes, provided a cross-genre and intertextual linking device for content, tone and structure throughout *Transcendence*. It provided flashes of colour, introduced the unexpected, lent motifs-in-common to the historical and futuristic fictions, and fragmented the narrative, all things I had been keen to experiment with from the outset. This chimes with Stephen King’s advice in his craft memoir *On Writing*: ‘You’ve blown up your TV and committed yourself to a thousand words a day, come hell or high water. Now comes the big question: What are you going to write about? And the equally big

answer: Anything you damn well want. Anything at all' (King 2000, p 181). And so, I took King's advice, and did.

CONCLUSION

My evolving research crystallised into three main questions: how aspects of music might become generative methodologies for a novel; how David Mitchell's composite novels both informed and acted as a creative starting-point for my own composite historical and dystopian environments; and how the fourth dimension might open the way for *Transcendence* to break down composite form and incorporate cross-genre elements in unexpected and unusual ways. Each of these questions was preoccupied with boundaries and thresholds of various natures. The biggest question I am left with on completion of the novel is, does it work? I must concede that while *Transcendence* is experimental and therefore fulfils its brief, I do not believe that, in its current form, it would necessarily please all readers. Perhaps the juxtaposition of fairy tale forest and 1950's-style UFOlogy is awkward; maybe readers will puzzle over Sooty's appearances, or wonder why she is there at all. Reader expectation is perhaps sometimes thwarted or pulled a little too far for comfort. But, in support of what I have done, I quote Wolfe, who notes:

The writers who contribute to the evaporation of genre, who destabilize it by undermining our expectations and appropriating materials at will, with fiction shaped by individual vision rather than traditions or formulas, are the same writers who continually revitalise genre: A healthy genre, a healthy literature, is one at risk, one whose boundaries grow uncertain and whose foundations get wobbly. (Wolfe 2011, p 51)

Regarding the musical aspects of the novel, which were so vital to its evolving structure, I had already finished the final draft of *Transcendence* when I read Emily Petermann's words:

the musical novel places relatively high demands on the reader. Confronted with a text that breaks with expectations of traditional narrative structure, he or she must seek to make sense of the form of these unusual novels. In some cases, that involves struggling with disparate plot strands, temporal shifts, a seeming disjunction between chapters... [and] shifting points of view or narrative voices. (Petermann 2014, p 4)

I was both delighted and intrigued that fiction I had allowed to evolve organically, using principles which had layered up in my conscious and unconscious mind since childhood, ultimately resonated with the words of a literary critic I had never met. To a career academic, this would probably not be surprising at all, and may even be amusing, yet to myself, first and foremost a creative, it was a revelation. The term ‘musical novel’ finally cemented my understanding of the importance of musicology in informing various aspects of *Transcendence*, because musical structure was vital to my exploitation of thresholds, boundaries, pan-historical narrative, different genre influences, and the fourth dimension, and to the integration of these elements into a single novel. As I continued to unpick this, I finally understood that musicology had not just inspired structure within *Transcendence*, it had inspired content, too. As an Early Music specialist, I have always been fascinated by the arbitrary nature of historical survivals: if Hildegard of Bingen and the Comtesse de Dia’s manuscripts had been lost, for example, we may believe that medieval women did not compose¹⁴; if Mendelssohn had not discovered JS Bach’s forgotten manuscripts, it is unlikely that we would today regard JS Bach as a major figure in the Baroque canon¹⁵; if Clara Weik (Schumann) had been born a man, her work would not have been devalued and virtually forgotten after her death, nor would she have destroyed much of it in her lifetime, mistakenly believing it to be

¹⁴ Further information on Hildegard of Bingen can be accessed on Classic FM’s pages; information on the Comtesse de Dia is available on Coloratura Consulting’s web resource (for both references, see the primary Bibliography & References).

¹⁵ A wealth of information is now in the public domain regarding the history of Bach’s forgotten manuscripts. The Library of Congress website (undated, link available in Bibliography & References) provides an interesting and reliable source of information in the first instance.

inferior to that of her husband, all because of institutionalised gender bias.¹⁶ While this seemingly random disappearance and resurrection of musical scores and memory of the musicians themselves appears to speak only of music history, in actual fact, these things resonate with fundamental questions inherent in temporal boundaries and thresholds, dystopian narrative, and the human condition itself: what will remain after we are gone, and what will it mean to whoever might discover it in our wake? I realised that my preoccupation with the reinstatement of something which had previously been lost owed more to music than I had first supposed, and therefore resonated more widely with my research interests than I had initially admitted. I was never inclined to use music or musical scores as motifs for loss and resurrection myself, though, perhaps because I wished to step away from something I had worked with for so long. Instead, I chose ‘missing women’, and other forms of art as mediums which survived and therefore transcended the human condition. *Transcendence* takes the notion of artistic survivals into fresh narrative territory by enmeshing art within the passage of time (both past and future), by refusing to let art exist as simply a utopian survival strategy for the characters in that moment (as is apparent in Atwood’s, St John Mantel’s and Lessing’s work, for example), but by embedding both art and its meaning in a much bigger temporal landscape (Atwood 2003; St John Mantel 2014; Lessing 1974). This landscape reveals the reverse of survival as apocalyptic destruction, visible in *Transcendence*’s ruined landscape in impressions of its wrecked cathedral, the melted mill machinery, and its lost people. In other words, we cannot see only utopia in art, because we must face art’s ruin as well. Yet, when Dottie finds a single scrap of glass from the remains of Lincoln cathedral in a distant future, we recognise Sooty’s pawprint and remember the Anglo Saxon artist, Cwenhild. Art is still therefore recognisable as such, even after its destruction, when its makers and methods have been long-forgotten, its substance largely ruined. As Winterson

¹⁶ Clara Weik Schumann was well-respected within her lifetime as both a concert pianist and a composer. After her death, attitudes towards Weik’s work suffered due to gender bias, with her output being dismissed as her husband’s work rather than her own, as detailed in Classic FM’s article (listed under Classic FM 2018, link available in Bibliography & References).

notes, 'Even those from whom art has been stolen away by tyranny, by poverty, begin to make it again. If the Arts did not exist, at every moment, someone would begin to create them, in song, out of dust and mud, and although the artefacts might be destroyed, the energy that creates them is not' (Winterson 1995, p 20). Art, therefore, is the perfect medium with which to depict both the historical and dystopian elements of ruin and survival, crossing boundaries and thresholds in time and in human experience, being lost and resurrected over and again, an embodiment of our curiosity about the past and our fears for the future.

Throughout *Transcendence*, I hoped that Iser's 'search for connections' would prompt the reader to consider whether reality has fixed mechanics, whether time is truly linear, and whether random chance and the bizarreness of Fortean phenomena arise to remind us that we are never in complete control of every aspect of our environment (Iser 1974, p 280). All these things suggest that so-called normality is much stranger than it appears on life's surface, something expressed perfectly by Auster:

...the unexpected occurs with almost numbing regularity in all our lives. And yet there's a widely held notion that novels shouldn't stretch the imagination too far. Anything that appears 'implausible' is necessarily taken to be forced, artificial, 'unrealistic'. I don't know what reality these people have been living in, but it certainly isn't my reality. In some perverse way, I believe they've spent too much time reading books. They're so immersed in the conventions of so-called realistic fiction that their sense of reality has been distorted. Everything's been smoothed out in these novels, robbed of its singularity, boxed into a predictable world of cause and effect. Anyone with the wit to get his nose out of his book and study what's actually in front of him will understand that this realism is a complete sham. To put it another way: truth is stranger than fiction. (McCaffery, Gregory & Auster 1992)

Auster's sentiment is one I have long held, even before beginning to write *Transcendence*, because it embraces the powerful cause-and-effect that randomness and chance - aleatoric principle - have on real life and on aspects of story. Auster's

words also reflect the notion that the fourth dimension is forever present, most often invisible and sometimes out of reach, yet waiting to make itself felt in the most unexpected of ways.

In terms of quantifying *Transcendence*, I remained mindful that, ‘There are quite possibly as many versions of what the novel is as there are novelists and novel theorists’ (Cooppan 2018, p 23). Eventually, I came across two terms which fitted my PhD project perfectly, the first of which is ‘translit’. According to Douglas Coupland, translit novels

cross history without being historical... [and] span geography without changing psychic place. Translit collapses time and space as it seeks to generate narrative traction in the reader’s mind. It inserts the contemporary reader into other locations and times, while leaving no doubt that its viewpoint is relentlessly modern and speaks entirely of our extreme present. (Coupland 2012, para 2)

While I am not convinced that a novel which crosses history is not in some way historical, perhaps what Coupland is expressing is that translit novels cross history without being *entirely* historical, which would indeed describe *Transcendence*, many of Mitchell’s novels, a good selection of Winterson’s, and all of Lunde’s novels-to-date. What interests me most of all, though, is Coupland’s assertion that the links between the composites of a translit novel can be ‘as ethereal as a snatch of music, a drug-induced sensation, a quality of light or a rock formation’, because ‘the Translit author assumes the reader has the wits to connect the dots’ (Coupland 2012, para 14). This, I feel, is entirely true of *Transcendence*.

The second term I encountered is ‘mosaic novel’, sometimes used interchangeably with the term composite (Nahrung 2016, p 3). Jonathon Crowe asserts that the mosaic novel is

all about subtext – the theme that emerges when each story is considered as part of a greater whole... what makes a book a mosaic novel comes from the interstices between the stories, and the synergies that appear in the mind of the reader. Consuming a mosaic novel is not a passive act: the reader must work a good deal harder. (Crowe 2017, para 5)

Crowe's description of a mosaic novel suits *Transcendence* perfectly, not just in its acknowledgement of a subtext (of which erased women is only one example), but also by attributing importance to the gaps between the stories. The interstices in *Transcendence* are not simply the temporal gaps necessitated by a fractured timeline, but include stranger spaces in which the reader is asked to believe the implausible – that wormholes in time exist, that somebody can be abducted by aliens and reappear years later, that the enchanted forest has different incarnations, and that vanished women might return in any number of ways, if we look hard enough for the gaps they left in their wake. I was later to discover that 'realistic and general fictions' have been observed to use the mosaic form less than the 'plentiful examples in speculative fiction', which perhaps indicates why this fractured form appealed to me in the first place (McDermott 2010, para 1). But, I will concede that I am happy for *Transcendence* to be considered composite, translit, mosaic, or even, if the reader must, a story cycle, simply because I accept that stand-fast labels are 'pretty much a function of the publisher's presentation', or a necessity to 'the critic who relies on labels to make a point about a text' rather than being of primary importance to the writer (McDermott 2010, para 1; Le Guin 2007, para 1). I see *Transcendence* as a novel, though, and always will.

Regarding the influence of David Mitchell on the form and content of *Transcendence*, Mitchell's work provided an adventurous starting-point which, aside from the obvious elements such as composite form and pan-historical story, transpired to be loaded with similarities to my own aspirations which I had initially

been unaware of. The more I engaged with Mitchell's thought processes as he spoke about his work, the more boundaries and thresholds, musical analogies, fourth dimension strangenesses, and aleatoric threads appeared over and again. Mitchell was influenced by Calvino and Auster, both of whom use aspects of randomness/aleatoric methodology in their work; Auster's novel *The Music of Chance* takes its title from the alternative term for aleatoric music; Auster's work has also been described as 'blurring the frontiers between madness and creativity and between the real and the imaginary' (Auster 1990; Sarmiento 2002, p 82). I began to realise that boundaries and thresholds, musical form, aleatoric principle and creative writing are linked in ways I had never previously imagined, via a criss-crossing of arterial junctions which stretch beyond individual creative artists and infiltrate a much wider, deeper and more complex creative landscape. This aspect is something I find difficult to successfully define, possibly because I am newly-awakened to its existence. But, it remains there, like the fourth dimension did at the turn of the last Century, awaiting further excavation and critical thought.

Looking back, I realise that at the outset of my project, thanks to my attraction to dystopian fiction, alien abduction and the secret life of the cat, I had stepped into a very tangled and rather magical forest myself, lantern in hand, blithely ignorant of what I might find there. Ten years after having set off on my creative writing journey beginning with a part-time MA, after being urged to 'be fearless' by my supervisor, whose words I wrote in capitals in my notes, and following creative instincts which were only later realised into a fully-fleshed critical methodology, I finally untangled and understood the core principles of what I'd undertaken: that my musical background had played a greater part in the writing of *Transcendence* than I originally realised; that David Mitchell's fiction was certainly a starting point but not a final resting place for form or content in *Transcendence*; and that the fourth dimension exists everywhere, pulling at the periphery of our perception, tempting us to cross dissolving boundaries, calling us beyond previously-accepted

thresholds, waiting to be acknowledged and explored. Even in the art of reading, the fourth dimension presents itself in ‘the coming together of text and imagination’ as a ‘virtual dimension’ occupying an arena beyond ‘the text itself’ (Iser 1974, p 279).

I cannot conclude without acknowledging the fabulous inspiration I received along the way from the work of novelists such as Mitchell, Lessing, Atwood, Winterson and many others, from supervisions with Zoe Lambert, from mutual critiquing, and those consoling words of wisdom recorded in author interviews, from which the often lonely and isolated writer discovers that she is normal to think this way or that way, to fret endlessly about process and story, or to use the tiniest item as a starting-point for an entire novel. In my case, this was Sooty, a black cat, who provided the inspiration for threshold, boundary and fourth dimension hinterland as she wove her way through the narrative refusing to answer my questions about who she was, or what she was doing there. Should I choose to take hold of my lantern and set out again one day, I suspect that the forest will have much more to reveal.

Bibliography & References (primary)

FICTION

Includes film

Alderman, N. 2016. *The Power*. Viking, London.

Atwood, M. 1985. *The Handmaid's Tale*. McClelland and Stewart, Ontario.

Atwood, M. 2003. *Oryx and Crake*. Virago, London.

Atwood, M. 2009. *The Year of the Flood*. McClelland & Stewart, Ontario.

Atwood, M. 2013. *Madd Addam*. Virago, London.

Atwood, M. 2019. *The Testaments*. Nan A Talese, New York.

Auster, P. 1990. *The Music of Chance*. Viking Press, New York.

Avatar. 2009, film, 20th Century Fox, Los Angeles.

Azimov, I. 1950. *I, Robot*. Dobson Books, London.

Beukes, L. 2013. *The Shining Girls*. Harper Collins, London.

Brown, F. 1954. 'Answer', in B Aldiss (ed), *A Science Fiction Omnibus* (2007 edition). Penguin Modern Classics, London, p 184.

Calvino, I. 1979. *If On A Winter's Night A Traveller*, trans. 1982, W Weaver, Harcourt Brace Jovanovich, New York.

Captain America. 2011, film, Marvel Studios, California.

Crichton, M. 1990. *Jurassic Park*. Alfred A Knopf, New York City.

Crichton, M. 1999. *Timeline*. Alfred A Knopf, New York City.

Dashner, J. 2009. *The Maze Runner*. Delacorte Press, New York.

Dick, PK. 1968. *Do Androids Dream of Electric Sheep?* Doubleday, New York.

Gee, M. 1998. *The Ice People*. Richard Cohen Books, London.

Hall, S. 2007. *The Carhullan Army*. Faber & Faber, London.

Hill, S. 1983. *The Woman in Black*. Hamish Hamilton, London.

Huxley, A. 1932. *Brave New World*. Chatto & Windus, London.

James, H. 1898. *The Turn of the Screw*. Heinemann, London.

Johnson BS. 1969. *The Unfortunates*. New Directions (2008), New York.

L'Engle, M. 1962. *A Wrinkle in Time*. Farrar, Straus & Giroux, MacMillan, New York.

Lawnmower Man. 1992, film, Fuji Eight Company Ltd, Japan.

Leckie, A. 2013. *Ancillary Justice*. Orbit, London.

Lessing, D. 1974. *The Memoirs of a Survivor*. The Octagon Press, London.

Lessing, D. 1999. *Mara and Dann, An Adventure*. Flamingo, London.

Lunde, M. 2015. *The History of Bees*. Scribner, London.

McCaffrey, A. 1969. *The Ship Who Sang*. Walker & Co, New York.

McEwan, I. 1987. *The Child in Time*. Vintage, London.

Miller, W Jnr. 1959. *A Canticle for Leibowitz*. JB Lippincott & Co, Philadelphia.

Mitchell, D. 1999. *Ghostwritten*. Hodder & Stoughton, London.

Mitchell, D. 2004. *Cloud Atlas*. Sceptre, London.

Mitchell, D. 2006. *Black Swan Green*. Hodder & Stoughton, London.

Mitchell, D. 2010. *The Thousand Autumns of Jacob de Zoet*. Hodder & Stoughton, London.

Mitchell, D. 2014. *The Bone Clocks*. Sceptre, London.

Mitchell, D. 2015. *Slade House*. Sceptre, London.

Murakami, H. 1994. *The Wind-Up Bird Chronicle*. Vintage, London.

Murphy, P. 1987. *Rachel in Love*. Bookscool.com, retrieved 20th June 2020, <https://www.bookscool.com/en/Rachel-in-Love-836190/1>

Orwell, George. 1949. *Nineteen Eighty Four*. Secker & Warburg, London.

Pearce, P. 1958. *Tom's Midnight Garden*, Oxford University Press, Oxford.

Perkins Gilman, C. 1892. *The Yellow Wallpaper*. Project Gutenberg, retrieved 16th March 2017, <http://www.gutenberg.org/files/1952/1952-0.txt>

Robocop. 1987, film, Orion Pictures, Los Angeles.

Saporta, M. 1962. *Composition No 1*. Visual Editions (2011), London.

Sedgwick, H. 2017. *The Growing Season*. Vintage, London.

Self, W. 2006. *The Book of Dave*. Viking Press, New York.

St John Mantel, E. 2014. *Station Eleven*. Knopf, New York.

Stanley Robinson, K. 2002. *The Years of Rice and Salt*. Bantam Books, New York.

Star Trek Voyager, 1997, television series (79th episode), Paramount Network Television, Los Angeles, 17th December.

Storr, C. 1958. *Marianne Dreams*. Faber & Faber, London.

The X files, television series, Fox, New York (1993-2002).

The X-Files: Fight the Future, 1998, film, 20th Century Fox, Los Angeles.

Universal Soldier. 1992, film, Carolco Pictures, Florida.

Waters, S. 2009. *The Little Stranger*. Penguin Riverhead, New York.

Wells, HG. 1895. *The Time Machine*. Heinemann, London.

Wells, HG. 1896. *The Island of Dr Moreau*. Heinemann, London.

Wells, HG. 1897. *The Invisible Man*. C Arthur Pearson, London.

Winterson J. 2020. *Hansel and Greta*. Vintage Penguin, London.

Winterson, J. 1989. *Sexing the Cherry*. Grove Press, New York.

Winterson, J. 2007. *The Stone Gods*. Hamish Hamilton, London.

Winterson, J. 2019. *Frankissstein*. Jonathan Cape, London.

Zafon, CR. 2004. *The Shadow of the Wind*. Text Publishing, Melbourne.

Zamyatin, Y. 1924 (reprinted 2008). *We*. Vintage Classics, New York.

NON-FICTION

Includes TV & Music

Ali, Z. 2021. *Unsolved Mysteries of the Bermuda Triangle*, thestrongtraveller.com, retrieved 19th February 2021. <https://thestrongtraveller.com/2021/01/19/unsolved-mysteries-of-the-bermuda-triangle/>

Allais, A. 1897. 'Funeral March for the Obsequies of a Deaf Man', *Album primo-avrilisque*. Paul Ollendorff, Choisy-au-Bac.

Andermahr, S. 2005. 'Cyberspace and the Body: Jeanette Winterson's *The Power Book*', in N Bentley (ed), *British Fiction of the 1990s*, Routledge, London, pp 108-122.

Atwood, M. 2011. *In Other Worlds – SF and the Human Imagination*. Virago, London.

Baccolini, R & Moylan, T (eds). 2003. *Dark Horizons: Science Fiction and The Dystopian Imagination*. Routledge, New York & London.

Barber, S. 1936. 'Adagio for Strings'. G Schirmer Inc, New York.

Bartok, B. 1943. 'Concerto for Orchestra'. Boosey & Hawkes, London.

Bellamy & Szeman, 2014. 'Life after People: Science Fiction and Ecological Futures', in G Canavan & K Stanley Robinson (eds), *Green Planets: Ecology and Science Fiction*, Wesleyan University Press, Connecticut, pp 192-205.

Beukes, L. 2013. *The Shining Girls* (appendix - author interview). Harper Collins, London.

Bilger, A. 2012. *Novels Are Not the Only Books*, Los Angeles Review of Books, retrieved 21st April 2020, <https://lareviewofbooks.org/article/novels-are-not-the-only-books/>

Birtwistle, H. 1977. 'Bow Down.' Universal Edition, Vienna.

Brown, CS. 1948. *Music And Literature: A Comparison of the Arts*. University of Georgia Press, Athens.

Byatt, AS. Undated. *Ghostwritten - a novel by David Mitchell*, bookbrowse.com, retrieved 19th July 2021,
https://www.bookbrowse.com/reviews/index.cfm/book_number/613/ghostwritten

Cage, J. 1952. '4'33"', premiered 29th August 1952, Maverick Concert Hall, Woodstock, New York.

Clark, AL. 1912. 'The Fourth Dimension', *Queen's Quarterly*, volume 20, issue 1st July 1912, pp 431-446.

Classic FM, 2018. *Clara Schumann was completely unique and awesome – and here's why*, retrieved 19th June, 2020, <https://www.classicfm.com/discover-music/clara-schumann-facts-pianist-composer/>

Classic FM, undated. *Hildegard of Bingen: life and music of the great female composer* (Hopkin, O), retrieved 20th February 2021,
<https://www.classicfm.com/composers/bingen/guides/discovering-great-composers-hildegard-von-bingen/>

Coe, J. 2011. 'Composition no 1 - review,' *The Guardian*, 29th October, retrieved June 7th 2021, <https://www.theguardian.com/books/2011/oct/28/composition-no-1-saporta-review>

Collier, S. 2017. 'Working the Garden: Women and Religion in Apocalyptic Fiction', Undergraduate Honors Theses, The College of William and Mary (Virginia, USA) - Paper 1061, W&M Scholarworks, retrieved 16th June 2020, <https://scholarworks.wm.edu/cgi/viewcontent.cgi?article=2083&context=honors-theses>

Coloratura Consulting. 2014. *Melanie Spiller & Coloratura Consulting - Composer Biography: Comtessa Beatriz de Dia*, Coloratura Consulting, retrieved 26th July 2021, <https://coloraturaconsulting.com/2014/09/01/composer-biography-comtessa-beatriz-de-dia-c1140-c1200/>

Cooper, K and Short, E. 2012. *The Female Figure in Contemporary Historical Fiction*. Palgrave Macmillan, London.

Cooppan, V. 2018. 'The Novel as Genre' in E Bulson (ed), *The Cambridge Companion to the Novel*, Cambridge University Press, Cambridge, pp 23-42.

Coupland, D. 2012. 'Convergences', *New York Times*, 8th March, retrieved 4th June 2020, <https://www.nytimes.com/2012/03/11/books/review/gods-without-men-by-hari-kunzru.html>

Crowe, J. 2017. *Venera Dreams and the Art of the Mosaic Novel*, Johnathan Crowe, retrieved 30th May 2020, <https://www.jonathancrowe.net/2017/11/venera-dreams-and-the-art-of-the-mosaic-novel/>

Dash, M. 2011. *Timeslips*, Mike Dash History, retrieved 12th June 2020, <https://mikedashhistory.com/tag/timeslips/>

Dimovitz, SA. 2018. 'Shrodinger's Cat Metalepsis and the Political Unwriting of the Postmodern Apocalypse in David Mitchell's Recent Works', *C21 Literature: Journal of 21st-century Writings*, volume 6, issue 3, pp 1-23. DOI: <https://doi.org/10.16995/c21.50>

EXARC.net 2001, *Experimental Archaeology*, EXARC.net, retrieved 2nd May 2021, <https://exarc.net/experimental-archaeology>

Forrester, K. 2016. 'Victorian Fireside Storytelling – Christmas, Ritual, and Liminality around the Fire: Six Stories,' in D Downey, I Kinane & E Parker (eds), *Landscapes of Liminality: Between space and place*, Rowman & Littlefield International, London and New York, pp 91-110.

Fortean Times Magazine, 1973-current, Dennis Publishing, London.

Gatens, M. 1997. 'Corporeal Representation in/and the Body Politic', in K Conboy, N Medina & S Stanbury (eds), *Writing on the Body: Female Embodiment and Feminist Theory*, Columbia University Press, New York, pp 80-95.

Gerrig, R. 2010. 'Readers' Experiences of Narrative Gaps', *Storyworlds: A Journal of Narrative Studies*, volume 2, issue January 2010, pp 19-37.

Goldstein D, Grider S & Banks Thomas J. 2007. *Haunting Experiences – Ghosts in Contemporary Folklore*. Utah State University Press, Utah.

Goodman, M. 2007. 'Ectopia: The Family Bible', PhD thesis, Lancaster University, retrieved 5th January 2019,

<https://modules.lancaster.ac.uk/mod/folder/view.php?id=1187937>

Guignery, V. 2011. 'B.S. Johnson's The Unfortunates: Revisiting the Elegy,' *Études Britanniques Contemporaines*, volume 41, issue 2011, pp 119-134.

Guy, J. 2010. *Ghosts: The Unexplained Series*. Saddleback Educational Publishing, Costa Mesa.

Haldane, JBS. 1924. 'Daedalus, or, Science and the Future', A paper read to The Heretics, Cambridge, retrieved 20th June 2020,

<https://babel.hathitrust.org/cgi/pt?id=mdp.39015030971488&view=1up&seq=4>

Hall, L. 2019. 'Haunting Modernisms: Ghostly Aesthetics, Mourning and Spectral Resistance in Literary Modernism, 2017 by Matt Foley', review of *Haunting Modernisms: Ghostly Aesthetics, Mourning and Spectral Resistance in Literary Modernism* by Matt Foley, *Fantastika Journal*, 1st January, Non-fiction Reviews, pp

67-69, retrieved 5th January 2020, <https://fantastikajournal.com/wp-content/uploads/2019/01/Fantastika-Journal-Vol-3-Issue-1-2019.pdf>

Hatcher, H. 1938. 'The Literary Fourth Dimension', *The English Journal*. Volume 27, issue 6, pp 455-464.

Hopf, C. 2011. 'The Stories We Tell: Discursive Identity through Narrative Form in *Cloud Atlas*', in S Dillon (ed), *David Mitchell: Critical Essays*, Gylphi, Canterbury, pp 105-127.

Hudson, M. 2017. *Ghosts, Landscapes, and Social Memory*. Routledge: Abingdon, Oxfordshire.

Iser, W. 1974. *The Implied Reader: Patterns of Communication in Prose Fiction from Bunyan to Beckett*. The John Hopkins University Press, Baltimore & London.

Iser, W. 1980. 'The Reading Process: A phenomenological Approach', in JP Tompkins (ed), *Reader-Response Criticism: From Formalism to Post-Structuralism*, John Hopkins University Press, Baltimore, pp 50-69.

JAXA, undated, *Research on the Space Solar Power Systems (SSPS)*, kenkai.jaxa, retrieved 14th June 2020, <http://www.kenkai.jaxa.jp/eng/research/ssps/ssps-index.html>

Jenner, S. 2014. 'BS Johnson and the Aleatoric Novel', in M Ryle & J Jordan (eds) *BS Johnson and Post-War Literature: Possibilities of the Avant-Garde*. Palgrave Macmillan, London, pp 71-86.

Jones, G. 2017. 'Aliens in the Fourth Dimension', in A Sawyer & D Seed (eds), *Speaking Science Fiction*, Liverpool University Press, Liverpool, pp 201–213.

King, S. 2000. *On Writing*. New English Library, London.

Konior, B. 2019. 'Automate the Womb: Ecologies & Technologies of Reproduction', review of Xenofeminism by Helen Hester, *Parrhesia: A Journal of Critical Philosophy*, volume 31, issue, pp 232-257.

Kukkonen, K. 2011. 'Metalepsis in Popular Culture – an Introduction', in K Kukkonen, & S Klimek (eds), *Metalepsis in Popular Culture*, De Gruyter, New York, pp 1-21.

Laszkiewicz, W. 2017. 'Into the Wild Woods', *Mythlore*, volume 36, issue 1, pp 39-58, retrieved 3rd February 2021, <https://www.jstor.org/stable/10.2307/26809256>

Latham, R. 2014. 'Biotic Invasions: Ecological Imperialism in New Wave Science Fiction' in G Canavan & K Stanley Robinson (eds), *Green Planets: Ecology and Science Fiction*, Wesleyan University Press, Connecticut, pp 77-98.

Le Guin, U. 2007. 'Lost in Mindspace', *The Guardian*, 21st July, retrieved 31st March 2017, <https://www.theguardian.com/books/2007/jul/21/fiction.featuresreviews3>

Lepselter, S. 2012. 'The Resonance of Captivity: Aliens and Conquest', *Journal of Ethnographic Theory*, pp84-104, retrieved 28th May 2021, <https://www.journals.uchicago.edu/doi/pdfplus/10.14318/hau2.2.006>

Library of Congress (The), undated. *Felix Mendelssohn: Reviving the Works of JS Bach*, Library of Congress (www.loc.gov), retrieved 11th March 2020, <https://www.loc.gov/item/ihas.200156436/>

Link Rosenflanz, K. 2012. 'Overturned Verticals and Extinguished Suns: Facets of Krzhizhanovsky's Fourth Dimension,' *The Slavic and East European Journal*, volume 56, issue 4, pp 536-552. Retrieved July 2, 2021. <http://www.jstor.org/stable/24392614>

Lo T-C, 2016. 'Portfolio of Compositions Conceived in Relation to an Exploration of Silence in Music,' PhD in music composition, York University UK, retrieved 4th May 2021, <https://theses.whiterose.ac.uk/18077/1/phd-lo-revised.pdf>

Lovecraft, HP. 1933 (website last updated 2009). *Notes on Writing Weird Fiction*, Hplovecraft.com, retrieved 6th April 2018, <http://www.hplovecraft.com/writings/texts/essays/nwwf.aspx>

Lunde, M. Undated. *About the Author/ Authors at Foyles: Maya Lunde, Questions & Answers: The History of Bees*, Foyles, retrieved 1st May 2020, <https://www.foyles.co.uk/Author-Maja-Lunde>

Mackrell, J. 1985. 'BS Johnson and the British Experimental Tradition: An Introduction', *Review of Contemporary Fiction*, volume 2, issue 5, pp 42-64.

MacRobert, M. 2013. 'Modelling the Creative Writing Process', in J Kroll & G Harper G (eds), *Research Methods in Creative Writing*. Palgrave Macmillan, London, pp 56-77.

McCaffery L, Gregory S, & Auster P. 1992. 'An Interview with Paul Auster', *Contemporary Literature*, volume 33, issue 1, pp 1-23, DOI:10.2307/1208371

McDermott, J. 2010. *Mosaic Novel Paper*, Joe M McDermott, retrieved 1st June 2020, <https://jmmcdermott.wordpress.com/2010/11/13/j-m-mcdermott-mosaic-novel-paper-part-4/>

McWeeney, C. Undated. *An Interview with David Mitchell*, bookbrowse.com, retrieved 16th June 2021, https://www.bookbrowse.com/author_interviews/full/index.cfm/author_number/480/david-mitchell

Melnick, D. 1979. 'Fullness of Dissonance: Music and the Reader's Experience of Modern Fiction.' *Modern Fiction Studies*, volume 25, issue 2, pp 209-222.

Miall, DS. 1984. 'Designed Horror: James's Vision of Evil in The Turn of the Screw', *Nineteenth-Century Fiction*, volume 39, issue 3, 1984, pp 305–327, retrieved 20th June 2020, www.jstor.org/stable/3044807

Miller, A. 2015. *Sins in Thy Orisons: On David Mitchell's Slade House*, The Millions, retrieved 14th May 2020, <https://themillions.com/2015/11/sins-in-thy-orisons-on-david-mitchells-slade-house.html>

Mitchell, D. 2004. 'Enter the Maze,' *The Guardian*, 22nd May, retrieved 5th July 2021, <https://www.theguardian.com/books/2004/may/22/fiction.itlocalvino>

Mitchell, D. 2010. 'David Mitchell on Historical Fiction', *The Telegraph*, 8th May, retrieved 29th June 2019, <https://www.telegraph.co.uk/culture/books/bookreviews/7685510/David-Mitchell-on-Historical-Fiction.html>

Mufon.com, 2021. *Mutual UFO Network - est. 1969*, Mufon.com, retrieved 20th April 2021, <https://www.mufon.com>

Myers, DG. 1993. 'The Rise of Creative Writing,' *Journal of the History of Ideas*, volume 54, issue 2, pp. 277–297. Retrieved 29th June 2021, www.jstor.org/stable/2709983

Nadeau, R. 1981. 'Crisis of Tonality: What Is Avant-Garde?' *Music Educators Journal*, volume 67, issue 7, pp 36-41, retrieved 25th February 2021, <https://www.jstor.org/stable/3400651>

Nahrung, J. 2016, 'Stolen futures: the Anthropocene in Australian science fiction mosaic novels', Exegesis of PhD in Creative Writing, University of Queensland Australia, retrieved 1st May 2020, <http://www.aawp.org.au/wp-content/uploads/2017/02/Nahrung-J- AAWP 2016 Stolen-futures.pdf>

Newcomb, S. 1898. 'The Philosophy of Hyper-Space,' *Science*, volume 7, issue 158, pp 1-7, retrieved 14th February 2020, <https://www.jstor.org/stable/1623332>

Newcomb, S. 1902. 'The Fairyland of Geometry,' *Harper's Monthly Magazine*, 8th March 1902. Harper & Brothers, New York. New edition: Stover, D and Newcomb, S. 2016. *The Fairyland of Geometry and Other Essays in Science*, Rock's Mills Press, Ontario.

Northover, K. 2015. 'David Mitchell reveals the secrets behind his multi-stranded narrative', *Sydney Morning Herald*, 25th March, para 10-11, retrieved 9th May 2019, <https://www.smh.com.au/entertainment/books/david-mitchell-reveals-the-secrets-behind-his-multistranded-narratives-20150326-1m81v0.html>

O'Brien, M. 2011. *A Crisis of Waste? Understanding the Rubbish Society*. Routledge, New York.

O'Connell, M. 2017. *To Be A Machine – Adventures Among Cyborgs, Utopians, Hackers, and the Futurists Solving the Modest Problem of Death*. Granta, London.

Partridge, C. 2004. 'UFO Religions', *Nova Religio: The Journal of Alternative and Emergent Religions*, volume 8, issue 2, pp 110-112. DOI:10.1525/nr.2004.8.2.110

Patel, R. 2014. *Cloud Atlas* author David Mitchell: 'What a bloody mess we've made.' Motherjones.com, retrieved 1st July 2021, <https://www.motherjones.com/media/2014/10/david-mitchell-cloud-atlas-bone-clocks-interview/>

Petermann, E. 2014. *The Musical Novel: Imitation of Musical Structure, Performance, and Reception in Contemporary Fiction*. Camden House, New York.

Pivo, H. 2019. 'Selling Silence, Controlling Chaos: John Cage's Interventions into Muzak,' *Public Art Dialogue*, volume 9, issue 1, pp 95-118. DOI: 0.1080/21502552.2019.1571842

Post, MRS. 2014. 'Perilous Wanderings through the Enchanted Forest: The Influence of the Fairy-Tale Tradition on Mirkwood in Tolkien's 'The Hobbit'', *Mythlore*, volume 33, issue 1, pp 67-84, retrieved 14th May 2021, <https://dc.swosu.edu/cgi/viewcontent.cgi?article=1033&context=mythlore>

Prescott, B. 2019. 'Navigating the Carte du Tendre in Fairy Tale: A Very Short Introduction', review of 'Fairy Tale: A Very Short Introduction' by Marina Warner, *Mythlore*, Spring/Summer 2019, Review Essays, pp157-170.

Redd, N. 2017. *What is Wormhole Theory?* Space.com, retrieved 26th September 2019, <https://www.space.com/20881-wormholes.html>

Rees, J. 2013. *Ten Questions for the writer David Mitchell*, Theartsdesk.com, retrieved 2nd May 2021, <https://theartsdesk.com/film/10-questions-writer-david-mitchell>

Riley, H. 1966. 'Aleatoric Procedures in Contemporary Piano Music,' *The Musical Times*, volume 107, issue 1478, pp 311–312.

Roberts, A. 2016. *The History of Science Fiction*. Palgrave Macmillan, London.

Roberts, M. 2013. 'Introduction' in Deborah Levy, *Black Vodka*. And Other Stories, High Wycombe.

Ross, M. 1992. 'Review: Boundaries and Thresholds', review of Boundaries and Thresholds by Hilda Ellis Davidson, *Béaloides*, 1992/3, Legends and Fiction: Papers Presented at the Nordic-Celtic Legend Symposium, pp 336–339.

Sarmiento, C. 2002. 'Paul Auster's 'The New York Trilogy': The Linguistic Construction of an Imaginary Universe,' *Interdisciplinary Literary Studies*, volume 3, issue 2, pp 82–101, retrieved 27th June 2021, www.jstor.org/stable/41207004. Accessed 20 July 2021

Sawyer, R. 2011. *The Purpose of Science Fiction: how it teaches governments – and citizens – how to understand the future of technology*. Slate, retrieved 27th May 2019,

<https://slate.com/technology/2011/01/science-fiction-teaches-governments-and-citizens-how-to-understand-the-future-of-technology.html>

Scheick, WJ. 1978. 'The Fourth Dimension in Wells's Novels of the 1920's,' *Criticism*, volume 20, issue 2, pp 167-90, retrieved April 8th 2021, <http://www.jstor.org/stable/23102649>

Schoene, B. 2009. *The Cosmopolitan Novel*, Edinburgh University Press, Edinburgh.

Schwartz, S. 1982. *Women and Science Fiction*, newyorktimes, retrieved 27th March 2021, <https://www.nytimes.com/1982/05/02/books/women-and-science-fiction.html>

Seed, D. 2011. *Science Fiction: A Very Short Introduction*. OUP, Oxford.

Shaw, K. 2018. "Some magic if normality": Fantastica Cosmopolitanism in David Mitchell's *The Bone Clocks*. *C21 Literature: Journal of 21st-century Writings*, volume 6, issue 3, pp 1-19. DOI: <https://doi.org/10.16995/c21.52>

Simpson, K. 2011. "Or something like that" – Coming of Age in number9dream', in S Dillon (ed), *David Mitchell: Critical Essays*, Gylphi, Canterbury, pp 49-75.

Slemen, T. 2011. 'Tom Slemen's Tales of Liverpool: Timeslips', *Liverpool Echo*, 18th June, retrieved 12th June 2020, <https://www.liverpoolecho.co.uk/news/liverpool-news/tom-slemens-tales-liverpool-timeslips-3372751>

Snyder, KV. 2011. "Time to go": the Post-Apocalyptic and the Post-Traumatic in Margaret Atwood's 'Oryx and Crake', *Studies in The Novel*, volume 43, issue 4, pp 470-489.

Stawiarski M. 2008. 'Teaching Musical Fiction,' *The Journal of Aesthetic Education*, volume 42, issue 4 (Winter 2008), pp. 78-88, retrieved 3rd March 2021, <https://www.jstor.org/stable/25160304>

Streiber, W. 1987. *Communion*. Avon Books, New York.

Tansley, L. 2011. 'The frame within a frame: a short-short story sequence theory in a sequence of short-shorts', *Short Fiction I Theory and Practice*, volume 1, issue 1, pp 37-45. DOI: 10.1386/fict.1.1.37_1

Tate Gallery, undated, *Avant-Garde*, The Tate Gallery London, retrieved 13th February 2020, <https://www.tate.org.uk/art/art-terms/a/avant-garde>

Tate, A. 2017. *Apocalyptic Fiction*. Bloomsbury Academic, London.

Throesch, E. 2017. 'Introduction', *Before Einstein: The Fourth Dimension in Fin-de-Siècle Literature and Culture*, Anthem Press, London & New York, pp 1-16, retrieved July 27th 2021, <http://www.jstor.org/stable/j.ctt1jktqh1.4>

Time Team, 1994-2013, television series, Channel 4, London.

Voigt, K. 2016. 'Ghostly Science or Scientific Ghosts: The Fourth Spatial Dimension in Children's Literature', in M Fleischhack, E Schenkel (eds), *Ghosts - or the (Nearly) Invisible: Spectral Phenomena in Children's Literature*, Peter Lang, Frankfurt, pp 45-56, retrieved 12th June 2020, www.jstor.org/stable/j.ctv2t4d7f.8

Wagner, T. 2003. *Kim Stanley Robinson - The Years of Rice and Salt*. SF Reviews.net, retrieved 4th June 2021, <http://www.sfreviews.net/yearsofrice.html>

Weisman, A. 2008. *The World Without Us*. Virgin Books (Random House), London.

Whitmarsh, T. 2013. 'Radical Cognition: Metalepsis in Classical Greek Drama', *Greece & Rome*, volume 60, issue 1, pp 4-16, retrieved 28th February 2020, www.jstor.org/stable/43298101

Winding, T. 2017. 'Into the Woods: A Writer's Journey through Fairy Tales and Fantasy', *Journal of the Fantastic in the Arts*, volume 28, issue 1, pp 33-45, retrieved July 20 2021, <http://www.jstor.org/stable/26390192>

Winterson, J. 1995. *Art Objects: Essays on Ecstasy and Effrontery*. Vintage International, New York.

Wolfe, GK. 2011. *Evaporating Genres*. Wesleyan University Press, Connecticut.

Zolkover, A. 2011. 'King Rat to Coraline: faery and fairy tale in British Urban Fantasy', in A Kerchy (ed), *Postmodern Reinterpretations of Fairytales: how Applying New Methods Generates New Meanings*, The Edward Mellen Press, New York, pp 67-82.

Bibliography & References (wider)

FICTION

Allan, N. 2014. *The Race*. Titan, London.

Auster, P. 1987. *The New York Trilogy*. Faber & Faber, London.

Ballard, JG. 1962. *The Drowned World*. Berkley Books, London.

Barnes, J. 1989. *A History of the World in 10-and-a-half Chapters*. Vintage, New York.

Beukes, L. 2010. *Zoo City*. Angry Robot, Nottingham.

Bradbury, Ray. 1953. *Fahrenheit 451*. Ballantine Books, New York.

Butler, O. 1987. *Dawn (Xenogenesis Trilogy)*. Grand Central Publishing, New York.

Butler, O. 1988. *Adulthood Rites (Xenogenesis Trilogy)*. Grand Central Publishing, New York.

Butler, O. 1989. *Imago (Xenogenesis Trilogy)*. Grand Central Publishing, New York.

Butler, O. 1996. *Bloodchild and Other Stories*. Seven Stories Press, New York.

Carey, MR. 2014. *The Girl with All the Gifts*. Orbit, London.

Cavendish, M. 1666 (reprinted 1994). *The Blazing World and Other Writings*. Penguin Classics, London.

Christopher, J. 1965. *A Wrinkle in the Skin*. Wildside Press, New Jersey.

Christopher, J. 1970. *The Guardians*. Hamish Hamilton, London.

Coleman, CG. 2017. *Terra Nullius*. Hachette Australia, Sydney.

Collins, S. 2008. *The Hunger Games*. Scholastic, New York.

Flynn, G. 2015. *The Grownup*. Weidenfeld & Nicholson, London.

Ghosh, Amitav. 1995. *The Calcutta Chromosome*. Avon Books, New York.

Hoban, R. 1980. *Riddley Walker*. Jonathan Cape, London.

Hossain, R. 1905 (website undated). *Sultana's Dream*, originally published in The Indian Ladies' Magazine, retrieved 14th October 2017, <http://www.eltsjournal.org/archive/value6%20issue3/15-6-3-18.pdf>

Hunter, M. 2017. *The End We Start From*. Grove Press, New York.

Ishiguro, K. 2005. *Never Let Me Go*. Faber & Faber, London.

James, MR. 1904. *Ghost Stories of Antiquity*. University of Adelaide Library, retrieved 1st May 2019, <https://ebooks.adelaide.edu.au/j/james/mr/antiquary/chapter5.html>

James, P.D. 1992. *The Children of Men*. Faber & Faber, London.

Le Guin, U. 1969. *The Left Hand of Darkness*. Ace Books, New York.

Lessing, D. 1980. *The Sirian Experiments*. Flamingo, London.

Link, K. Undated. *I Can See Right Through You*. McSweeney's (issue 48), retrieved 3rd August 2018, <https://store.mcsweeneys.net/products/mcsweeney-s-issue-48>

London, J. 1908 (reprinted 2011). *The Iron Heel*. Wilder Publications, Radford, Virginia.

Lovecraft, HP. 1920 (web page undated). *The Cats of Ulthar*, Hplovecraft.com, retrieved 28th November 2018, <http://www.hplovecraft.com/writings/texts/fiction/cu.aspx>

Lunde, M. 2020. *The End of the Ocean*. Simon & Schuster, London.

Mackintosh, S. 2018. *The Water Cure*. Hamish Hamilton, London.

McCarthy, C. 2006. *The Road*. Alfred A Knopf, New York.

McEwan, I. 2019. *Machines Like Me*. Jonathan Cape, London.

McIntyre, V. 1978. *Dreamsnake*. Houghton Mifflin Company, New York.

McMaster Bujold, L. 1986. *Ethan of Athos*. Baen Books Science Fiction, New Jersey.

Merril, J. 1948 (website undated). *That Only a Mother*, Creepypasta Fandom, retrieved 29th June 2020, https://creepypasta.fandom.com/wiki/That_Only_a_Mother

Meyer, M. 2012. *Cinder*. Macmillan, New York.

Mitchell, D. 2001. *number 9dream*. Sceptre, London.

Noon, J. 1993. *Vurt*. Ringpull Press, London.

O'Brien, R. 1974. *Z for Zacharia*. Atheneum, New York.

O'Hara, R. Dec 2017-Jan 2018 (1st performance run). *Mankind*. Playwrights Horizons Commission, New York.

Okorafor, N. 2014. *Lagoon*. Hodder & Stoughton, London.

Perkins Gilman, C. 1915 (republished 1998). *Herland*. Dover Publications, New York.

Piercy, M. 1976. *Woman on the Edge of Time*. Alfred A Knopf, New York.

Pizan, de C.1405 (republished 1999). *The Book of the City of Ladies*. Penguin Classics, London.

Poe, EA. 1843 (reproduced 2019). *The Black Cat*. American Stories, retrieved 1st September 2020, <https://learningenglish.voanews.com/a/edgar-allen-poe-the-black-cat/4307305.html>

Red Dwarf. 1989, television series (1st episode, series 3), Paul Jackson Productions, London, 14th November.

Roth, V. 2011. *Divergent*. HarperCollins, New York.

Saunders, G. 2010. *Escape From Spiderhead*, newyorker.com, retrieved 1st June 2018, <https://www.newyorker.com/magazine/2010/12/20/escape-from-spiderhead>

Shelley, M. 1818. *Frankenstein*. Lackington, Hughes, Harding, Mavor, & Jones, London.

Simpson, H. 2009. *Diary of An Interesting Year*. The New Yorker, retrieved 13th December 2019, <https://www.newyorker.com/magazine/2009/12/21/diary-of-an-interesting-year>

Tchaikovsky, A. 2017. *Dogs of War*. Head of Zeus, London.

The Worm that Turned (The Two Ronnies). 1980, television series, BBC, London, 1st November.

Wyndam, J. 1955. *The Chrysalids*. Michael Joseph, London.

NON-FICTION

Adams, N. 2015. 'Between Myth and Reality: Hunter and Prey in Early Anglo-Saxon Art', *Anglo-Saxon Studies*, volume 29 (no issue number), pp 13-52.

Ahlin, C. 2017. *The History of the Dystopian Novel Actually begins with a book about the Perfect Society*, Bustle, retrieved 4th January 2019, <https://www.bustle.com/p/the-history-of-the-dystopian-novel-actually-begins-with-a-book-about-the-perfect-society-7554444>

Alghrani, A. 2017. 'Medical law expert on womb transplants, unisex pregnancy, and the 'right to gestate'', *The Conversation*, 8th July, retrieved 1st June 2018, <https://theconversation.com/medical-law-expert-on-womb-transplants-unisex-pregnancy-and-the-right-to-gestate-80581>

Anglo Saxon House: A Reconstruction, 2009, educational film, East Sussex Archaeology and Museums Partnership, Sussex, <https://www.youtube.com/watch?v=n09vrVf1168>

Atwood, M. 2003. *Negotiating with the Dead: A Writer on Writing*. Virago, London.

Atwood, M. 2017. 'Margaret Atwood on what "The Handmaid's Tale means in the time of Trump"', *New York Times*, 10th March, retrieved 11th June 2018,

<https://www.nytimes.com/2017/03/10/books/review/margaret-atwood-handmaids-tale-age-of-trump.html>

Avril, T. 2017. 'Children's Hospital's 'artificial womb' raises hope for extreme preemies', *The Philadelphia Inquirer*, 25th April, retrieved 1st May 2017, <http://www.philly.com/philly/health/CHOP-artificial-womb-preemies-placenta-premature-baby.html>

Baccolini, R. 2004. 'The Persistence of Hope in Dystopian Science Fiction', *Modern Languages Association*, volume 119, issue 3, pp 518-521, retrieved 19th May 2020, https://www.jstor.org/stable/pdf/25486067.pdf?ab_segments=0%2Fbasic_search%2Fcontrol&refreqid=search%3Ae1bdc40cfa64848325e78dbb4c7a7281

Baker, B. 2014. *Science Fiction*. Macmillan International Higher Education, London.

Barker, R. 2015. *All I ever wrote: the complete works of Ronnie Barker*. Ebury Press, London.

Bascom, W. 1965. 'The Forms of Folklore Prose Narratives', *The Journal of American Folklore*, volume 78, issue 307, pp 3-20.

Bell, A & Alber, J. 2012. 'Ontological Metalepsis and Unnatural Narratology', *Journal of Narrative Theory*, volume 42, issue 2, pp 166–192, retrieved 4th September 2018, www.jstor.org/stable/24484758

Benson, S. 2008. *Contemporary Fiction and the Fairy Tale*. Wayne State UP, Detroit.

Bostrom, N. 2003. 'Human Genetic Enhancements: A Transhumanist Perspective', *Journal of Value Enquiry*, volume 37, issue 4, pp 493-506.

Bostrom, N. 2005. *A History of Transhumanist Thought*, Nick Bostrom, retrieved 1st July 2020, <https://www.nickbostrom.com/papers/history.pdf>

Bosworth-Toller Anglo Saxon Dictionary on-line, <http://bosworth.ff.cuni.cz/>

Botha, M. 2016. 'Microfiction' in A Einhaus (ed), *The Cambridge Companion to the English Short Story*, Cambridge University Press, pp 201-220, doi: 10.1017/CCO9781316018866.016

Boyne, J. 2017. "Women are better writers than men": novelist John Boyne sets the record straight', *The Guardian*, 21st December, retrieved 5th February 2019, <https://www.TheGuardian/books/2017/dec/12/double-x-factor-why-women-are-better-writers-than-men>

Brooke-Rose, C. 1981. *A Rhetoric of the Unreal*. Cambridge University Press, Cambridge.

Buglass, J and West, J. 2014. 'Pet Cats in Roman Villas: A North Yorkshire Candidate', *The Archaeological Forum Journal: CBA Yorkshire*, volume 3 (no issue number), pp 1-6, retrieved 16th June 2018, https://nanopdf.com/download/pet-cats-in-roman-villas_pdf

Burns, CL. 1996. 'Fantastic Language: Jeanette Winterson's Recovery of the Postmodern Word'. *Contemporary Literature*, volume 37, issue 2, pp 278–306, retrieved 18th April 2020, www.jstor.org/stable/1208876

Butler, J. 1990. *Gender Trouble*. Routledge, Oxfordshire & Philadelphia.

Campbell, J. 1949 (reprinted 1990, P Cousineau (ed)). *The Hero's Journey: Joseph Campbell on His Life and Work*, Harper Collins, London.

Carbonell, R. 2018. *Do Big Cats Really Prowl the Australian Bush?*, ABC News, retrieved 23rd June 2019, <https://www.abc.net.au/news/2018-01-22/do-big-cats-really-prowl-the-australian-bush/9330686>

Center for Genetics and Society, 2020, *The Center for Genetics and Society is a nonprofit organization working to encourage responsible uses and effective governance of human genetic and assisted reproductive technologies*, the Center for Genetics and Society, retrieved 4th January 2020, <https://www.geneticsandsociety.org/topics/human-cloning>

Chalak, GR & Helan, SA. 2018. 'The Helpless Angel in Charlotte Perkins Gilman's The Yellow Wallpaper', *International Journal of English Language & Translation Studies*, volume 6, issue 3, pp 130-136, retrieved 26th March 2020, <http://www.eltsjournal.org/archive/value6%20issue3/15-6-3-18.pdf>

Cixous, H. 1976. 'The Laugh of the Medusa', trans K Cohen & P Cohen, *Signs*, volume 1, issue 4, pp 875-893, retrieved 18th September 2019, <http://www.jstor.org/stable/3173239>

Cleto, S & Warman, B. 2019. '10 Reasons to Study Folklore', carterhaughschool, undated, retrieved 6th May 2020, <https://carterhaughschool.com/10-reasons-to-study-folklore/>

Clute, J. 2018. 'Fantastika; or, The Sacred Grove', *Fantastika Journal*, volume 1, issue 1, p 16, retrieved 30th August 2019, <https://fantastikajournal.com/wp-content/uploads/2018/11/Fantastika-Journal.-Vol-1.-Issue-1.pdf>

Crawford, S. 2009. *Daily Life in Anglo Saxon England*. Greenwood World Publishing, Oxford.

Cohen, M. 2018. 'Narrative Theory and Novel Theory' in M Garrett (ed) *The Cambridge Companion to Narrative Theory*, Cambridge University Press, Cambridge, pp 248-261, doi: 10.1017/9781108639149.018

Cosslett, RL. 2018. 'Sophie Mackintosh: 'Dystopian feminism might be a trend, but it's also our lives'', *The Guardian*, 24th May, retrieved 26th June 2019, <https://www.TheGuardian/books/2018/may/24/sophie-mackintosh-the-water-cure-interview>

Coughlan, M. 2016. 'Reference and Repetition in Jeanette Winterson's novels', MA Thesis, Lakehead University Ontario Canada, retrieved 23rd April 2020,

[https://www.academia.edu/27315402/Reference and Repetition in Jeanette Wintersons Novels](https://www.academia.edu/27315402/Reference_and_Repetition_in_Jeanette_Wintersons_Novels)

Cox, E. 2018. 'Handmaids, Androids and Sex Dolls: New Perspective on Women and Gender in Modern SF', *SFRA Review*, no volume number, issue 323, p 4, retrieved 6th September 2019,

<http://www.sfra.org/resources/Documents/SFRA%20323.pdf>

Crowe, C. 1848 (reprinted 2011). *The Night Side of Nature: of Ghosts and Ghost Seers*. Cambridge University Press, Cambridge.

Dalrymple Henderson, L. 1984. 'The Fourth Dimension and Non-Euclidean Geometry in Modern Art: Conclusion', *Leonardo*, volume 17, issue 3, pp 205-210, retrieved 15th February 2020, <https://www.jstor.org/stable/1575193>

Davey, A. 2019. *Osberg Ship Carving*, Ancient History Encyclopedia (EU), retrieved 30th May 2019, <https://www.ancient.eu/image/9861/oseberg-ship-carving/>

Delaney, SR. 1998. *Racism and Science Fiction*. New York Review of Science Fiction, retrieved 28th September 2015, <https://www.nyrsf.com/racism-and-science-fiction-.html>

DeLong, A. 2006. 'The Cat's Cradle: Multiple Discursive Threads in Jeanette Winterson's *Oranges Are Not the Only Fruit*', *Lit: Literature Interpretation Theory*, volume 17, issue 3-4, pp 263-275, doi: [10.1080/10436920600998837](https://doi.org/10.1080/10436920600998837)

Desjardins, J. 2016. *The Alternative Energy Sources of the Future*. Visualcapitalist.com. 20th October 2016, retrieved 24th October 2019, <https://www.visualcapitalist.com/alternative-energy-sources-future/>

Desmet, F. 2010. 'Female Perspectives in the Dystopian Novel', MA thesis, Ghent University, retrieved 1st May 2016, https://lib.ugent.be/fulltxt/RUG01/001/457/858/RUG01-001457858_2011_0001_AC.pdf

Ditum, S. 2018. 'Never-ending Nightmare: Why Feminist Dystopias must stop torturing Women', *The Guardian*, 12th May, retrieved December 12th 2018, <https://www.TheGuardian/books/2018/may/12/why-the-handmaids-tale-marks-a-new-chapter-in-feminist-dystopias>

Donald, A. Undated. *Period Speech and Dialogue in Historical Fiction: Blood's Game* by Angus Donald. Writing.ie/resources, retrieved 25th June 2019, <https://www.writing.ie/resources/period-speech-and-dialogue-in-historical-fiction-bloods-game-by-angus-donald-blog-tour/>

Dowers, L. 2014. *Writing Historical Fiction – A Guide*. Amazon Printing, London.

Dunn, M & Morris, A. 1995. *The Composite Novel: The Short Story Cycle in Transition*. Twayne Publishers Inc, Connecticut.

Fallon, A. 2011. 'VS Naipaul finds no woman writer his literary match – not even Jane Austen', *The Guardian*, 2nd June, retrieved 10th February 2019, <https://www.TheGuardian/books/2011/jun/02/vs-naipaul-jane-austen-women-writers>

Farley, P and Symmons Roberts, M. 2012. *Edgelands: Journeys into England's True Wilderness*. Vintage Books, London.

Finney, B. 2000. *Bonded by Language: Jeanette Winterson's 'Written on the Body'*, Brian Finney California State University, retrieved 17th July 2020, <http://web.csulb.edu/~bhfinney/winterson.html>

Flood, A. 2016. 'Publishing industry is overwhelmingly white and female, US study finds', *The Guardian*, 28th January, retrieved 26th June 2018, <https://www.theguardian.com/books/2016/jan/27/us-study-finds-publishing-is-overwhelmingly-white-and-female>

Fort, C. 1919. *The Book of the Damned*. Boni and Liveright, New York.

Freely, M. 2012. 'In conversation: A new approach to teaching long fiction', in D Morley & P Neilsen (eds), *The Cambridge Companion to Creative Writing*, Cambridge University Press, Cambridge, pp 24-36.

Freud, S. 1919 (reprinted 2003). *The Uncanny*, trans D McLintock, Penn Arts & Sciences Dept of English, retrieved 10th July 2020, http://www.english.upenn.edu/~cavitch/pdf-library/Freud_Uncanny.pdf

Gallagher, J. 2014. 'First womb-transplant baby born', *BBC*, 4th October, retrieved 24th January 2018, <https://www.bbc.com/news/health-29485996>.

Garland Mann, S. 1989. *The Short Story Cycle – A Genre Companion and Reference Guide*. Greenwood Press, Connecticut.

Garrett, M (ed). 2018. *The Cambridge Companion to Narrative Theory*, Cambridge University Press, Cambridge, doi: 10.1017.9781108639149

Genette, G. 1988. *Narrative Discourse Revisited*, trans J Lewin, Cornell University Press Ithaca, New York.

Ghose, T. 2017. *Beer and Birthdays: Personal Roman Letters Unearthed Near Hadrian's Wall*. Livescience.com, retrieved 9th November 2019, <https://www.livescience.com/59753-personal-roman-letters-unearthed-hadrians-wall.html>

Gillis, S, Howie G and Munford R. 2007. *Third Wave Feminism: A Critical Exploration*. Palgrave Macmillan, London.

Great Valley Kindred. 2017. *Conceptions of the Afterlife*, Great Valley Kindred, retrieved 17th October 2019, <https://greatvalleykindred.com/conceptions-of-the-afterlife/>

Guyant, V. 2012. 'Introduction – Special Issue on Motherhood', *Femspec*, volume 12, issue 2, p 1-16.

Haines-Eitzen, K. 1998. "Girls Trained in Beautiful Writing': Female Scribes in Roman Antiquity and Early Christianity', *Journal of Early Christian Studies*, volume 6, issue 4, pp 629-646, retrieved 7th December 2019,

<https://muse.jhu.edu/article/9996>

Hajek, D. 2014. *A Universe Beneath Our Feet: Life in Beijing's Underground*, National Public Radio (NPR), retrieved 7th December 2019,

<https://www.npr.org/2014/12/07/368760646/a-universe-beneath-our-feet-life-in-beijings-underground>

Hallman, JC. 2014. *In Utopia: Six kinds of Eden and the Search for a Better Paradise*. St Martins Press, New York.

Halverson, J. 1969. 'The World of Beowulf', *ELH*, volume 36, issue 4, pp 593–608, retrieved 29th June 2019, www.jstor.org/stable/2872097

Haraway, D. 1985. 'A Cyborg Manifesto: Science, Technology, and Socialist-Feminism in the Late Twentieth Century', republished 2016 Manifestly Haraway, University of Minnesota Press, Warwick University Proquest Ebook Central, retrieved 14th February 2019,

<http://ebookcentral.proquest.com/lib/warw/detail.action?docID=4392065>

Haraway, DJ. 2008. *When Species Meet*. University of Minnesota Press, Minnesota.

Harbison, N. 2012. *I Listen to Colour*, TEDGLOBAL, retrieved 3rd August 2018
https://www.ted.com/talks/neil_harbisson_i_listen_to_color?language=en

Hawking, S. 2015. 'Artificial Intelligence could wipe out humanity when it gets too clever, as humans will be like ants', *The Independent*, 8th October, retrieved 2nd June 2016, <https://www.TheIndependent/life-style/gadgets-and-tech/news/stephen-hawking-artificial-intelligence-could-wipe-out-humanity-when-it-gets-too-clever-as-humans-a6686496.html>

Heholt, R. 2016. *Speaking of Seeing Ghosts: Visions of the Supernatural in the Tales of Catherine Crowe*, Peter Lang, retrieved 22nd June 2019,
<https://www.peterlang.com/view/9783631692516/chapter02.xhtml>

History.com. 2018. *History of Ghosts*, History, 21st August, retrieved 23rd May 2019,
<https://www.history.com/topics/halloween/historical-ghost-stories>

Howard, M. 1975. 'Doris Lessing considers her world and the world', *New York Times*, 8 June 1975, retrieved 7th February 2019,
<http://movies2.nytimes.com/books/97/09/14/reviews/lessing-survivor.html>

Hudson, M. 2017. *Ghosts, Landscape and Social Memory*. Routledge, Oxfordshire.

Hutchison, E. 2010. 'Unsettling Stories: Jeanette Winterson and the Cultivation of Political Contingency', *Global Society*, volume 24, issue 3, pp 351-368, doi: [10.1080/13600826.2010.485561](https://doi.org/10.1080/13600826.2010.485561)

Huxley, J. 1957 (first published 1968). 'Transhumanism', *Journal of Humanistic Psychology*, volume 8, issue 1, pp 73-76, retrieved 16th July 2020, <https://journals.sagepub.com/doi/pdf/10.1177/002216786800800107>

Huxley, A. 1958. *Brave New World Revisited*, Huxley.net, retrieved 2nd October 2019, <https://www.huxley.net/bnw-revisited/>

Hvistendahl, M. 2011. *Unnatural Selection: Choosing Boys over Girls, and the Consequences of a World Full of Men*. PublicAffairs, New York.

Ingersol, EG. 1994. *Doris Lessing*. Ontario Review Press, New York.

Ingram-Waters, M. 2015. 'Writing the Pregnant Man', *Transformative Works and Cultures*, no. 20 (no issue number), (no page numbers provided), retrieved 29th May 2018, <http://journal.transformativeworks.org/index.php/twc/article/view/651/544>

Istvan, Z. 2017. *Zoltan Istvan on transhumanism, politics, and why the human body has to go*, New Atlas, retrieved 3rd March 2018, <https://newatlas.com/zoltan-istvan-interview-transhumanism-politics/48041/>

Iverson, S. 2012. 'Academic mothers: Women on the edge of time', *Femspec*, volume 12, issue 2, pp 105-116, retrieved 3rd March 2015, https://www.researchgate.net/publication/268221257_Academic_mothers_Women_on_the_edge_of_time/citation/download

Johns-Putra, A. 2014. 'Care, Gender, and the Climate-Changed future: Maggie Gee's 'The Ice People' in G Canavan & K Stanley Robinson (eds), *Green Planets: Ecology and Science Fiction*, Wesleyan University Press, Connecticut, pp 127-142.

Jones, R. 2016. *Against Transhumanism: The delusion of technological transcendence*, Softmachines/Wordpress, retrieved 3rd January 2017, http://www.softmachines.org/wordpress/wp-content/uploads/2016/04/Against_Transhumanism_1.0_small.pdf

Joyce, L. 2017. *The Origins of Domestic Noir*, National Centre for Writing, retrieved 13th March 2020, <https://nationalcentreforwriting.org.uk/article/the-origins-of-domestic-noir/>

Kabat-Zinn, J. 2017. *Defining Mindfulness*, Mindful, retrieved 28th February 2020, <https://www.mindful.org/jon-kabat-zinn-defining-mindfulness/>

Kelly, F. 1997. 'Early Irish Farming: a study based mainly on the law-texts of the 7th and 8th Centuries AD', *Early Irish Law Series 4*, no volume or issue number given, School of Celtic Studies, Dublin Ireland, retrieved 30th May 2019, https://www.vanhamel.nl/codecs/Kelly_1997a

Kelly, J. 1975. 'Doris Lessing: The Memoirs of a Survivor', *Off Our Backs*, volume 5, issue 7, p 13, retrieved March 2nd 2020, www.jstor.org/stable/25784058

Kermode, F. 2000. *The Sense of an Ending - studies in the Theory of Fiction with a New Epilogue*, Oxford University Press, Oxford.

King, J. 2011. 'Unauthorized Versions: Jeanette Winterson, Michèle Roberts, and the Myth of the Flood', *Contemporary Women's Writing*, volume 5, issue 1, pp 52–65, retrieved 20th April 2020, <https://doi-org.ezproxy.lancs.ac.uk/10.1093/cwwrit/vpq009>

Knepper, W and Hopf, C. 2019. *Contemporary Critical Perspectives: David Mitchell*. Bloomsbury Academic, London & New York.

Kornfield, S. 2003. 'Suppression and Transformation of the Maternal in Contemporary Women's SF', paper presented to SFRA Conference, Guelph Canada, 2003, retrieved 26th June 2019, <http://www.natperspective.com/susan/WSFSFRAPresentation03.html>

Kress, N. 1993. *Beginnings, Middles and Ends*. Reader's Digest Books, Cincinnati, Ohio.

Lanouette, J. 2012. *A History of Three-Act Structure*, *Screentakes – Character and Theme-focussed Screenplay Analysis*, retrieved 14th May 2020, <https://www.screentakes.com/an-evolutionary-study-of-the-three-act-structure-model-in-drama/>

Larbalestier, J. 2002. *The Battle of the Sexes in Science fiction*. Wesleyan University Press, Connecticut.

Larbalestier, J. 2006. *Daughters of Earth*. Wesleyan University Press, Connecticut.

Le Guin, U. 1989. *The Language of the Night: essays on fantasy and science fiction*. The Women's Press Ltd, London.

Le Guin, U. 2014. 'Ursula K Le Guin's Speech at National Book Awards: 'Books aren't just commodities'', *The Guardian*, 21st November, retrieved 3rd December 2015, <https://www.theguardian.com/books/2014/nov/20/ursula-k-le-guin-national-book-awards-speech>

Lea, D and Schoene, B (eds). 2003. *Posting the Male: Masculinities in Post-War and Contemporary British Literature*. Rodopi, Amsterdam & New York.

Leary, K. 2017. *The Bionic Lens Could Push Eyesight Beyond 20/20 Vision: Perfect eyesight and the ability to focus without straining the eyes*. Futurism, retrieved 3rd September 2017, <https://futurism.com/tesla-model-3-get-smart-air-suspension-2018> retrieved 15th October 2019

Lee, Y. 2018. 'Questions of Scale: Narrative Theory and Literary History', in M Garrett (ed), *The Cambridge Companion to Narrative Theory*, Cambridge University Press, Cambridge, pp 29-45, doi: 10.1017/9781108639149.004

Lodge, D. 1992. 'The Art of Fiction: Defamiliarization', *Washington Post*, 17th May, retrieved 25th June 2019, https://www.washingtonpost.com/archive/entertainment/books/1992/05/17/the-art-of-fiction-defamiliarization/a645156d-2cfc-4c03-abd4-421ed76ce8a3/?utm_term=.d6d0eedc4a22

Loveday, M. Undated. *Strange Feasts and Where to Find Them – Twelve More Great Flash Fiction Novels/Novellas Part 1*, SmokeLong Quarterly, retrieved 28th February 2020, <http://www.smokelong.com/strange-feasts-and-where-to-find-them-twelve-more-great-flash-fiction-novels-novellas/>

Lunde, M. 2020. <http://www.majalunde.com/about/>

Lutgendorff, L. 2015. 'I Read the 100 Best Fantasy and Sci Fi Novels, And They Were Shockingly Offensive', *The New Statesman*, 13th August, retrieved 1st November 2018, <https://www.newstatesman.com/culture/2015/08/i-read-100-best-fantasy-and-sci-fi-novels-and-they-were-shockingly-offensive>

Machinal, H. 2011. 'Cloud Atlas and If on a winter's night a traveller: Fragmentation and Integrity in the Postmodern Novel', in S Dillon (ed), *David Mitchell: Critical Essays*, Gylphi, Canterbury, pp 155-176.

Manby, C. 2018. 'Why do we insist in believing in ghosts?', *The Independent*, 22nd October, retrieved 8th January 2019, <https://www.TheIndependent/life-style/why-do-we-insist-on-believing-in-ghosts-a8563096.html>

Mantel, H. 2009. 'Wicked parents in fairytales', *The Guardian*, 10th October, retrieved 23rd November 2019, <https://www.TheGuardian/books/2009/oct/10/fairytales-hilary-mantel>

Marchini, L. 2017. *Review: Grosvenor Museum, Chester*, CurrentArchaeology.co.uk, retrieved 16th June 2020, <https://www.archaeology.co.uk/articles/features/review-grosvenor-museum.htm>

Marland, H. 2018. 'The Yellow Wallpaper: a 19th Century story of nervous exhaustion and the perils of women's 'rest cures'', *The Conversation*, 27th February, retrieved 23rd May 2019, <http://theconversation.com/the-yellow-wallpaper-a-19th-century-short-story-of-nervous-exhaustion-and-the-perils-of-womens-rest-cures-92302>

May, CE (ed). 1994. *The New Short Story theories*. Ohio University Press, Ohio.

McKee, R. 1998. *Story*. Methuen, London.

Meet The Romans with Mary Beard. 2012, television series, BBC Two, London.

Mendelsohn, F. 2008. *The Rhetorics of Fantasy*. Wesleyan University Press, Connecticut.

Mishan, L. 2009. *First Contact: A Talk with Ursula K Le Guin*, The New Yorker, retrieved 29th May 2019, <https://www.newyorker.com/books/book-club/first-contact-a-talk-with-ursula-k-le-guin>

Mohr, D. 2009. 'The Tower of Babble'? The Role and Function of Fictive Languages in Utopian and Dystopian Fiction', in R Pordzik (ed), *Futurescapes – Space and Science Fiction Discourses*, Rodopi, Amsterdam, pp 225-248.

Mone, G. 2011. *Muscles in a Vial: Can a Single Shot Turn You Into Captain America?* Live Science, retrieved 15th October 2019, <https://www.livescience.com/15199-captain-america-real-super-soldier-serum.html>

Monk, P. 2001. 'Goddess on the Hearth: The Archetypal Significance of the Cat in Modern Fantasy', *Journal of the Fantastic in the Arts*, volume 12, issue 3, pp 309-321, retrieved 23rd June 2019, https://www.jstor.org/stable/43308532?read-now=1&seq=1#page_scan_tab_contents

Newell, D (2004). 'Judith Merrill and Rachel Carson: Reflections on Their "Potent Fictions" of Science', *Journal of International Women's Studies*, volume 5, issue 4, pp 31-43, retrieved 7th March 2019, <http://vc.bridgew.edu/jiws/vol5/iss4/3>

Nittle, N. 2018. *Spend 'frivolously' and be penalised under China's new social credit system*, vox.com, retrieved 2nd November 2019, <https://www.vox.com/the-goods/2018/11/2/18057450/china-social-credit-score-spend-frivolously-video-games>

Noon, J. 2017. 'Top 10 imaginary drugs in fiction', *The Guardian*, 18th October, retrieved 5th August 2018, <https://www.theguardian.com/books/2017/oct/18/top-10-imaginary-drugs-in-fiction>

Northcote, A. 1922 (republished 2010, S Davies (ed)). *In Ghostly Company: Tales of Mystery and the Supernatural*. Wordsworth editions, London.

O'Mara, K. 2018. *The Lady Hero's Journey*, McSweeney's, retrieved 24th February 2020, <https://www.mcsweeneys.net/articles/the-lady-heros-journey>

Özyurt Kılıç, M. 2008. 'Transgressing Gender Boundaries: The Function of the Fantastic in Jeanette Winterson's *The PowerBook*', *English Studies*, volume 89, issue 3, pp 287-304, doi: [10.1080/00138380802011925](https://doi.org/10.1080/00138380802011925)

Paasonen, S. 2005. *Figures of Fantasy: Women, Internet & Cyberdiscourse*. Peter Lang, New York.

Pepperell, R. 2003. *The Posthuman Condition: Consciousness beyond the brain*. Intellect Books, Bristol.

Pluskowski, A. 2010. 'Animal Magic' in M Carver, A Sanmark & S Semple (eds), *Signals of Belief in Early England: Anglo-Saxon Paganism Revisited*, Oxbow Books, Oxford, pp 103-127.

Pollington, S. 2008. *First Steps in Old English*. Anglo-Saxon Books, Ely, Cambridgeshire.

Poole, K. 2015. 'The Contextual Cat: Human-Animal Relations and Social Meaning in Anglo-Saxon England', *Journey of Archaeological Method and Theory*, volume 22, issue 3, pp 857-882, retrieved 30th May 2018,
<https://link.springer.com/article/10.1007/s10816-014-9208-9>

Pordzik, R. 2012. 'The Posthuman Future of Man: Anthropocentrism and the Other of Technology in Anglo-American Science Fiction', *Utopian Studies*, volume 23, issue 1, pp 142-161, retrieved 5th December 2017,
<https://www.muse.jhu.edu/article/474287>

Preda, A. 2019. *Jeanette Winterson's The Stone Gods as an Ebullition of Genres*. Philologia Volume 1 2019 (no issue number), Studia Universitatis Babeş-Bolyai series, Cluj-Nappca, Romania, retrieved 29th March 2020,
https://www.academia.edu/41440439/Jeanette_Wintersons_The_Stone_Gods_as_an_Ebullition_of_Genres?email_work_card=view-paper

Prehal, B. 2011. 'Freyja's Cats: Perspectives on Recent Viking Age Finds in Thegjandadalur North Iceland', Master of Arts (partial fulfillment of), Hunter College of the City University of New York, retrieved 29th May 2019,
<https://www.nabohome.org/postgraduates/theses/bp/BrendaPrehalThesis.pdf>

Propp, V, Martin AY, and Martin, RP. 1984. *Theory and History of Folklore*, University of Minnesota Press, retrieved 21st February 2020,
www.jstor.org/stable/10.5749/j.ctttv14w

Prose, Francine. Undated, 2020. *Scent of a Woman's Ink*. Harper's Magazine, retrieved 30th March 2020, <https://harpers.org/archive/1998/06/scent-of-a-womans-ink/>

Quinlan, T. 2012. *Narratives, Strategic Narratives and Micro-Narratives*, Narrate, retrieved 24th June 2019, <https://narrate.co.uk/2012/10/narratives-strategic-narratives-and-micro-narratives/>

Quito, A. 2016. *This woman, a self-described cyborg, can sense every earthquake in real time*, Quartz.com, retrieved 20th July 2018, <https://qz.com/677218/this-woman-a-self-described-cyborg-can-sense-every-earthquake-in-real-time/>

Raguin, VC. 2003. *The History of Stained Glass: The Art of Light, Medieval To Contemporary*. Thames & Hudson, London.

Randolph, O. 2016. *Women's Rights in Anglo Saxon England*, Octavia, retrieved 29th June 2017, <https://octavia.net/womens-rights-anglo-saxon-england/>

Ranisch, R. 2014, 'Morality', in R Ranisch & SL Sorgner (eds), *Post- and Transhumanism: An Introduction*, Peter Lang pp 149-172/researchgate.net p 1-22, retrieved 19th February 2019, https://www.researchgate.net/publication/270393539_Morality_of_Transhumanism_and_Posthumanism

Rawson S, Cartmell S, and Wong J. 2013. 'Suture techniques for tendon repair; a comparative review', *Muscle, Ligaments and Tendons Journal*, volume 3, issue 3, pp 220-228, retrieved 15th October 2019, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3838333/>

Rosheim, M. 1990. 'Design of An Omnidirectional Arm', in *The International Conference on Robotics and Automation*, IEEE Robotics & Automation Society, Cincinnati, pp 2162–2167, <https://ieeexplore.ieee.org/document/126324>

Rothman, J. 2014. *A better way to think about the Genre debate*, *The New Yorker*, 6th November, retrieved 27th June 2019, <https://www.newyorker.com/books/joshua-rothman/better-way-think-genre-debate>

Rothstein, E. 2005. 'The Tainted Science of Nazi Atrocities', *New York Times*, retrieved 12th June 2020, <https://www.nytimes.com/2005/01/08/arts/design/the-tainted-science-of-nazi-atrocities.html?auth=linked-facebook>

Russ, J. 1971. 'The Wearing out of Genre Materials', *College English*, volume 33, issue 1, pp 45-54, retrieved 24th September 2019, <https://www.jstor.org/stable/375521?seq=1>

Scott, E. 2018. *Transhumanist has gone through hundreds of body modifications to evolve with technology and time*, *Metro*, retrieved 23rd June 2018, <https://metro.co.uk/2018/04/26/transhumanist-gone-hundreds-body-modifications-evolve-technology-time-7498882/>

Shaw, K. 2018. “Some magic is normality”: Fantastical Cosmopolitanism in David Mitchell’s *The Bone Clocks*, *C21 Literature: Journal of 21st-Century Writings*, volume 6, issue 3, pp1-19. DOI: <https://doi.org/10.16995/c21.52>

Shklovsky, V. 1917. *Art as Technique*, Warwick University, retrieved 15th June 2020, <https://warwick.ac.uk/fac/arts/english/currentstudents/undergraduate/modules/fulllist/first/en122/lecturelist-2015-16-2/shklovsky.pdf>

Shoop C, and Ryan D. 2015. “Gravid with the ancient future’: ‘Cloud Atlas’ and the Politics of Big History’, *SubStance*, volume 44, issue 136, pp 96-106, <https://www.jstor.org/stable/24540791>

Shrayber, M. 2014. *What Exactly is Mpreg? A Male Pregnancy Enthusiast Explains*, Jezebel, retrieved 3rd September 2016, <https://jezebel.com/what-exactly-is-mpreg-a-male-pregnancy-enthusiast-expl-1651553874>

Silva De Sa, MC. 2014. ‘Storytelling as Survival in Margaret Atwood’s *Oryx and Crake* and *The Year of the Flood*’, Master of Literary Studies thesis, Universidade Federal de Minas Gerais, retrieved 1st May 2018, https://repositorio.ufmg.br/bitstream/1843/ECAP-9KDRK2/1/disserta_o_storytelling_as_survival_in_margaret_atwood_s_.pdf

Sperling, T. 2016. ‘Radical Pedagogy in Doris Lessing’s *Mara and Dann*’, *Critique: Studies in Contemporary Fiction*, volume 58, issue 3, pp 300-311, retrieved 1st

November 2017,

<https://www.tandfonline.com/doi/full/10.1080/00111619.2016.1242473>

SPR, 2018. *The Society for Psychological Research*, SPR, retrieved 24th June 2019,

<https://www.spr.ac.uk/>

Stephens, P. 2010. 'The Green Wall: Nature, Liberty and Yevgeny Zamyatin's Dystopian Frame', *Proceedings of Western Political Science Association 2010* (Annual Meeting Paper), Western Political Science Association, Western States of USA, pp 1-23, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1580348

Sterling, B. 1989. 'Slipstream', *Journalscape* (*Electric Frontier Foundation*), no volume or issue number, p 2, retrieved 30th August 2019,

<https://www.journalscape.com/jlundberg/page2>

Stowe, S. 2002. *Making Sense of Letters and Diaries*,. History Matters, retrieved 2nd May 2018, <http://historymatters.gmu.edu/mse/letters/whatkind.html>

Street-Porter, J. 2016. 'We might soon be able to grow babies outside the womb – and as someone who never wanted kids myself, I applaud it', *The Independent*, 16th September, retrieved 12th September 2017,

<https://www.independent.co.uk/voices/pregnancy-foetus-growing-outside-the-womb-ivf-sofia-vergara-nick-loeb-court-battle-fertility-clinics-a7310936.html>

Symons, X. 2016. *Male Pregnancy a Real Possibility*, BioEdge, retrieved 16th January 2017, <https://www.bioedge.org/bioethics/male-pregnancy-a-real-possibility/11726>

Than, K. 2005. *Power of the Future: 10 ways to run the 21st Century*, LiveScience, retrieved 6th December 2017, <https://www.livescience.com/11324-power-future-10-ways-run-21st-century.html>

The Bookseller News Team, 2018. *Feminist Fiction tops the bill at Olympia*, The Bookseller, retrieved 21st December 2018, <https://www.thebookseller.com/news/feminist-fiction-tops-bill-olympia-766656>

The Great Utopia and Dystopian Works of Literature. 2017. Video stream, Kanopy, 4th February, retrieved 3rd June 2019, <https://www.youtube.com/watch?v=VwG3gwgIVqM>

Thomas, A. 2017. 'Super-intelligence and eternal life: transhumanism's faithful follow it blindly into a future for the elite', The Conversation, 31st July, retrieved 3rd April 2019, <https://theconversation.com/super-intelligence-and-eternal-life-transhumanisms-faithful-follow-it-blindly-into-a-future-for-the-elite-78538>

Throesch, E.

Tropes Vs Women: The Mystical Pregnancy. 2011. YouTube, Anita Sarkeesian, July 2011, Feminist Frequency, retrieved 21st February 2019, https://www.youtube.com/watch?v=0rhH_QGXtgQ

Turney, S. Undated. *Language and Idiom in Historical Fiction*, Writers & Artists, retrieved 20th June 2019, <https://www.writersandartists.co.uk/writers/advice/845/dedicated-genre-advice/writing-historical-fiction/>

Vindolanda Charitable Trust, 2016. *History of the Vindolanda Trust*, Vindolanda Charitable Trust, retrieved 16th June 2020, <https://www.vindolanda.com/history-of-the-trust>

Vint, S. 2014. *Science Fiction: a Guide for the Perplexed*. Bloomsbury Academic, London & New York.

Wallace, W. 2012. 'Sent to the asylum: the Victorian women locked up because they were suffering from stress, post natal depression, and anxiety', *Daily Mail*, 13th May, retrieved 23rd May 2019, <https://www.dailymail.co.uk/home/you/article-2141741/Sent-asylum-The-Victorian-women-locked-suffering-stress-post-natal-depression-anxiety.html>

Walter, D. 2013. 'Science Fiction's Invisible Women', *The Guardian*, 8th August, retrieved 5th November 2017, <https://www.theguardian.com/books/booksblog/2013/aug/08/science-fiction-invisible-women-recognition-status>

Ward, C M. 2018. *Christmastide Ghost Story Traditions*, The House of Wigs, retrieved 23rd May 2019, <https://thehouseoftwigs.com/2018/12/21/christmastide-ghost-story-traditions/>

Warmflash, D. 2018. *Male Pregnancy May Be Closer Than You Think*, Genetic Literacy Project, retrieved 27th May 2018, <https://geneticliteracyproject.org/2018/01/05/male-pregnancy-may-closer-think/>

Weber, BR. 2018. 'Torture Porn in Dystopic Feminism', *Communication, Culture & Critique*, volume 11, issue 1, pp 192–194, retrieved 22nd May 2019, <https://doi.org/10.1093/ccc/tcx011>

Wednesbury Shire, undated. *The Heathen Afterlife*, Englatheod, retrieved 17th October 2019, <http://www.englatheod.org/afterlife.htm>

Weisberger, M. 2018. *Why does Artificial Intelligence Scare us so much?*, LiveScience, retrieved 27th May 2019, <https://www.livescience.com/62775-humans-why-scared-of-ai.html>

White, C. 2014. 'Seeing Things: Science, the Fourth Dimension, and Modern Enchantment', *The American Historical Review*, volume 19, issue 5, pp 1466-1491, retrieved March 5th 2021, <https://www.jstor.org/stable/43698884>

Wilson, R. 2013. *Eugenics*. Eugenics Archive, retrieved 27th May 2019, <http://eugenicsarchive.ca/discover/tree/>

Wilson, SR. 2013. 'Storytelling in Lessing's Mara and Dann and Other Texts', in SR Wilson (ed), *Women's Utopian and Dystopian Fiction*, Cambridge Scholars Publishing, pp 32-29, retrieved 29th June 2019, <https://www.cambridgescholars.com/download/sample/61524>

Winter, G. 2018. 'The brave new world of wombless gestation', *The Irish Times*, 17th October, date retrieved 26th September 2019, <https://www.irishtimes.com/life-and-style/health-family/the-brave-new-world-of-wombless-gestation-1.3657329>

Wray, J. 2013. *Ursula K Le Guin, The Art of Fiction No. 221*, *The Paris Review* (issue 206), retrieved 1st August 2014, <https://www.theparisreview.org/interviews/6253/ursula-k-le-guin-the-art-of-fiction-no-221-ursula-k-le-guin>

Wright, D. 2013. *Human Consciousness and the UFO Contact Phenomenon*, *Hybrids Rising*, retrieved 20th May 2018, <https://hybridsrising.com>

Yaszek, L. 2004. 'Stories 'That Only a Mother' Could Write: Midcentury Peace Activism, Maternalist Politics, and Judith Merrill's Early Fiction', *NWSA Journal*, volume 16, issue 2, pp 70–97, retrieved 2nd April 2019, www.jstor.org/stable/4317053

Yazgunoglu, K. 2016. "Posthuman 'Meta(l)morphoses' in Jeanette Winterson's *The Stone Gods*", *Ecozona: European Journal of Literature, Culture and Environment*, volume 7, issue 1, pp 144-160, retrieved 29th August 2017,
<http://ecozona.eu/article/view/986>

Yorke, B. 1989. "Sisters under the skin"? Anglo-Saxon Nuns and Nunneries in Southern England', *Medieval Women in Southern England*, volume 15 (no issue number), pp 95-117, retrieved 29th June 2017,
[https://www.reading.ac.uk/web/files/GCMS/RMS-1989-05 B. Yorke, 'Sisters Under the Skin' AngloSaxon Nuns and Nunneries in Southern England.pdf](https://www.reading.ac.uk/web/files/GCMS/RMS-1989-05_B._Yorke,_%27Sisters_Under_the_Skin%27_AngloSaxon_Nuns_and_Nunneries_in_Southern_England.pdf)

Yorke, J. 2013. *Into the Woods – How stories work and why we tell them*. Penguin Random House, London.

Zaba, T. 2016. 'Pieces of Reality' in ST Joshi (ed), *Lovecraft Annual No 10*, Hippocampus Press, New York, pp 191-198.