1

Riverbed

Generators floodlit the temple. A scene of ghastly devastation. Bodies lay exposed, limbs strewn at hideous angles. Each king was decapitated, each privileged neck sliced by diamond-edged handsaws, their proud torsos dismembered by chainsaws, line-drilling, and wire-cutting. The wide stone foreheads were reinforced by steel bars and a mortar of epoxy resin. Avery watched men vanish in the fold of a regal ear, lose a shoe in a royal nostril, fall asleep in the shade of an imperial pout.

The labourers worked for eight hours, dividing the day into three shifts. At night, Avery sat on the deck of the house-boat and re-calculated the increasing tension in the remaining rock, re-evaluated the wisdom of each cut, the zones of weakness and new stress forces as, tonne by tonne, the temple disappeared.

Even in his bed on the river, he saw the severed heads, the limbless minions, stacked and neatly numbered in the flood-lights, awaiting transport. One thousand and forty-two sandstone blocks, the smallest weighing twenty tonnes. The miraculous stone ceiling, where birds flew among the stars, lay dismantled, out in the open, below real stars, the real blackness beyond the floodlights so intense it seemed to be

coming apart, like wet paper. The workers had first attacked the surrounding rock, a hundred thousand cubic metres carefully plotted, labelled, and removed by pneumatics. And soon, the building of artificial hills.

To free himself from the noise of machinery, Avery listened for the river flowing past their bed, his head against the hull. He imagined, clinging to the dark wind, the steady breath of glass-blowers in the city five hundred kilometres north, the calls of water-sellers and soft-drink vendors, the shrieking of kingfishers through the surf of ancient palms, each sound evaporating into the desert air where it was never quite erased.

The Nile had already been strangled at Sadd el Aali, and its magnificent flow had been rerouted before that, to increase the output of Delta cotton, to boost the productivity of the unimaginably distant Lancashire mills.

Avery knew that a river that has been barraged is not the same river. Not the same shore, nor even the same water.

And although the angle of sunrise into the Great Temple would be the same and the same sun would enter the sanctuary at dawn, Avery knew that once the last temple stone had been cut and hoisted sixty metres higher, each block replaced, each seam filled with sand so there was not a grain of space between the blocks to reveal where they'd been sliced, each kingly visage slotted into place, that the perfection of the illusion – the perfection itself – would be the betrayal.

If one could be fooled into believing he stood in the original site, by then subsumed by the waters of the dam, then everything about the temple would have become a deceit.

And when at last – after four and a half years of overwork, of illness caused by extremities of heat and cold, or by the constant dread of miscalculation – when he stood at last with the Ministers of Culture, the fifty ambassadors, his fellow engineers, and seventeen hundred labourers to gape at their achievement, he feared he might break down, not with triumph or exhaustion, but with shame.

Only his wife understood: that somehow holiness was escaping under their drills, was being pumped away in the continuous draining of groundwater, would soon be crushed under the huge cement domes; that by the time Abu Simbel was finally re-erected, it would no longer be a temple.

The river moved, slow and alive, through the sand, a blue vein along a pallid forearm, flowing from wrist to elbow. Avery's desk was on deck; when he worked late, Jean woke and came to him. He stood up, and she didn't let go, hanging from her own embrace.

– Calculate me, she said.

At dusk, the light was a fine powder, a gold dust settling on the surface of the Nile. As Avery took out his paints from the wooden box, thick cakes of solid watercolour, his wife lay down on the still-warm deck. Ceremoniously, he parted her cotton shirt from her shoulders, each time witnessing her body's colour deepening: sandstone, terra cotta, ochre. A glimpse of the secret white stripes under straps, the pale ovals like dampness under stones, untouched by the sun. The secret paleness he would later touch in the dark. Then Jean

peeled her sleeves from her arms and turned on her side, her back to him, in the velvet light. The light of darkness, more evening than day.

Avery leaned overboard, dipped his teacup into the river, then set the circle of water next to him. He chose a colour and let it seep into the soft hair of the brush, infused with river water. Gently he released its fullness across Jean's strong back. Sometimes he painted the scene before them, the riverbank, the ruinous work that never stopped, the growing pile of stone physiognomy. Sometimes he painted from memory, the Chiltern Hills, until he could smell his mother's lavender soap in the fading heat. He painted, beginning from childhood, until he was again man-grown. Then, almost the moment he finished, he dipped the cup again into the river and with clear water drew his wet brush through the fields, through the trees, until the scene dissolved, awash on her skin. Some of the paint remained in her pores, until she bathed, the Egyptian river receiving the last earth of Buckinghamshire in its erasing embrace. Of course, Jean never saw his landscapes and, blind, was free to imagine any scene she wished. He would come to think of his wife's languor during that dusk hour – each dusk those months of 1964 – as a kind of wedding gift to him; and in turn, she felt herself open under the brush, as if he were tracing a current under her skin. In this dusk hour, each gave to the other a secret landscape. In each, a new privacy opened. Every evening that first year of their marriage Avery contemplated Buckinghamshire, his mother's smell, the distance of time from the wet beech forest to this desert, stress points, fissures and elasticity, the

pressure map of the soon-to-be-constructed concrete domes, and the heavy mortal beauty of his wife, whose body he was only beginning to know. He thought about the Pharaoh Ramses, whose body above his knees had recently vanished and now lay scattered in the sand, stored in a separate area from the limbs of his wife and daughters. It would be many months before they would be reunited, a family that had not been separated for more than thirty-two hundred years.

He thought that only love teaches a man his death, that it is in the solitude of love that we learn to drown.

When Avery lay next to his wife, waiting for sleep, listening to the river, it was as if the whole long Nile was their bed. Each night he floated down from Alexandria, through the delta of date palms, past isolated *dahabiyah*, with their loose sails, beached on the banks. Each night before sleep, to dispel the day's equations and graphs, he made this journey in his mind. Sometimes, if Jean was awake, he spoke the journey aloud until he felt her drift into that state of near sleep when one still believes one is awake, hearing nothing. But Avery would continue to whisper to her nonetheless, elaborating the journey with a hundred details, in gratitude for the weight of her thigh across his. The river, he felt, heard every word, wove every sigh into itself, until it was filled with dreaming, swelled with the last breath of kings, with the hard breathing of labourers from three thousand years ago to that very moment. He spoke to the river, and he listened to the river, his hand on his wife in the place their child would some day open her, where his mouth had already so

often spoken her, as if he could take the child's name into his mouth from her body. Rebecca, Cleopatra, Sarah, and all the desert women who knew the value of water.

While he painted her back, Jean remembered the first time – in the cinema in Morrisburg – that they'd sat together in the dark. Avery had touched her nowhere but her wrist, where the small veins gather. She felt the pressure move along her arm, his fingertips still touching only an inch of her, and she decided. Later, in the bright foyer she was exposed, in invisible disarray; he had crawled a slow fuse under her clothes. And she knew for the first time that someone can wire your skin in a single evening, and that love arrives not by accumulating to a moment, like a drop of water focused on the tip of a branch – it is not the moment of bringing your whole life to another – but rather, it is everything you leave behind. At that moment.

Even that night, the night he touched one inch of her in the dark, how simply Avery seemed to accept the facts – that they were on the edge of lifelong happiness and, therefore, inescapable sorrow. It was as if, long ago, a part of him had broken off inside, and now finally, he recognized the dangerous fragment that had been floating in his system, causing him intermittent pain over the years. As if he could now say of that ache: "Ah. It was you."

Avery was often lost, thinking through the mathematics by which a temple defines its space, attempting to enclose no less than sacredness. Constructing a plane where heaven meets earth. Jean argued that this meeting best takes place out in the open, and that the true plane where the divine vertical pierces this world is simply in the upright posture of a man. But for Avery, the body was one thing and the shaping of space – the human calculation of space to receive spirits – quite another.

– But we shape our inner space too, argued Jean. We are making up our minds and changing our minds all the time. And if we believe, I think it's because we choose to.

– Of course, said Avery, but the body is given to us. We arrive . . . prefabricated. A temple was the first power station. Think of the formulas invented, the physical achievement of thousands of men moving a mountain, hewing and hauling stone tonne by tonne, often hundreds of kilometres, to a site of precise coordinates – all in an attempt to capture spirits.

To define space, Avery continued, and then he stopped. No. Not to give shape to space, but to give shape to . . . emptiness.

At this, Jean grew fond and took her husband's hand. From the deck of the houseboat, they watched as workers disappeared into the newly fitted steel culvert that ran from Ramses' feet into the inner rooms of the Great Temple. The culvert burrowed its way through five thousand truckloads of sand, which had been transported from the desert to protect the facades and to provide lateral support for the cliffside. A century before, it had taken the discoverer of

Abu Simbel, Giovanni Belzoni, many days to dig his way down through drifted dunes to the temple; now Avery and his men had reburied it.

–You're like a man seen from a distance, said Jean, a man who we think has stopped to tie his shoelaces but who is really kneeling in prayer.

– Our shoelaces have to come undone, said Avery, before we ever think to kneel.

North of Bujumbura in Burundi, a small stream – Kasumo – bubbles out of the ground. This spring joins others – the Mukasenyi, the Ruvironza, the Ruvubu – into the Kagera, which in turn flows into Lake Victoria. This upper branch of the Kagera is one source of the Nile. Another source is the Rwindi River, which carries glacial runoff from the great Ruwenzori Range – the Mountains of the Moon. From the rainforest below, the snow peaks were thought to be salt, captured moonlight, mist. No one imagined snow in the equatorial rainforest, a place so verdant it sweats out a spell of giganticism.

Earthworms a metre long churn the soil, white heather sways ten metres above a woman's head. Flowers more than three metres tall sweeten the sun, their scent merging with the fragrance of cloves off the sea from Zanzibar. Grass grows tall as a man, moss thick as the trunk of a tree. Bamboo clatters into the sky like an image on accelerated film – a pace of fifty centimetres a day.

This is the habitat of the mountain gorilla, an animal that with one arm can snap the head off a human but who fears water and will not cross the river.

The equatorial snow – this frozen moonlight, this salt, this mist – melts and gushes with the force of gravity over sixty-four thousand kilometres of jungle, swamp, and desert; it swells the Nile and stains its burning banks bright green. Snow that comes to flow through a landscape so hot that it wrings a man's dreams from his head, the mirage shimmering in the air; so hot that a man cannot gain a moment's respite from his own shadow or his own sweat; so hot that the sand dreams of becoming glass; so hot that men die of it. A landscape so arid that its annual rainfall barely fills four teaspoons.

The desert abandons anyone who lies down. From the moment a body is covered in sand, the wind, like memory, begins to exhume it. And so the Bedouin and other desert tribes dig deeper graves for their women, a discretion.

Perhaps this is another reason for the immensity of the desert tombs, the sheer weight and mass of rock hauled and piled – ingeniously piled, yet piled all the same – at the gravesites of the kings.

In the desert we remain still and the earth moves beneath us.

Each night the temperature fell to freezing and the labourers began their day around the fire. By early morning one paid a price for even the slightest exertion. No one was seen to sweat because any moisture evaporated instantly. Men dipped their heads into whatever shade could be found, squeezed into the shadows of wooden crates and trucks. They gazed with desire across the Nile at the umbra of dom and date palms, acacias, tamarisk, and sycamore. Their faces sought the north wind.

Each morning from the houseboat, Jean watched Avery disappear into the throng of men. All around him, faces the colour of wet earth; Avery, pale as the sand. Soon she would climb to the plateau where a garden had been started, irrigated by the same pipes that provided water for the camp's swimming pool, and begin her lessons on desert fruits from the wife of one of the Cairo engineers, a gracious source of information – from recipes to plant medicines and cosmetics – who wore an elegant white shirt-dress to the garden, with white sandals, her hair elaborately sculpted and pinned under a white straw hat. She directed Jean, who was happy to sink her knees and hands into the work.

All day the temple rock absorbed the sunlight; any gap between the blocks trapped the heat like a clay oven. Then, each evening, the stone slowly cooled. Visitors came to experience Abu Simbel at dawn. But Jean knew that the true miracle of the temple was only revealed at dusk when, for one brief twilit hour, the great colossi came to life, stone lips and limbs cooling exactly to the temperature of skin.

One day, three hundred thousand years ago, one of our hominid ancestors in Berekhat Ram leaned down to pick up a tuff of volcanic rock whose shape, by chance, resembled a woman. Then another stone was used to deepen the naturally formed line between "head" and "neck" and between "arm" and "torso." This is the earliest example of stone made flesh.

In paleolithic Britain, a hunter chipped a handaxe out of flint, taking care not to damage a perfect fossil shell of a bivalve mollusc embedded in the stone. From the hunter fashioning the first tools (the first awareness that matter can be split to make a sharp edge) to the splitting of the atom – a minuscule amount of time in evolutionary terms, about two and a half million years. But perhaps time enough to consider the importance of preserving the beautiful mollusc in the stone.

The history of nations, Avery knew, was not only a history of land but a history of water. Flowing with the Nile over the border of Egypt into the Sudan, Nubia was a country without boundaries, currency, or government, yet an ancient country nonetheless. To the west and to the east, the Sahara. To the south, from the town of Wadi Halfa, the desolate desert of Atmur. For centuries, armies travelled by river for Nubia's gold, its incense and ebony. They came and built their fortresses and tombs, their mosques and churches on the lush thighs of the Nile. When stone is scarce, it is the clearest sign of conquest, just as a tree is a sign of water. The first Christians

lived in the Pharaohs' ruins and built their churches in the Pharaohs' temples. Then, in the eighth century, Islam travelled upriver to Nubia, and mosques appeared where the churches had been. Yet conquest was never easy, even by river. The infamous Second, Third, and Fourth Cataracts – and cataracts within cataracts – the Kagbar, Dal, Tangur, Semna, and Batn el Hajar, "the belly of stones" – discouraged trespassers. From Dara to Aswan, caravans of a hundred camels crossed the sand, creaking and jangling with heavy sacks of rubber from the forests of Bahr el Ghazal, with ivory, ostrich feathers, and wild game. They passed through the dry valleys and hills, stopping at last at the oasis of Salima before reaching the Nile south of Wadi Halfa, then following the west bank of the river north into Egypt. Some believe the Nubians are originally from Somaliland, or that they crossed the Red Sea from Asia, by way of the port of Kosseir. Over the centuries, Arabic and Turkish occupiers married Nubian women, and tribes of twenty-eight different lineages lived together in scattered villages along the Nile.

Since the band of naturally fertile, silt-rich soil along the riverbank was only a few metres wide, for thousands of years Nubians have worked their *eskalays*. The *eskalay*, Avery had told Jean, holding his lamp close to an illustration in his journal that lay open beside him on their bed on the river, is the great machine of the desert. Its motor is a yoke of bulls. Countless generations of cattle have plodded tight circles in the sand to draw the river, waterbowl by waterbowl, into fields of chickpea and barley.

Farming land was so limited that shares were passed down,

single *feddans* divided and subdivided through generations so many times that, when compensation was to be allocated because of the dam, exasperated clerks found themselves dealing with shares as small as half a square metre. The divisions were so minute and the deeds of ownership so complicated – every single official landowner having died many centuries before – that any hope of straightforward compensation was abandoned. Instead, the Nubian way had to be respected – co-ownership in a communal economy.

In Nubia, families distribute the fruit of the palm among themselves, with shared responsibility for the care of the tree. Cows are the property of a collective of four, each owning a leg, and these shares can be sold and traded. An animal can be rented. The one who feeds and shelters the cow has a right to its milk and calves. Each owner has to provide food and shelter when the animal works his *eskalay*. Division but not divisiveness, for that would literally kill the enterprise.

Before the building of the High Dam at Aswan in the 1960s, a small dam was constructed, and its height was raised twice – ten, then twenty years later, the villages of lower Nubia, the fertile islands, and the date forests were drowned. Each time, the villagers moved to higher ground to rebuild. And so began the labour migration of Nubian men to Cairo, Khartoum, London. The women, with their long, loosely woven black *gargaras* trailing the sand, erasing their footprints, took over the harvesting and marketing of the crops. They pollinated the date palms, cared for their family's property,

and tended the livestock. Men returned from the city to be married, to attend funerals, to claim their share of the harvest. And some returned in 1964 to join their families when, with hundreds of thousands of tonnes of cement and steel, and millions of rivets, a lake was built in the desert. Nubia in its entirety – one hundred and twenty thousand villagers, their homes, land, and meticulously tended ancient groves, and many hundreds of archaeological sites – vanished. Even a river can drown; vanished too, under the waters of Lake Nasser, was the Nubians' river, their Nile, which had flowed through every ritual of their daily life, had guided their philosophical thought, and had blessed the birth of every Nubian child for more than five thousand years.

In the weeks before the forced emigration, men who returned from labour exile walked through their villages to homes they had not seen in twenty, forty, fifty years. A woman, suddenly young and then just as suddenly old again, looked at the face of a husband barely seen since she was a girl, and children, now middle-aged, looked upon fathers for the first time. For more than three hundred kilometres, the river absorbed such cries and silences, the shock not of death but of life, as men, living ghosts, returned to look upon their birthplace for the last time.

The workers at Abu Simbel fell into small colonies: the Italian stonecutters – the *marmisti* – who could smell faults in the stone at twenty paces; the Egyptian and European engineers;

the cooks and technicians; the Egyptian and Nubian labourers; and all the spouses and children. Avery walked through the site and saw a hundred problems and a hundred singular solutions. He saw the clever adaptations made by workers who could not wait three months for replacement parts to arrive from Europe. It gave him a deep pleasure, his father's pleasure, to notice the wire and spring borrowed from another machine, transplanted with the fraternity of an organ donor.

When Avery first saw the Bucyrus machines squatting in the desert at Abu Simbel – the pumps, refrigerators, and generators – it was almost an ache he felt, for these were the machines his father had loved best. William Escher had put great stock in Ruston-Bucyrus reliability – in their famous excavators and in their machines for compressing, ventilating, pumping, winching, heating, freezing, illuminating . . . He'd had a boy's love of heavy machinery and favoured Bucyrus above all because of their machines born of the Second World War: midget submarines, flameproof locomotives, mine sweepers, landing craft, patrol boats, the Mathilda 400 and Cavalier 220 tanks, the 600 Bren Gun Carriers, and the tunnelling machine commissioned by Winston Churchill and constructed to his personal specifications, a box with a six-foot steel plough in front and a conveyor system in back, designed to dig trenches at the rate of three miles an hour.

–When my father worked for Sir Halcrow and Co., Avery told Jean, the company was building the great Scottish dams. And during the war they were consulted for the "bouncing

bomb" missions, and tunnelled under London for the post office, and extended Whitehall for Churchill. My father was sent to North Wales to assess the Manod slate quarry to ensure it was sound enough to shelter paintings from the National Gallery. That's where he'd learned the sizes of Welsh slate: wide and narrow ladies, duchesses and small duchesses, empresses, marchionesses, and broad countesses. He loved the names of things: joists, trusses, sole plates, studs, footing, bearers, lintels, and spars.

– They could be plant names, said Jean. The flowering lintel, the spar nettle, the black-eyed joist . . .

– My father's first job, when he was fifteen, said Avery, was at Lamson Pneumatic Tubes. Ever since I can remember, we shared an affection for pneumatic tubes: ingenious, practical, inexplicably humorous. We loved the idea of an elegant, handwritten note, perhaps a love letter, stuffed into a cylinder and then shot through a tube of compressed air at thirty-five miles an hour or sucked up by a vacuum at the other end like liquid through a straw. My father believed this was the most unjustly neglected technology of the century, and we were continually thinking up new uses for pneumatic tube systems – it was a game he started with me in his letters during the war and we never stopped playing it. He drew maps of London criss-crossed with hundreds of miles of underground pneumatics – little trains of capsule-cars for public transportation; groceries delivered direct from shops to private residences, swooshed right into the kitchen icebox; flowers shot directly from the florist into the vase on one's piano; delivery of medicines

to hospitals and convalescent homes; pneumatic school buses, pneumatic amusement rides, pneumatically operated brass bands . . .

My father was a splendid draughtsman, Avery continued. I have never known anyone who could draw machinery as he did. He pushed aside his plate at the supper table and I'd watch him sketch inner workings with fine clear lines. Suddenly the paper came alive and each part took its place in a moving, working mechanism.

It was over a draughtsman's drawing that my parents met. My mother was sitting across from him on a train. He had a drawing tablet open across his bony knees and she praised his work. Avery sat up in their bed below deck, very straight, and jostled against Jean as if they were in a railway compartment. '. . . Thank you,' said my father, 'though I must tell you, it's not the human circulatory system, it's a high-pressure vacuum engine. Though perhaps,' he added politely, 'it seems like a heart when viewed upside down.' He turned the drawing around and looked. 'Yes, I see,' he said. 'And now so do I,' said my mother. 'It's beautiful,' she added. 'Yes,' said my father, 'a well-designed engine is a thing of exceptional beauty.' My mother reports that he then examined her more closely, searched her face. 'Well, yes,' said my mother, 'but what I mean is the drawing itself, the pressures and flow of the pencil.' 'Ah,' said my father, blushing. 'Thank you.'

–Wait! said Jean, to whom one of the great, unexpected pleasures of her marriage was this free speech before sleep. Did your father really blush?

– Oh, yes, said Avery. My father was a mechanism for blushing.

The palm tree, Jean discovered, bears two fruits – not only dates, but also shade. Everywhere in Nubia they are tended, but in Argin and Dibeira, in Ashkeit and Degheim, the date palms grow so thick along the banks of the river that the Nile disappears. The shade there is green and the wind makes a fan of the entire tree. Even the south wind gathers there to cool itself among the leaves of the crown.

The Bartamouda palm gives the sweetest fruit, pouches bursting with brown liqueur, plump flesh with a tiny stone, which the tongue finds like a woman's jewel as the sweetness fills one's mouth. Gondeila dates, by far the largest but less sweet, just right for syrup. The Barakawi, barely sweet at all and therefore somehow more satisfying to eat by the handful. And the Gaw, thin flesh barely covering its bulbous stone, perfectly adequate for vinegar and *araki* gin.

More than half the palm trees in the Wadi Halfa district were Gaw, immense *buras*, ancient groves growing around a single mother, reproducing for generations. At pollination time, the Nubians climbed, the graceful trunk between their legs, and cut the male flower in the bud. Then the buds were ground to powder and small amounts were wrapped in a twist of paper. As each female flower opened, the climber would again ascend, his cap brimming with paper twists of pollen that would be broken over the open flowers. Any

flowers left unpollinated grew a tiny date, a little fish, *sis*, and were fed to the animals.

When Jean and Avery first arrived in Egypt, the dates were still green, but soon the fruit drooped in heavy yellow-and-crimson clusters. By August the crop had grown dark and wrinkled with ripeness and then grew darker still. When at last the fruit was shrivelling on the branch, it was quickly harvested, its sweetness reaching its deepest concentration. Men climbed, swung their scythes, and the bunches fell to the ground, where women and children gathered the fruit in sacks and baskets. Bunch after bunch rained down, sackful after sackful was carried back to the village and spread out to dry.

Shares in date trees were sold, mortgaged, given as wedding gifts and dowries. Not only the fruit but the core of fallen trunks, *golgol*, was eaten. The fruit was sold at market, used for jam and spirits, for cakes, as a special porridge for women in labour. The leaves were woven into rope for the waterwheel, the *sagiya*, for rugs and baskets; they were used as sponges for bathing, as fodder and fuel. Stems were fashioned into brooms. The branches were used for roofs and lintels, for furniture and crates, for coffins and grave markers. And when the train bearing the last inhabitants of Nubia left Wadi Halfa just before the inundation, its engine was decorated with the leaves and branches of the date palms that would soon drown. One could almost have believed a forest had risen from the ground and was making its way across the desert if it weren't for the wailing of the train whistle, a sound unmistakably human.