

THE DOOMSDAY PLAN

A Clan Story

JOHN FRANCIS KINSELLA

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For

Tilla, Selma, Eléonore, Noé, Xaver, Elyas, Adèle, Camille and Antoine

'The lust for gold is so great that neither work, disease, or death can stop them. I believe that if there was gold in the mouth of hell, they would not be deterred.'

Jodoco Rique, 1534

CONTENTS

Nostradamus

Author's Note

Prologue

2019

May

June

July

August

September

October

November

December

2020

January

February

March

Postscript

NOSTRADAMUS

Near the gates and within the two cities, there will be two scourges the like of which was never seen. Famine within plague, people put out by steel, crying to the immortal God for relief.

Concerned by sombre visions of the future, Pat Kennedy had increasingly sought the experience and advice of his friend John Francis as to the future, not markets and economics, but the future of humanity as it stood. The response was not encouraging.

The idea that he should protect his family and friends slowly took form. Quietly he set about a project he named Salvator Mundi, one that would not only offer protection, but an alternative future. He developed it as a business plan to attract a core of very wealthy and privileged investors, those seeking a doomsday safe-haven, ready to invest in a project that offered them the comfort and security they were used to.

Like Pat Kennedy those investors had deployed all their energy to build and protect their fortunes only to realise the world in which they lived was an increasingly dangerous, unstable, unhealthy, overcrowded and overpolluted place to live, and it was time to concern themselves with their own and their family's survival, far from the masses on whom their wealth had been built.

Author's Note

Soon half a century will have passed since I first seriously ventured into the pristine equatorial climax forests of Borneo, a soon-to-be forgotten world. It was not until 1980 I started to pen my first story, Borneo Pulp, about the ravages of logging and plantations, already clawing their way into one of nature's last natural reserves. During the forty years that have since passed my worst imaginings have come to pass, millions and millions of hectares of primary forest, on every continent, have been sacrificed to the chainsaw, transformed into toothpicks, chopsticks, toilet paper, hardwood and rattan furniture, making way for oil palm and pulpwood plantations. The lives of countless orang-outangs and other forest creatures lost, and entire communities of forest peoples driven from their ancestral homes.

Today, I feel like that paltry thing in William Butler Yeats' poem, Sailing to Byzantium, a tattered coat on a stick, wondering what will the next forty years bring.

I

That is no country for old men. The young
In one another's arms, birds in the trees,
—Those dying generations—at their song,
The salmon-falls, the mackerel-crowded seas,
Fish, flesh, or fowl, commend all summer long
Whatever is begotten, born, and dies.
Caught in that sensual music all neglect
Monuments of unageing intellect.

П

An aged man is but a paltry thing, A tattered coat upon a stick, unless Soul clap its hands and sing, and louder sing
For every tatter in its mortal dress,
Nor is there singing school but studying
Monuments of its own magnificence;
And therefore I have sailed the seas and come
To the holy city of Byzantium.

Ш

O sages standing in God's holy fire
As in the gold mosaic of a wall,
Come from the holy fire, perne in a gyre,
And be the singing-masters of my soul.
Consume my heart away; sick with desire
And fastened to a dying animal
It knows not what it is; and gather me
Into the artifice of eternity.

IV

Once out of nature I shall never take
My bodily form from any natural thing,
But such a form as Grecian goldsmiths make
Of hammered gold and gold enamelling
To keep a drowsy Emperor awake;
Or set upon a golden bough to sing
To lords and ladies of Byzantium
Of what is past, or passing, or to come.

John Francis Kinsella Earth Day, Paris, April 22, 2020

PROLOGUE

No man is rich enough to buy back his past.

Oscar Wilde

WHAT KIND OF A STORY IS THIS? Well I suppose some might call it meta-fiction. I mean by that much of it is true and the rest is fiction, but perhaps it's not fiction at all. You the reader will have to decide what part of my story is imagination and what is made-up, but be warned, remember the hackneyed saying that fact is often stranger than fiction.

Against a background of uncertainty, asset prices had rocketed, and in spite of persistent bad news with Brexit, Trump, the Middle East, hunger, disease and climate change, markets continued to progress. Since 2008, following the crash of Lehman Brothers, the Dow Jones had re-emerged from the economic crisis, rising a dizzying 450%, with more and more billionaires chasing assets and property, pushing prices to unbelievable heights.

Democratic activists, ecologists, anti-climate change and extinction groups, collapsonauts, equal gender rights, anti-capitalist, and those opposing the neo-liberal model, along with political activists, were among those leading protests movements, forming what could be collectively called a save-the-planet-revolution.

In the forefront were many determined and highly vociferous men and women, some writers, others actors, television and media personalities, and business men and women. Amongst them was Pat Kennedy, his family, friends and their families, a Clan of extremely wealthy men and women.

They included Tom Barton and his wife Lola—a Colombian, mother of two young children. Tom had gotten rich by investing in Latin America—industry, minerals, oil, gas and agriculture.

Spanning two continent Latin America covered more than 19 million square kilometres with a population that would reach 500 million by 2050, offering limitless possibilities for business, but Tom Barton's ambitions ran contrary to those of many investors, his vision was one of equity, between the needs of men and the safeguard of the natural environment.

The Clan now collectively stood at the head of a diverse 100 billion dollar empire of cross holdings that straddled the planet, managed mostly by the men of the Clan, founders of the different businesses that constituted their respective family fortunes. The wives of such men had in the recent past been passive, apart from their engagement in charity, watching their husband's business from a distance, silently observing. Now that had changed, some wives enjoyed extravagant public lives, aboard their yachts, or in their outrageously extravagant homes, others were drawn to more serious roles, no longer content to look on, but since they had no legal role in their partners business activities, they joined one of the many in vogue movements to defend women's rights, minority rights, anti-somethings, often enrolled into the crusade to save the planet.

The unspoken question was, save the planet, okay, but from what, from whom, and for who?

The Clan gravitated around Pat Kennedy, the head of a leading international banking and investment group, an empire onto itself. The INI Banking Corporation projected a clean image, those who visited the bank's gleaming glass and steel towers were greeted by images, conjured up by its public relations department, of an environmentally friendly business group, backed by glossy brochures, filled with bright images and descriptions of businesses in manufacturing, mining and agriculture, spread across a broad geographical spectrum, where factories and fields were filled with happy smiling workers.

The reality was different, not that Pat and his friends were slave drivers, exploiting the poor and the natural resources of their countries, but the bank invested in innumerable business through a vast network of markets, where few if any really knew where and under what conditions workers and resources were exploited.

The bank was a triumvirate, and one of its headquarters rose out of the heart of the City of London, amongst the many towers that resembled a cluster of sparkling crystals.

Beyond those towers lurked a more sinister world, one driven by corruption, dirty money, narcotics, human trafficking, workers exploitation and a kingdom where the gig economy left a trail of human desolation, where knife crime was rampant, where a punitive state had forgotten many of its citizens and those who had made it their home.

London was nevertheless far from the desolation of the kingdom's former manufacturing and mining regions, towns and cities forgotten in a wilderness of industrial ruin and social collapse, where large swathes of the UK's population struggled to survive. It was a contradiction when compared to the front page stories of the *Daily Mail*, filled with the adventures and love lives of the rich, royals, celebrities and footballers, their extravagant marriages, their ultra-spoilt children, their sumptuous villas, their yachts, jets, supercars, and wild holidays.

Those abandoned by the system looked on, separated by an impenetrable glass wall as the wild party continued, as Bojo fiddled and parliament tore itself to pieces in the UK's never-ending Brexit saga, not helped by the opposition, led by a sour old time Marxist, with his fifties style discourse, as though he and his party were trapped in a time warp, although any comparison would have been unfair to Karl Marx.

It was more or less the same story a couple of hours in the Eurostar to the south-west of London, Paris, where Emanuel Macron pursued his surrealistic promises, where his equally heavy-handed punitive state hit the same forgotten classes that suffered in the same way as did their UK counterparts.

It was a tale of two cities, both prisoners of the gig economy, with entire districts abandoned to gangs that controlled the illicit traffic of drugs and contraband cigarettes, prostitution and illegal immigration, where the only alternative for the disinherited young and forgotten was the kind of diliveroo job that made the Amazon economy work. A world of zero-hour contracts, few holidays, no sick leave, no hope, where businesses drove their workers to extreme limits under the threat of punishing penalties or job loss, which Ken Loach described as 'Labour that could be turned on and off like a tap.'

The film-maker was a lifelong crusader fighting a losing battle against social injustice, in a society where nearly five million people worked in precarious jobs, relying on food banks and handouts to supplement near starvation wages.

Paris intramuros was the home of the bobos, an inner-city elite—champagne socialists, bankers, lawyers, IT engineers, architects, fashion designers, marketing and communications specialists, actors and artists, served by a low-paid precariat, living in the less well-off arrondissements and to a greater extent beyond the *périphérique*—the circular urban highway that separated the rich core from the poor periurban sprawl, both of which had been stripped of their industries, the bobos taking over the heart of the city and the best paid jobs, whilst the traditional working class disappeared or ended up on the pedals of deliveroo push-bikes.

It was little wonder countless young people dropped out, choosing a life of indolence, drugs and petty crime.

Poverty, homelessness, inequality, the slow car crash of health systems, were symptomatic of globalisation, where the politically correct refused to look at the causes of pollution and climate change—the unrestrained growth of population and rampant immigration, the twin fuels of growth and globalisation.

Pat was haunted by the idea his bank's image would be harmed by investigative reporters, exposing pollution and bad working conditions in the industries it financed, as was the case in many of its investments in Russian mining and metallurgy, Chinese manufacturing or Brazilian agricultural.

The bank funded the Fitzwilliams Foundation, headed by John Francis, through which it could bail itself out by developing projects via scientific and humanitarian agencies, dedicated to defending indigenous peoples and protecting their homelands from the encroachment of ruthless industrialists and criminal organisations.

One such agency, a struggling underfunded association, headed by Alfonso Martinez, had been brought to the attention of the foundation, thanks to Anna Basurko, for its remarkable efforts and progress in defending the land rights of the Wayuu, a Native American ethnic group whose home lay on the Guajira Peninsula, situated in northernmost part of Colombia and north-west Venezuela

Anna first met Martinez in Colombia during her research into marine archaeology off the Caribbean coast of the country. She had introduced him to Lola Barton who had expressed her concerns about the Wayuu Indians and their struggle against the vast coal mining complex that had despoiliated their region, transforming its people into dependent slaves.

Alfonso was a self-effacing Spanish lawyer dedicated to helping others. He had first worked with Franciscan missionaries, then set up an association to carry out what he discovered was to be his life's work. A native of the historical town of Tudela in Navarre, Alfonso had created a following in the wealthy region that bordered the Pyrenees, where the Basques had won their struggle for autonomy and built a solid experience in structuring the legal means to defend their rights against big government.

Alfonso's family had been marked by the brutality of the Spanish Civil War, his grandfather murdered in the massacres perpetrated by Franco's men. The war had pitched families against families and atrocities had been perpetrated by both sides—as in all wars, but Alfonso saw nothing was to be gained from reigniting the conflict, aside from preserving the memory of the victims and the need to avoid falling into the extremist trap.

The story of the survival and courage of the indigenous peoples of South America, recounted by Anna, against the worse kinds of adversity, had fired Pat's imagination, and his realisation that perhaps there was a lesson to be learnt from their experience.

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Like Pat Kennedy those investors had deployed all their energy to build and protect their fortunes only to realise the world in which they lived was an increasingly dangerous, unstable, overcrowded and overpolluted place to live, and it was time to concern themselves with their own and their family's survival, far from the masses on whom their wealth had been built.

The Doomsday clock stood at less than two minutes to midnight. Time was short, government solutions non-existent, as ecocide, pandemics, climate change and mass extinction stalked the planet.

2019

MAY

1

A BOOK FESTIVAL

CAMILLE, LIKE MOST PARISIANS, had her weekend routine, especially Saturday mornings. After breakfast with Liam, she set off for the traditional food market across the square from their place where a vast choice awaited her, not only fruit and vegetables, but just about everything else—meat, *charcuterie*, poultry, fish, cheeses, bread and conserves, from every corner of France and beyond. Liam's business left them with few moments together and Saturday lunch was one of the few occasions they could enjoy alone. The colourful Marché d'Aligre offered endless ideas for lunch, especially in the 19th century food hall, where specialised vendors offered an extraordinary range of delicious mets.

They were relatively new to the district and as she cut through the gardens in square Trousseau, she remarked for the first time a shop front on the opposite pavement, it bore the name PLANÈT DÉTECTION, and seemed a little out of place at a spot where fashionable cafes and boutiques were the norm.

With curiosity getting the better of her, instead of going directly to the market, she stopped and peered into the shop window. It was filled with a variety of strange objects from another age mixed with the latest gadgetry in electronic metal detectors. She pushed on the glass door. It was locked. A man appeared, he looked a her questioningly, a fashionable young woman, perhaps she'd mistaken the shop for something else. He smiled, opened the door and welcomed her inside.

The place was a capernaum of tools and oddities, a newspaper cutting in a frame announced *Chercheur de trésor*.

'Can I help you?' the man asked.

'You sell metal detectors.'

'That's our business.'

'For treasure hunters?'

'Yes, as well as archaeologists and geologists,' he said amused at her curiosity.

Camille had Pat Kennedy in mind, he'd been mulling over a vague project to explore Muisca Indian sites in the Altiplano of the Cordillera Oriental in Colombia. He'd developed an interest in Pre-Colombian archaeology after the discovery of an extraordinary jade mask and other artefacts during an undersea salvage programme he'd undertaken off the coast of the Alta Guajira.

The haul of treasure from the *Espiritu Santo*, a Spanish galleon, had unexpectedly yielded a cache of Mayan treasure, probably looted and on the way to Spain in 1708 when the vessel sank off the Caribbean coast of Colombia.

Pat was flying in to Paris that evening from Hong Kong and they were expecting him the next day at their place, a large duplex Haussmannian apartment on rue Charles Baudelaire, a short walk from the Bastille, in the 12th arrondissement of Paris.

* * *

Early the next morning, a fine spring day and a welcome break from three weeks of almost continuous rain, Pat, who didn't stand on ceremony, turned up at the Clancy's apartment earlier than expected. Liam had left for his weekend run, ten kilometres along the banks of the Seine, and Camille proposed they take a walk around the street market where she hinted there was something he would be interested to see.

Pat knew the market, he liked rubbing shoulders with the very mixed crowd, Parisians from every walk of life and every imaginable origin. He liked to feel he was in touch with the people, escape from his own often unreal world of finance and business.

The market was buzzing, a motley jazz band played on the street corner opposite the 19th century covered gourmet food market. On the esplanade was a *brocante*—a second-hand market—books, antique clutter, discarded decorative objects and general junk. They strolled past the stalls as Camille pointed him in the direction of rue de Charenton.

'There,' she said pointing to a building at the junction where the market tailed off, where the more impecunious stall holders offered overripe fruit and no longer fresh vegetables to not so well-off less regarding shoppers.

A banner announced a Festival du Livre et de la Presse d'Ecologie.

The building looked like some kind of a school, and it was. A rather grimy white modern stucco façade with large metal framed windows. A black and white poster over the entrance announced '100ecs', a cultural association, and on either side more colourful banners depicting what looked like a smouldering forest, welcomed visitors with the words, *Entrée Libre*—free entrance.

'A book festival,' announced Camille. 'I'd like you to meet a friend, one of the organisers.'

It was not a big deal, a couple of dozen stands where publishers and booksellers laid out their wares, works covering a broad spectrum of subjects linked to ecology and the environment. Nearly all were in French, which didn't stop Pat exploring them in his constant search for information that would prove or perhaps disprove his sombre vision of the future.

It was not that he was a pessimist, in fact by nature he was an irrepressible optimist, but he was above all a realist, and what he observed, together with the information that was accumulating day by day, reminded him of the period leading up to the catastrophe of the Second World War, when Chamberlain and his appeasers hoped against hope that all would turn out for the best, whilst Hitler laid his plans for war.

It wasn't just the multiplication of conflicts, but the steady flow of bad news, it could have been put down to the media, but from where he sat with the information resources he had at his disposal, everything pointed to a dark future. There was of course the much spoken about climate change and the loss of biodiversity, but there was also overpopulation, a major contributing factor to the pollution of natural resources—land, sea and air, the threat of disease with repetitive epidemics of Ebola and Sars, then there was war and civil strife, an uncontrolled flow of immigration, those fleeing hunger and overpopulation, the list was long and was growing longer by the day.

'Pat, let me introduce you to Catherine, she's the organiser of the festival.'

Catherine was a dark haired woman of fortyish whose English was approximate and who quickly suggested Pat meet the star speaker of the event, Kyril Kyristoforos, who was scheduled to preside on a televised discussion panel later in the day.

Kyristoforos was more than an activist, rather an eco-celebrity, the founder of Gaia, a foundation dedicated to the safeguard of the natural environment. He was widely known for his highly successful TV documentary films on polar expeditions, the African savannah, the rainforests of South America and South East Asia. He was also an active campaigner against big agribusiness, pesticide and chemical-laden fertilizer producers, plastics, and petrochemicals.

Gaia was neither a company nor a trust, but a combination of both, and tax exempt. In simple terms, it was a non-profit philanthropic corporation. Its

vocation was to back organisations, institutions, or individuals dedicated to the betterment of human society, through science, education, culture, and in particular the preservation and protection of the biosphere by reducing human impact to sustainable levels.

How it did that depended on the funds it could raise, and Kyristoforos beyond his eco-celebrity status spent a good part of his time with people like Pat Kennedy persuading them to back his projects, fund raising was a competitive business.

He was surrounded by a TV team, his team, in preparation for the conference he was to chair later that day to mark the high point of 17th festival, which would serve to launch his new *Rainforest* TV series.

He looked across at Pat as Catherine whispered in his ear and immediately recognised the banker, even dressed in his universal easygoing weekend wear.

Of course Kyril spoke perfect English, a slight mid-Atlantic accent, which solved any problems Kennedy may have had with French. Kyril was used to meeting decision makers, politicians, businessmen and renowned scientists. But it was not everyday he spoke to a very rich man, that is one as rich as Pat Kennedy. Most of the people that gravitated around Kyril were in media and publishing, some were in politics, and most hoped something would rub off the celebrity in their favour. Pat on the other hand was a potential backer, a source of sponsorship, cash.

Each country had its iconic green leader, heading a crusade to save the planet, a popular hero with his documentaries, books, press articles and commentaries, his pet projects to avert disaster, and his changing political affiliations. A few were known internationally like David Attenborough, whose BBC wildlife series was a planetary hit. There were others like Michael Moore or Al Gore, and personalities lesser known outside their countries or language spheres.

Kyril thanks to the international success of his wildlife films and documentaries had gathered a large following, not only in France, but also

much of Europe. His film *Rainforest* had won prestigious awards in Cannes, at the International Wildlife Film Festival in Montana, the Jackson Wild Summit and the Greenpeace Film Festival.

Capturing audiences was a combat, an everyday battle for funds, the competition fierce, as it was amongst businesses for green celebrities whose endorsement was worth a million words. Hollywood stars bet their careers on backing humanitarian and green movements, at the forefront were stars like Leonardo DiCaprio, Judith Paltrow, Willie Nelson, Cameron Diaz, George Clooney, Brad Pitt and Cindy Crawford. Sting was not a newcomer to the ecological movement, already in 1989, he with his wife, Trudie Styler, created the Rainforest Foundation. He had even a Colombian species of frog named after him, *Dendropsophus stingi*.

Kyril had started his career as an actor fresh out of drama school, his career was brief, however, his acting skills served him well when he joined a humanitarian foundation as its public relations manager, at first organising seminars, conferences and publications. It was when he started to produce short promotional videos, low budget, he came into his own, with his photogenic looks and aura he was a natural. He soon found backing for his first TV reportage, an exposé on rapacious logging operations in the Congo, which established him as a defender of the rainforest, its peoples and wildlife

Like all actors he was a chameleon, who, when he shed his green mantle, became a businessman, at the head of the vehicle he had created, Gaia, a foundation dedicated to saving the planet Earth. He asserted humanitarianism and ecology went hand in hand, he also approved the presence of showbiz with its power to reach out to the public, even LGBT movements, no one could afford to be seen dodging the trend. Beyond that the driving force was his own burning ambition, the kind that drove politicians, adventurers and carpetbaggers.

* * *

Was he a guru? Well he wasn't a spin doctor. Some kind of Messiah, who had set himself up to save humanity from itself? Not really. A self-appointed eco-warrior? Perhaps, there were plenty of them. But, all other things aside, Kyril Kyristoforos was a charismatic mediatic figure, his detractors call him Saint Kyril, though he only wore sandals when he had to. The same went for his jacket, which he shed, often slung over his shoulder, once he had the attention of his audience, hypnotising them with his sincerity, not unlike those evangelists that could be seen Sunday mornings on Bloomberg TV or CNBC when markets were closed

Certain activists and their followers saw their existence as an end in itself, and that end justified their existence, not their declared objective, forgetting that an organisation was of moral value, if and only it refrained from treating its declared objective as a justification for its own existence.

It was not rare to see the charismatic leaders of such organisations become sacred totems, religious symbols, with their loyal followers who defended the beliefs, litanies and canons of the organisation and its leader, blind to any alternative argument. They of course had their share of scientists, experts—real and pseudo, communicators, organisers and fund raisers, who with their foot soldiers carried the combat both at home and in the field.

Therein lay the difference, Kyril was closer to capital markets than the Bible.

Pat couldn't and wouldn't stay for the conference, pleading an unavoidable engagement, instead, to Kyril's great satisfaction, Pat invited him to dinner that evening at the nearby Le China, which the ecologist accepted. Dinner with a billionaire banker was an opportunity he couldn't afford to pass up, an evening with Kennedy was better than the one he'd planned with his grabbing producers, media reporters, sycophants and fawning followers, which could be put off for another day.

AN IRISH HERO

IT WAS BY PURE CHANCE that Pat Kennedy had happened upon the story in the Irish Times, that of Roger Casement, executed by the British for treason. Like all Irishmen, Pat of course knew the story of Casement's role in the Uprising of 1916, what he didn't know were the details of his career as a diplomat in the British Foreign Office.

Strange though it may seem, it filled some of Pat's blanks in the history of Hong Kong and Britain's colonies in South East Asia, where the atrocities in Amazonian served to build Britain's ambitions to corner the rubber market by introducing rubber tree plantations in Malaysia to produce the raw material needed by Dunlop for its tyres, invented by a Scot—John Boyd Dunlop who lived most of his life in Ireland and died at his home in Dublin's Ballsbridge in 1921, but that's another story.

Pat's interest in Casement's story was linked to a project that was taking form in his mind, one that was linked to Colombia, where he had spent several weeks the previous year with his friends salvaging the treasure of the Spanish galleon, the *Espiritu Santo*.

Thanks to his friend Tom Barton, Pat Kennedy had discovered the Cordillera Oriental, Colombia's branch of the Andes that swept down to the Amazon rainforest, a place Pat had visited under strange circumstances a couple of decades earlier.

The Cordillera had now become the focus of Pat's project and the story of Sir Roger Casement, an Irishman, in the Amazon, spurred him on, though it was not his intention to end up at the end of a rope.

A Dubliner, Casement started out in life by working for the Eider Dempsey Line, one of the important imperial British shipping companies that carried passengers and freight between Liverpool and the ports of West Africa including the Congo Free State.

He then worked for Henry Morton Stanley and the African International Association, an instrument of Belgium's King Leopold II, its chairman, as was Stanley, who was immortalised by his words: 'Doctor Livingstone, I presume?'

In 1890 Casement, after he had become disenchanted by colonialism, met Joseph Conrad. Both believed European colonisation would bring moral and social progress to the continent and free its inhabitants 'from slavery, paganism and other barbarities,' a vision they later regretted.

Conrad was to express his change of conviction through his powerful and much acclaimed book *Heart of Darkness*, in the same way as Casement, who, after after joining the British Colonial Service, was appointed consul and commissioned to report on the attrocities committed against Africans enslaved by the rubber industry in the Belgian Congo.

The best part of a century later *Heart of Darkness* was adapted and transposed into Vietnam by Francis Ford Coppola in his cinema classic *Apocalypse Now*.

Casement was described by his friend the sculptor Herbert Ward in a letter: 'No man walks this earth at the moment who is more absolutely good and honest and noble-minded.'

In 1906, he was posted to Brazil, first as consul, then consul-general in Rio de Janeiro, where he was appointed to a parliamentary commission charged with investigating reports of inhuman treatment inflicted on the Putumayo Indians by the Peruvian Amazon Company—PAC.

The story of Casement's mission was told by Mario Vargas Llosa, the Peruvian Nobel Prize winner for literature, in his book, *El sueño del celta*, and its English version *The Dream of the Celt*, an account of the Irishman's life and how he set out into the deep dark heart of the Amazon jungle and its endless expanses bordering the Rio Putumayo, in pursuit of truth and justice.

In September 1910, Casement left Iquitos and travelled upriver to La Chorrera, where he spent nearly two months investigating the atrocities committed against the Putumayo indigenous people by ruthless rubber tappers.

His conclusions were laid out in the *Putumayo Report*, which had a resounding effect in London when it was presented in 1911, earning Castlemain a knighthood.

The crime was discovered in 1908 when Walter Hardenburg, a young American engineer, left home for the Amazon, where the rubber boom had launched a number of ambitious projects including the construction of a railway. Instead of joining the railway project he was embarked on a terrible adventure that would mark forever the history of the Amazon.

In January Hardenburg and his travelling companion were caught up in a battle between Peruvian armed forces, reinforced by men of the Peruvian Amazon Company, against a group of Colombian *caucheros*. Hardenburg and his friend were captured, their baggage stolen, and they were held prisoners. During his forced sojourn in the jungle, where he was harshly treated, he witnessed countless hideous atrocities against the Indians which he recorded. Then in June 1909, Hardenburg travelled to London to bear witness before the Anti-Slavery Aborigines Protection Society who published his account, which shocked British opinion, and successfully lobbied the government to investigate the crimes committed 'at the behest of the agents of a great joint-stock company with headquarters in London.'

The fact that the Peruvian Amazon Company was a London registered company with three British directors, John Russell Gubbins, a friend of Peruvian president Augusto Leguía, Herbert Reed, a banker, and Sir John Lister-Kaye, an English baronet, forced the government to action.

An investigation was launched and Roger Casement quit London for the Amazon where he was appointed consul and empowered by the Foreign Office to undertake an enquiry into the alleged atrocities.

Pat Kennedy couldn't help being struck by Hardenburg's words in his book *The Putumayo*, *The Devil's Paradise*:

'The influence of the Incas did undoubtedly extend into the forest regions in a degree, as evidenced by remaining customs and nomenclature, but the Incas did not establish order and civilization in the forests as upon the highlands. The Incas and their predecessors built a series of fortresses which commanded the heads of the precipitous valleys leading to the forests, whose ruins remain today, and are marvels of ingenuity in megalithic construction.'

Hardenburg witnessed chained Indians transporting huge bales of raw rubber in the most primitive conditions constantly beaten and tortured by the PAC's slave drivers.

The PAC, also known as the Anglo-Peruvian Amazon Rubber Co, was run by Julio Cesar Arana, a Peruvian entrepreneur and politician, who raised capital for his venture in London, and counted eminent Britons on its board of directors, including Sir J. Lister Kaye, an English baronet.

The PAC was accused by Hardenburg of practices that amounted to the barbaric slavery of the indigenous peoples in the Putumayo region of the Amazon rainforest.

A Select Committee of the House of Commons published a paper on the investigations in 1913, in which the British Board of Directors of the PAC was declared not criminally responsible under the Slave Trade Acts.

Juan Alvaro Echeverri, an anthropologist at the National University of Colombia, reiterated the findings, which he published in the Irish Journal of Anthropology, an article describing his research into the genocide practised against the Putumayo Indians between 1900 and 1930 when they were almost totally wiped out during the rubber boom, a period they called the *Basket of Darkness*.

The harsh reality was rubber had become a vital raw material for the developed world at that time, supplying armies and industries with tyres, belts, clothing and endless other products.

When *Hevea Benthamiana*, *Hevea Brasiliensis* and *Hevea guyanensis* were discovered on the banks of the rivers Putumayo and Igaraparana in the late 19th Century, it brought a wave of explorers and adventurers to a region that now straddles Peru, Brazil and Colombia, in the indigenous territories of the Witotos, Boras and Andoques tribes.

PAC set up its base at Iquitos, far from the government in Lima, where it took less time to reach Lisbon in Portugal, across 'the region of the Amazon Valley—a region nearly as large as the whole of Europe without Russia', via the Amazon River, than undertake the almost impossible journey to Lima overland or via the treacherous Straits of Magellan.

The remoteness of Iquitos allowed men like Julio Cesar Arana to act with complete impunity. It was a time of the *Mission Civilisatrice*, when Europe believed native peoples needed to be civilised, a pretext for subjecting them to the most odious conditions.

Hardenburg witnessed hunting expeditions to capture Indians, many of whom looked 'thin, cadaverous and attenuated, they looked more like ghosts than human beings', as his photos witnessed.

Casement was experienced in the matter, his report into abuse of the people in the Congo State ended King Leopold's reign as its de facto ruler. Leopold II of Belgium had governed the vast country as his own private estate, where according to conservative estimates six million native Africans were killed by Leopold's agents, either starved on the rubber plantations or killed when they refused to accept slavery on plantations, logging or in the search for ivory.

His transformation into an anti-imperialist came in part from the fact that he was an ardent Irish nationalist, who saw his country like the Congo as being oppressed by an imperial power, manifested in his letters by his contempt for Victorian imperialism. One of the crimes committed by Arana's men:

'... took place during the carnival of 1903, and it was an abominable and horrible crime. Unfortunately, around 800 Ocaina Indians arrived in La Chorrera to hand over the products they had harvested... After these were weighed, the man who led them, Fidel Velarde, picked out 25 of the men, whom he accused of laziness. This was the signal for Macedo and his accomplices to order that sacks dipped in gasoline be placed on the Indians like a tunic and set on fire. The order was dully obeyed and one could see the dreadful image of those miserable (Indians) screaming loudly and piteously as they ran towards the river hoping to save themselves by plunging in, but all of them died.'

Casement's Blue Book—a parliamentary report entitled *Correspondence* on the Treatment of British Colonial Subjects and Native Indians Employed in the Collection of Rubber in the Putumayo District, was published July 1912.

It provoked of outrage and incredulity at the idea a British-registered company was responsible for the maltreatment of hundreds of innocent Indians.

In 1913, after Casement retired from the diplomatic services, he entered Irish nationalist politics. This ended when he was arrested on a deserted beach, not far from McKenna's Fort, near Banna Strand, in Ireland, on his way back from Germany on Easter Thursday 1916, the day before the Dublin Rising, after an unsuccessful attempt to solicit help from Germany for the rebels cause.

The scene was described by an eyewitness, Pat 'Aeroplane' O'Shea:

'Advancing along the middle of the road marched a company of RIC, helmets on their heads, and carbines on their shoulders and ammunition pouches slung on their belts. However one disliked them, one could not but admit that they were a fine body of men as they strode along, looking neither to right or left and lest of all at the man in civilian clothes who walked in the centre and whose great height almost dwarfed them all. Nobody, not even his

ignoble escort, knew the identity of this stranger whose proud and erect mien drew and held the attention of all. He was of middle age, handsome, with pale complexion, black hair and moustache turning grey. He wore a cheap looking and obviously ready-made suit with a white handkerchief peeping out of the breast pocket. He wore no beard. He wore no overcoat so that his manacled hands were in plain view. On his head he wore a cap with a wide flat top. As far as dress went, his was a shabby figure. One thing was recognised by all. The man who left Tralee by the 10.30 train that morning was a personage, but all guesses were very wide of the mark – especially those relating to the prisoner's nationality.'

That man was Sir Roger Casement, who was tried for high treason and hanged in Pentonville Prison in London on August 2, 1916.

The slave driver, Julio Cesar Arana, died at the age of 88, penniless, in a small house in Magdalena del Mar, near Lima in 1952, after his properties in the Putumayo were transferred to Colombia.

As for the victims of the PAC and others who exploited the native peoples, it took a century before someone stepped up to apologise. In 2012, Colombian President Juan Manuel Santos offered the apologies of the nation to the indigenous peoples who suffered as a result of the rubber boom during which it was believed that at 100,000 died, probably very much more, decimated by the greed of the rubber companies and others who exploited the forests of the Amazon.

A QUEST

IT WAS BECOMING DIFFICULT TO SORT the wheat from the chaff. Information polluted by fake news was on overload as the internet revolution continued to explode with knowledge, news and nonsense, reaching out into every distant corner of human society, across the entire planet, empowering every single citizen interested in the world around him, its destiny, his destiny, his family's destiny.

Hightech companies, like Facebook, Google, Microsoft, Amazon, and others never heard of, controlled the information we received, the movies we watched, the food we ate, the products we consumed, our communications, the mails and messages we sent, photographs and videos we exchanged with our families and friends, with our employers, our banks, fiscal authorities, doctors and health services, all transferred via cable networks, over the ether, via satellites, open to snoopers, hackers and spies of every imaginable kind.

News was controlled by an ever tighter and smaller circle of large media companies, while a multitude of independent bloggers and commentators inundated us with fake news, disinformation, and subversive propaganda of every political shade and colour.

Peter Pomerantsev, a senior visiting fellow at the London School of Economics, wrote: More information was supposed to mean more freedom to stand up to the powerful, but it's also given them new ways to crush and silence dissent. More information was supposed to mean a more informed debate, but we seem less capable of deliberation than ever. More information was supposed to mean mutual understanding across borders, but it has also made possible new and more subtle forms of conflict and subversion. We

live in a world of mass persuasion run amok, where the means of manipulation have gone forth and multiplied, a world of misinformation, disinformation, fake news, dark ads, psy-ops, hacks, bots, soft facts, deep fakes, ISIS, Putin, trolls, Trump, it was endless.

* * *

Pat Kennedy believed that collapse was inevitable, not imminent, but near, all the signs were there—climate change, runaway demographics, pollution, disease, war and strife.

He felt it was part of his duty to his family, friends and associates to set about developing a survival plan, but when he stopped to think, he realised that if he lived to the age of his grandfather, he had another 30 or so years ahead of him. Most mortal men would have been satisfied with that, but not Pat. What would be all his wealth be worth to him if he was dead?

He remembered his visit to Xi'an, the capital of Qin Shi Huang, the first emperor of a united China, who with his vast wealth and power had built a tomb guarded by the now famous life-sized Terracotta Army, a city from which he would rule in the afterlife, however, in the meantime, to forestall the risk that the afterlife was just a dream, Qin sought the elixir of eternal life, mercury pills, which unfortunately for him only hastened the end of his mortal existence.

Immortality was an age old dream, but in 2020 there was a glimmer of hope and certain scientists thought the key to longevity lay in our genes which controlled our biological clock.

Though brought up a Catholic in Ireland, Pat was not a believer, superstitious, but definitely not a believer, as for Chinese elixirs he had about as much faith in them as the holy water his mother brought home from Lourdes. But he did believe in science, and the progress medical science had made during his life time was remarkable by any measure.

Pat had everything a man could want, power, wealth, an elegant wife and two beautiful children, he owned homes in Hong Kong, London, Paris, New York, the Caribbean, a mega-yacht, a transcontinental jet or two, and above all robust health, but as he approached the age of 60, the thought of his own mortality made a sombre mark on his otherwise extraordinary rise to success—one day he would die.

He with Bill Gates, Jeff Bezos, Elon Musk and Mark Zuckerberg, had two things in common—they were immensely rich and they would die.

What was the point of surviving doomsday if he was to die of old age and decrepitude like the many nameless beggars he saw on the streets of London.

What was the point of saving the planet, restoring it to its once pristine state, if he was not there to enjoy it?

Was death inevitable when he controlled such vast wealth?

The two things went together, survival and longevity, longevity and survival, in conditions that permitted him to enjoy life and the trappings of wealth far from danger.

Pat's bank, INI Hong Kong, was the majority shareholder in LifeGen, a biological research institute based in Sophia Antipolis, a science and technology park that lay between Nice and Cannes, in the South of France. LifeGen's principal field of research was molecular biology and genetics and more precisely the biological clock, the mechanism that controlled the age process in the human body.

Understanding the underlying cause of ageing was essential if the ageing clock was to be be reversed, restoring characteristics of youth to aged cells and tissues. Pat learnt two factors influenced the ageing process: epigenetics and genetics, and defining their functioning was essential if they were to be opened to reprogramming.

The idea that those who would live to 200 or more had already been born, convinced Pat to invest, like Alphabet's life-science company, Verily, formerly Google Life Sciences, in life extending research.

LifeGen's goal was to slow and even reverse the aging process, through technology, big data, genomics and by applied regenerative medicine to replace or regenerate human cells, tissues and organs.

Life extension research was a field that governments and intellectuals disapproved, it was normal, philosophers had spent 2,500 years explaining and justifying death, religions had invested big in their afterlife beliefs, as for pension funds long life was anathema.

Pat had sufficient proof that life could be extended through techniques to rejuvenate the human body by increasing science's understanding of the biology that controls lifespan and harnessing related technologies.

It was a serious advantage to commence life with a good set of genes, which he believed he had, and to be far from the horribly polluted environment of China, far away, perhaps in Ireland, or on the Altiplano of Colombia, which was in the realms of the possible.

* * *

Ekaterina, John's wife, knew something about collapse, she was Russian and had lived in the former USSR. When she was a girl, her parents had always impressed on her that life under Communism was good, offering all the benefits of education, health-care, work, accommodation, plentiful food, sport and culture. Perhaps there had not been the same broad choices of goods the Western consumer society offered, but they were protected by the state on a fairly egalitarian basis.

That utopic version of Communism was already fading when Mikhail Gorbachev arrived, the Soviet economy was already starting to experience serious difficulties, a consequence of the Cold War. Slowly, things started to go downhill, but when collapse came, it happened overnight, after 70 long years of Communist rule by the successors of Lenin and his Bolshevik movement, a sudden catastrophic rupture, the capsizing of ship.

People were soon half starving, no heating, no light, electricity down most of the day, and no fuel at the petrol pumps. It was not unusual to see people

walking down the middle of the streets, old men and women pushing wheelbarrows, the few car there were had practically disappeared from view, as had the buses and trains. Even trees started to disappear from the streets and parks, when with each new day freshly cut tree stumps bore witness to the state of desperation as Muscovites sacrificed their greenery for firewood.

With one devaluation after the other, the rouble collapsed, savings evaporated, salaries and pensions went unpaid, factories shut down. The lucky ones who had managed to get out of Russia sent their families dollars.

As 2020 approached, things were of course better, a casual visitor to Moscow or Petersburg might have got the impression they were in any other European city, but behind the monuments, fine hotels, bright shops and traffic, outside of the cities the Russian economy was stagnating, those at the bottom were still struggling, the unwilling victims of low wages, under and unemployment, poor pensions, and run down public services.

'If it wasn't for our resource, oil and gas,' Ekaterina reminded John, 'we'd be a poor third world country. The next time you see a TV documentary or news programme on Russia, look carefully at the details and you'll see what I mean

'It all happened so quickly and should serve as a lesson to those who think they are safe from calamitous collapse and disorder.

'Why do you think rich oligarchs and politicians hide their money in the City or in Switzerland?' she asked him.

A PHILANTHROPIST

PAT BELIEVED THE ANSWERS TO TODAY'S problems lay somewhere in the past. At the same time he agreed with Jack Ma of Alibaba, who told the World Economic Forum in Davos, 'Be in love with the government. But don't marry them.'

Towards the end of 2018, Ma suddenly announced his decision to step down from his everyday role in his company, to focus on education and philanthropy.

It seemed like a good idea to Pat, and for the same reasons. Ma, however, feared that his power and popularity had made him a target of the Communist Party, which was not Pat's case, who apart from a few very special occasions had not sought to cosy up to China's power apparatus, even though he was unavoidably close to certain of them, through Lili's family.

Foreign CEOs had come under increasing pressure to give the Party a role in their firms and sooner or later INI would be pushed by the Party to give its nominees a role in business decisions, as with time, Hong Kong was destined to to lose its semi-autonomous status and become just another Chinese city.

That process would be complete in 27 years when he would be a very old man and his bank, probably be a Chinese bank.

He had achieved more than he could have imagined in his wildest dreams and it was time to turn his attention to other things, and not just philanthropy, in which he was already active through art, culture and scientific research. Certain high profile entrepreneurs could be an embarrassment or a threat to Beijing's inner circle. There was the case of Huawei's CEO and founder, Ren Zhengfei, whose popularity had reached a level that could threaten the Party after he had built the world's largest manufacturer of telecommunications equipment and second largest manufacturer of smartphones.

But when Huawei was suddenly caught in Donald Trump's gun sights, Ren Zhengfei was transformed into a popular hero, defending China against the American imperialist dictates, something that did not necessarily go down well with Beijing.

* * *

Pat was a latecomer to China though he came with a very considerable experience, fifteen years in the upper echelons of a major international banking corporation, with regional headquarters in different European capitals—Dublin, London, Amsterdam and Moscow. Six years later he was married to Lili Wu, daughter of a prominent Chinese family.

Now CEO of the INI Banking Corporation Limited which he had transformed into a Chinese bank that wholly owned and controlled its different international emanations, though Moscow had a specific structure. At the same time he and the Wu family were the bank's largest shareholders and enjoying undisputed control of the group.

His closest advisers included Angus MacPherson, his general manager, an old China hand, and John Francis a close friend, an eminent historian and economist.

What would have been a Chinese puzzle to many was explained by Angus and John—a model, launched by Deng Xiaoping in the late 70s, which nonetheless left many questions. Was it a Singaporean-style autocracy, or perhaps a state organised capitalist structure as some suggested was Japan. Certain saw it as a kind of Neo-Confucianism mixed with market economics. John Francis didn't see it as a post-Soviet Russian economic model, one

where an oligarchy had seized public assets in what was probably one of the greatest organised thefts of the 20th century, creating a robber-baron inspired form of socialism.

Pat did not analyse things that way, in fact he didn't analyse very much of anything, in a sense he was like Lili and hundreds of millions of Chinese, he accepted what he saw and got on with his business, building a vast fortune and expanding his empire as had many Chinese industrialists in post-Imperial China, before WWII in Shanghai, Canton and Hong Kong.

It wasn't something entirely new, it was the same free wheeling Confucian model of business and industry that had existed for centuries, under the authoritarian rule of the Son of Heaven, the Emperor, exploiting the vast obedient hard working masses that had always existed, guided by a strong hand.

It was a system familiar to anybody who had studied Chinese history, literature and Revolution. A struggle between the masses and their rulers, one that Pat observed in the streets below his eyrie on Hong Kong Island, where tens, even hundreds of thousands of demonstrators flooded onto the streets, manifesting their disapprobation of Beijing's policies and encroaching power.

RIO PUTUMAYO

PAT ARRIVED AT THE RESTAURANT first, accompanied by Liam and Camille, they had a table reserved in a discreet corner, separated by Chinese screens. Kyril arrived punctually and after exchanging greetings with Liam, whom he had briefly met before with Camille, they settled in and were soon chatting like old friends, exchanging stories about their adventures in strange and distant places.

They returned to the Clancy's place after dinner where a map of Colombia was produced. As Kyril ran his finger over the green coloured topography, Pat's mind wandered back to his first visit to that country, over two decades earlier, one he would never forget, and under circumstances best not mentioned.

Kyril talked about nearby Venezuela, which reminded Pat of the Farc and drug cartels, revolutionaries and criminal gangs that had survived decades in the dense mountainous jungles of southern Colombia, resisting well armed modern military forces, thanks to the inaccessibility of those regions.

In the same way the indigenous peoples had survived for thousands of years, retreating deep into the rainforests when threatened, fleeing the Conquistadors, escaping from slavery and the terror wreaked on the villages of their ancestral homelands.

'Have you ever heard of Roger Casement?' Pat asked.

Kyril wrinkled his eyebrows.

'Hardenburg?'

He smiled, 'Yes, I see, you're well informed. I remember Casement now, sent to Putumayo by the British government.'

Pat beamed, Kyril had done his homework.

It seemed to Pat Kennedy there was a lesson to be learnt from the indigenous peoples, one that would allow farseeing men to seed the rebirth of humanity.

They examined the map of southern Colombia and the countries that straddled the upper reaches of the Amazon. Pat ran his finger over the map, searching for Putumayo, starting where the rivers multiple tributaries drained the Andes, flowing out across the vast plane that extended 5,000 kilometres to the Atlantic, across primary rainforest, swamps, savannas and drylands.

He was surprised by the vastness of the region.

His finger stopped over an odd tongue of Colombian territory that penetrated into Peru and Brazil, and read alound, 'Leticia.' Then moving to the north to a meandering blue line, he declared triumphantly, 'Rio Putumayo.'

'Yes Pat. That's the spot. Tres Fronteras. Where Brazil, Colombia and Peru meet on the banks of the Amazon River.'

It was more than 1,000 kilometres as the crow flies from the Pacific, separated by the 6,000 metre high peaks of the Andes. To the west, the Atlantic, a journey of 3,500 kilometres by riverboat to the mouth of the Amazon. The distance between the two oceans was about the same as that between New York and Seattle, and it was far from being the widest point of the South American continent.

'How can you get there?' asked Pat.

'By small plane via Quito and Iquitos, though if you've got the time or a lot of things to transport, by the Amazon.'

'The Amazon?'

'Yes, it's navigable for ships up to 9,000 tons, from the Atlantic as far as Iquitos.'

Pat eyes lit up. It meant *Las Indias* could reach Leticia or Iquitos. His yacht had a displacement of 3,000 tons, and the *Sundaland II* 1,900 tons, a research ship that belonged to one of his companies.

'Actually Leticia is in Colombia at the bottom of the Amacayacu National Park,' Kyril informed him. 'It's where I'd like to make my next documentary film'

Pat looked up, fixed his eyes of Kyril.

'Interesting. I'll look at Rainforest tomorrow.

Kyril did not press him.

In the few short hours Pat had known the ecologist, he realised his ambitions were neither political, nor financial gain. That afternoon Camille had outlined Kyril's story for Pat, he had paid lip service to Macron and Sarkozy, but after realising he was facing immovable obstacles he quickly distanced himself from the backstabbing world of politics with its spin doctors and special advisers, a toxic environment that could only harm him and his cause, as the promises made to his followers would never be met.

He preferred to pursue his career as a symbol, a figurehead of the French ecological movement, which even if he realised he was fighting a lost war, was a suitable substitute whilst waiting for something better to turn up.

Away from the cameras and press, Kyril admitted to Pat the difficulty, even the impossibility, of implementing the measures necessary to prevent the disaster that stalked humanity. To his mind only a worldwide ZPG policy could save humanity from the apocalypse.

Pat felt a surge of vindication listening to Kyril—though he made a mental note to look up the meaning of ZPG. Here was a man with a clear vision, here was a man who could serve his plan, a familiar face seen in TV

documentary films covering nature and ecology, a man admired by millions for his independence and apolitical position.

DISAPPEARING FISH

JOHN WAS PLUNGED INTO HIS morning copy of *The Guardian*, an article by George Monbiot caught his eye, it was part of the background anguish caused by the continued attack on the environment by lobbyists who couldn't wait to get UK coastal waters back from European trawlers, not to save them from further depletion but to exploit them even more.

Monbiot wrote: 'The shocking and distressing fact is that the waters around the UK were once among the most abundant on Earth, and are now among the least. Armies of bluefin tuna once stormed our coasts, harrying shoals of mackerel and herring many miles long. Halibut the size of barn doors and turbot like tabletops came into shallow water to feed. Cod commonly reached almost two metres; haddock grew to a metre. Plaice were the size of road atlases. Pods of fin whales and sperm whales could be seen from the shore, while Atlantic grey whales, now extinct, roamed our estuaries. Gigantic sturgeon poured up the rivers to spawn, pushing through traffic jams of salmon, sea trout, lampreys and shad. On some parts of the seabed the eggs of the herring lay six-feet deep.'

Those days were long gone and in the interest of feeding an ever growing population, all roads pointed to an intensification of trawling the seas, even if total depletion lay on the horizon.

There were so many factors it was impossible to grasp the meaning of a situation that was beyond the understanding of any single man, especially one not trained in science.

John was convinced man was destroying his environment, the evidence was everywhere. Which on the other hand did not blind him to the fact that a mountain of shit in the form of misinformation was pumped out by journalists, half-baked environmentalists and politicians.

Sustainability was the buzz word. The need for more renewable energy sources, the need for wind power and hydroelectric dams was hammered home by everybody from Greta Thunberg to Bill Gates and Al Gore.

John saw so many alarmist or contradictory reports dumped on his desk at the Fitzwilliams Foundation he'd stopped reading them.

He did however remembered one that had caught his eye two or three years back, a report by research scientists at the School of Environment at Washington State University, a renowned institution specialised in 'research and understanding of the Earth's complex and dynamic physical, structural, biogeochemical, ecological and biological systems, and impacts of land use and climate change'.

The report, entitled *Greenhouse Gas Emissions from Reservoir Water Surfaces: A New Global Synthesis*, was relatively technical, but beyond the chemistry, it confirmed what certain scientists suspected, water reservoirs created by dams were an important source of greenhouse gases to the atmosphere.

The facts were there, dams significantly altered water, nutrients, ecosystem dynamics and fluxes in river networks, resulting in the release of one billion tons of methane emissions into the atmosphere, the result of decomposing of organic matter, created by the artificial retention of water in great lakes and waterways and in the proliferation of vegetable and microbial matter. This represented 1.3% of anthropogenic emissions, which was greater than biomass burnt in forest fires and agricultural activity.

Methane remained in the atmosphere about ten years, compared to CO_2 which remained present over hundreds of years, making the impact on global warming by methane three times greater than CO_2 .

The message, John explained to himself, did not lay in the figures, but in the complexity of our planet's climate and our difficulty in understanding it. Bad decisions could have dramatic effects.

His philosophy was based on a planned reduction in the population of the planet, ZPG, zero population growth, which would automatically reduce the effect of our impact on the natural environment as Paul Ehrlich wrote back in 1968 in his book *The Population Bomb*.

John had read the book at that time, when studying at the LSE in London. He smiled to to himself, it was one of the few advatanges of age, he could compare the past with the present, and he could vouch for the veracity of the predictions made by Ehrlich.

In 1968, when John, following the Flower Power movement and Hari Krishna, visited India for the first time, its population stood at 530 million, in 2020 it was 1.4 billion with growth rate of 1.26%, and by 2050, based on its present day age pyramid with 44% of the population under 25 years old, it would reach 1.7 billion.

In 1968 Ehrlich wrote:

It has been estimated that the human population of 8000BC was about five million people, taking perhaps one million years to get there from two and a half million. The population did not reach 500 million until almost 10,000 years later, about AD1650. This means it doubled roughly once every thousand years or so. It reached a billion people around 1850, doubling in some 200 years. It took only 80 years or so for the next doubling, as the population reached two billion around 1930. We have not completed the next doubling to four billion yet, but we now have well over three and a half billion people. The doubling time at present seems to be about 35 years. Quite a reduction in doubling times: 1,000,000 years, 1,000 years, 200 years, 80 years, 35 years.

Erhlich wasn't far off the mark, in 1968 it stood at 3.5 billion, in 2010 it had doubled to 7 billion, a doubling time of 42 years.

And there was little sign it was slowing. The doubling time mathematically speaking, for an annual growth of 1% is 70 years, for 2% 35 years, and 3% 24 years.

The population of the African continent is 1.34 billion, the growth rate 2.49%, which translates into a doubling every 28 years, which means a 2.68 billion in 2048.

Of course the growth rate was falling, but at present it stood at 1.1 for the entire planet which meant well before 2100, to be precise 2080, it would reach 15 billion, and if they all wanted the life style of the average European, their needs would be the equivalent to that of a population of 45 billion.

A FEMINIST MOVEMENT

IT WAS A BEAUTIFUL Paris morning when Camille and Anna met for lunch near the Marché d'Aligre. The sound of children's voices echoed from the garden square opposite La Salle à Manger, a small restaurant on rue Antoine Vollon. The trees were green and the temperature was a balmy 25 degrees with a slight breeze swaying the branches.

The story of Marché d'Aligre, one of the oldest markets in Paris, went back to the 17th century, when the district attracted furniture makers many of whom came from Germany and the Low Countries, commissioned by the court of Louis XIV during the building of the Château de Versailles. It was now a mixture of gentrified residences and working class apartments, a fashionable district, where Parisian bobos and North African immigrants mingled in the street market, each frequenting their own cafés and restaurants, where menus offered anything from a couscous at 10 euros to matured beef at 70 euros a kilo.

On the other side of the square, Camille's elegant Haussemanian apartments overlooked the spring greenery, a convenient two minutes from the market where a kaleidoscope of scenes met Anna's eye, so different from her home in San Sebastian. They passed a street organist, stallholders selling bric-a-brac, second-hand books and clothes, the open air fruit and vegetable market to the 19th century covered market. Past the sidewalk cafés, situated between quality bakers, butchers, wine merchants and cheese shops, that overflowed with chattering locals mixed with tourists taking a pause to enjoy an expresso, cappuccino, a beer or soft drink, watching the colourful comings and goings.

Parisian life was far from its troubled outer suburbs and regions, where change was already felt, where militant movements played havoc with Macron's centrist government and where yet another round of demonstrations was planned that same afternoon—this time it was a feminist movement

An easy decadence reigned in Macronie, as certain media commentators had named their world. Paris was different from London, its twin—a city where its population had been banished from the centre. Paris intramurous was alive with its dense population, its quarters and villages, though beyond the *périphérique*—a circular freeway that separated the city from its inner suburbs, many so-called *cities* had been transformed into no-go zones where a vast new population struggled to forge an identity.

After lunch they headed towards Saint Michel where the march was due to start. The temperature had risen to a very pleasant 27 degrees, strangely the streets seemed half-deserted of traffic. Past Notre Dame, wounded, but still alive

On the corner between boulevard des Gobelins and boulevard Arago, they heard the sound of loudspeakers, the banging of drums, slogans shouted as the marchers already en route approached. The cortège was dense and crowds of onlookers thronged around the Esplanade Leo Hamon where several avenues converged.

The marchers paused for some reason as the antiriot police regrouped and moved in different directions. Without realising it, they and the crowd of onlookers around them, were encircled by a battalion of CRS, Republican Guards. They were trapped, unable to advance or retreat.

Suddenly the tension rose several notches, the cortège concertinaed, a loud explosion rang out, spooking the crowd, resonating off the buildings, some kind of firework.

An order rung out, 'Helmets!', the CRS geared up for trouble.

The marchers started to move again.

The two women, ringed in on all sides, had no choice but to follow the cortège towards place d'Italie. The crowd was dense, certain looked tough, others wore masks, there was little doubt there would be trouble.

Soon clouds of tear gas filled the sky, the acrid fumes bringing tears to their eyes.

They slipped through an opening and made their way towards rue Mouffetard where they found a café to wipe their tears and get something to drink

'That's really toxic,' complained Camille.

'Did you know that as you exhale your breath contains 40,000 parts per million of CO₂' said Anna.

Camille looked at her, surprised by the question.

'That's 100 times more than in the air around us,' said Anna. 'Like the exhaust from your car, and there's over seven billion of us doing it, plus our pets and domestic animals.'

Camille wondered what it had to do with the demonstrators.

'The climate, emissions!'

'Oh, I get you.'

Anna smiled she was relieved that her French was not that bad.

'Well where did it all start, I mean CO₂ emissions, apart from humans that is,' asked Camille.

Anna hesitated, 'Well, in 1712,' she said recollecting the story, 'if I remember rightly it started with an English blacksmith, named Thomas Newcomen, who built a kind of steam engine in Dartmouth, that's in England, he designed it to pump flood water from a coal mine in Staffordshire.

'Soon other mine owners were queuing up to buy his steam engines. They were driven by coal, brought by sailing ships from the north of England, where coal mine owners soon became interested in the new invention.'

Anna told her it was not long before smaller, more efficient engines were built with wheels to run on rails to carry coal from the mines to the ships. These engines were soon powering passenger trains, steam ships and mills manufacturing all kinds of goods.

It was the beginning of the Industrial Revolution, which changed the lives of billions of human beings and the planet on which they lived, to the point scientists and philosophers saw it as the start of a new geological event—the Anthropocene.

The Industrial Revolution took place in England, where coal was readily available. The importance of coal was it produced produced ten times more energy per kilo than wood, a raw material man had used for fire since the dawn of humanity.

Camille wiped her eyes, she was lost.

'Well the energy locked in wood and coal was derived from the energy received from the sun, the former by living trees, the latter from dead plant matter buried, accumulated and fossilized in the earth countless millions of years before man's existence.

'That's subject to the iron laws of thermodynamics,' she insisted. 'The first is simple—energy cannot be destroyed or created, the second—the irreversibility of natural processes, more complicated, but can be explained by the fact that heat energy cannot by converted 100% into mechanical energy, that is to say the energy that cannot be converted into work, this 'waste' energy, known as entropy, is discarded for example into the atmosphere, part of which is our CO₂ and is the cause of the greenhouse effect. Then thirdly residual entropy, but I won't go into that.'

Newcomen's invention was therefore the source of wealth, the growth of population and climate climate change, giving birth to the Anthropocene, perhaps the beginning of a new evolutionary process, the end of evolution by

natural selection, which after 3 billion years gave birth to mankind, human civilization and extraordinary change.

'Thank God we'll be getting out of Paris,' sighed Camille who hadn't understood much of the thermodynamics lesson, technical stuff wasn't her field.

COLLAPSOLOGY

ALL OF A SUDDEN PAT KENNEDY WAS talking about collapsology. John wondered what he had been reading, who he had been talking to. Collapsology was a new science, a school of thought, or to John's mind, a pseudo science, one that had attracted a lot of new adepts, especially from Save the Planet movements and the ecosphere.

The origin, as far as Pat's interest was concerned, commenced when his team had hauled aboard *Las Indias*, the treasures from the wreck of the *Espiritu Santo*, a Spanish galleon, off the coast of Colombia the previous year, amongst the treasures was an extraordinary Maya mask.

The mask, carved out of jade, led Pat Kennedy to Guatemala and Belize and the discovery of the Maya and their demise.

Of course his interest in archaeology went further back, but the Maya and the collapse of their civilisation had raised many more questions in his mind, not just from an academic point of view, but as a reference, a tool, one that would allow him to interpret the future. How would today's society evolve, how would his life be affected by change, and in particular that of his banking empire, the existence of which hinged on the continued prosperity of the modern world.

It was not a simple questions of economics, dollars and cents, but how different crises could impact civilisation—natural events, war, disease, famine and societal change.

The development and collapse of the Maya in the Southern Lowlands of their world—over a span of approximately 1,400 years, was a field of study

of great interest, as parallels were drawn by many specialists who linked the collapse of the Maya to the depletion of natural resources. Models had been developed relating to the state of the Maya lands, populations and workers, many of whom were engaged in intensive agriculture and the building of monumental palaces, cultural and religious centres.

The causes were probably due to an accumulation of factors, which Pat linked to collapsology, a school of thought developed by Pablo Servigne and Raphaël Stevens in 2015, who were in a sense whistle blowers and warned of a convergence of crises—climatic, ecological, biological and economic, which together formed the spectre of imminent systemic collapse.

Climate change, pollution, the sixth great extinction, were the plagues that had descended on the planet, and were seen by collapsonauts as precursors of the coming disaster.

It was an idea that was starting to take hold in the popular mind, and the growing possibility that it could happen soon. A movement was born and soon collapsonauts as they were called were alerting the world to the urgency of changing its ways.

The seriousness of the hypothesis was underlined by an article that appeared in Nature, the most serious of scientific journals, that commenced with the heading:

'New elevation data triple estimates of global vulnerability to sea-level rise and coastal flooding.'

With little effort John found an article published in October 2019, written by Scott A. Kulp and Benjamin H. Strauss of Climate Central, a group of scientists who researched and reported the facts on climate change.

They concluded that up to 630 million people lived on land below projected annual flood levels for 2100, and up to 340 million for mid-21st century, versus roughly 250 million at present. They estimated one billion people now occupy land less than 10 metres above current high tide lines, including that 250 million below one metre.

This was based on the fact that the global mean sea level rose 15 centimetres in the 20th century as a result of climate change, and it would rise 50-60 centimetres more by 2100 unless 'sharp, immediate cuts to carbon emissions were made'.

More precisely, between 1900 and 1990 sea levels rose between 1.2 millimetres and 1.7 millimetres each year on average. By 2000, that rate had increased to about 3.2 millimetres each year and the rate in 2020 was estimated at 3.5 millimetres a year.

In a worst case scenario that figure could be as high as 2 metres by the end of the century, exposing coastal populations to grave risks.

The methods used DEM—digital elevation models, was based on high precision airborne and satellite measurement systems.

The consequences meant coastal communities worldwide would have to prepare themselves for much more difficult futures than anticipated today. Recent work suggested that the rise of sea-levels this century could force large-scale migration away from unprotected coastlines, redistributing population densities and putting great pressure on inland areas.

Worst still another article entitled: 'Climate tipping points—too risky to bet against', concluded *kairos* was imminent. The loss of the Amazon rainforest or the West Antarctic ice sheet, previouly thought to be a low possibility, were now more probable and could cause long-term irreversible changes to the planet's biophysical system with dramatic consequences for humanity.

The authors, six very serious scientists, led by Timothy M. Lenton of the Global Systems Institute in the UK, concluded, we were in a climate emergency, as the tipping point could be passed by just 1°C and 2°C of warming, despite the goal of the 2015 Paris agreement to set limits to well below 2°C.

They believed ice collapse was already near tipping point in the West Antarctica, the East Antarctic and Greenland. It seemed like an alarmist report, on the other hand, damage to Australia's Great Barrier Reef was ongoing and very visible, and would represent a profound loss of marine biodiversity and the livelihoods of countless people. The same went for the Amazon rainforest, where the tipping point could occur at a loss of just 20% of forest-cover.

These changes could destabilize the West African monsoon, triggering drought in Africa's Sahel region, drying the Amazon, disrupting the East Asian monsoon and causing heat to build up in the Southern Ocean, which in turn would accelerate Antarctic ice losses.

An existential threat to civilization was taking shape, a dark shadow over the future of humanity, a state of planetary emergency, as the clock ticked away, only seconds from midnight and doomsday.

Little wonder Pat was drawing up his options, he had nothing to lose and everything to gain, he instinctively sensed danger, and trusted his instinct which had paid off more than once.

ORIGINS

WHEN HUNTER-GATHERERS LIVED in the climatic climax forest, they lived in community with the plants and creatures around them, a state of perfect equilibrium. But when they invented better tools, little-by-little that equilibrium was upset as men remodelled the world around them, assuring their families of more and better food, clothing to protect them from the elements, building homes to shelter them at night and protect them from predators.

At some point, early human ancestors invented fire, and in burning wood they released the energy stored in that wood into the atmosphere, which was of little consequence, since in prehistoric times the total number of humans on the planet did not exceed about one million, and their impact on their environment was negligible compared to natural forest fires and volcanic activity.

When hunter-gatherers turned to agriculture, around 10,000BC, the population of the planet grew as farmers started to produce a surplus of food.

At first growth was slow, then with the dawn of civilisation, which appeared in the Middle East about 6,000 years ago, it accelerated, and by the time the Roman Empire was established the population of the planet had reached 300 million. With the Renaissance, there was a spurt in growth, then with the 19th century Industrial Revolution, it went ballistic, and a century later with the Consumer Society population, growth became exponential.

Today, when we burn 3 litres of gasoline in our family car the by-product of combustion is in the order of 10 kilos of CO₂ and other emissions, since

the carbon present in the gasoline combines with the oxygen present in the atmosphere.

That multiplied by the world's 1.2 billion vehicles, in 2020, 98% of which are powered by refined petroleum, each burning on average 1,500 litres of fuel a year, adds up to some 6 billion tons of CO_2 and other emissions per year.

By 2040, the number of motor vehicles on the roads of our planet will reach 2 billion, according to institutions, such as the IEA.

The role played by our atmosphere is that of maintaining the temperature of the planet at a level that sustains the flora and fauna living on it by capturing the sun's rays. If the quantity of CO₂ rises then so will the temperature, which is what is happening when the carbon stored in fossil fuels is released into the atmosphere during combustion.

As our population continues to grow and living standards rise, the more CO₂ we produce.

Reducing the human population of our planet should be our first priority, ZGP, but it comes with a conundrum. If we were to reduce the population rapidly, for example cutting births by 50%, so as to avoid the doomsday predictions made by scientists and economists, then the population would start to age rapidly, the older decile would start to die quicker, with the result there would be fewer and fewer workers available to feed and care for the non-productive population.

Now, this is not a simple hypothesis, we only have to look at Japan to observe the effect of falling births and the problem of caring for a rapidly ageing population. Japan's solution has been technology and more notably robotisation, which raises the question of AI (Artificial Intelligence) and humanity's future place on our planet.

As for the rest of the planet, countries and continents, like India and Africa, have not the resources of Japan. Thus population reduction for a large part of the planet is a non-starter, as is the idea that closing down a couple of dozen polluting mega-businesses would solve the problem of global

warming, though it would occupy the time and minds of a good number of disorientated eco-warriors and Champagne socialists in London, New York or Paris when they are at loose ends on Sundays.

Of course those eco-warriors like to go for big business and the rich, they are easy targets. Anyone pointing a finger at overpopulation and the developing world Were seen as apologists for eugenics and all kinds of other evils. Population control has been and is taboo.

Of course the rich could clean up their game and big business could cut back on fossil fuels, but change of technology is long. Clean nuclear fusion technology is still decades away and had been in development for more than half a century. Replaceable energy required new storage technologies and vast investments, not forgetting the budgetary needs of oil producing nations for whom oil and gas exports are synonymous with survival.

As it stands, oil and gas rich nations are poised to pump an additional seven million barrels a day into the market over the next decade to meet the needs of developed and developing nations. A projection that was in total contradiction with the objectives of the Intergovernmental Panel on Climate Change, which had targeted a rise of 1.5°C or less through a planned reduction in carbon emissions.

Those against fossil fuels saw producers pumping more barrels out of the ground for more profits, but what would happen if they stopped, was there an alternative, and if there was could it provide the energy needed to pull two or three billion poor people out of their misery, and, provide for the two billion additional mouths to feed over the next two or three decades as the world population grows to 10 billion?

Should we stop pumping or face extreme climate disruption—heatwaves, duststorms, hurricanes, forest fires and floods? Was that the price to pay to save the poor from hunger?

Was it possible to introduce sufficient renewable energy sources to offset the need for greater fossil fuel production and reach zero emissions by 2050? Who knows? The fact is no one is really interested, considering the top 50 fossil fuel companies plan to produce a total of 225 billion tons of carbon dioxide equivalent during the period leading up to that point in time.

The capitalist system was driven by growth and profits, it was perfectly natural as capital is derived from profits and growth meant future profits and capital to invest. It perpetuated a system described by economists over the last two centuries, from Adam Smith to Karl Marx, Keynes and Galbraith, and the oft quoted favourite of modern media intellectuals, Thomas Piketty, who focused his theme on wealth and income inequality.

Save the Planet luvvies spent their time pointing at multinational business—energy firms, pharmaceutical giants and big tech firms, it was easy, words cost nothing, media appearances were worth their weight in gold. As comedian Ricky Gervais quipped at a Golden Globes award ceremony: 'If ISIS started a streaming service you'd call your agent wouldn't you.'

Action was much more difficult, feeding the hungry in distant lands even more so, considering the US and Europe could not even protect their own homeless, the downtrodden and poor in their great cities.

It wasn't for the want of trying—communism, socialism, nationalism and all the other isms had failed. Why? That is difficult to say. The rich and the poor, the weak and the strong, were part of nature. Oh yes, you can complain, but that's the way it has always been, and probably will be, in spite of Marx and other philosophers' suggestions to the contrary.

For one thing there has always been too many people, because it was always better to have more than too few. In early human families the loss of a young man or woman was a disaster for a small family group. In agricultural society hands counted, and over the course of the industrial revolution factories demanded more and more labour, even child labour.

Today, now that the labour needs of agriculture have shrunk to a fraction of those in the past, factories have become automated and computers run our society, is it not time to reduce the number of humans and take advantage of the bounty knowledge and technology offers us?

The New York Times liked describing big oil and big anything as ruthless new versions of robber-baron capitalism, but the so-called victims were happy in their air-conditioned gas guzzling SUVs with their connected GPS navigation systems and smartphones. It was a Faustian pact and the price to pay was high, starting with climate change, and according to some the individual the loss of freedom

John Francis warned Pat the world economy was sleepwalking into a new financial crisis. He was echoing the words of the former Bank of England governor Mervyn King, who had headed the bank at the time the last economic crisis broke in 2008.

Little had changed since then and the risk of another economic and financial crisis threatened the fragile stability of Western democracy and its financial system, weakened by low interest rates, low growth and increasing political turmoil as politicians were caught in a cycle of indecision and electoral revolt that seemed to be spreading like wildfire. From Hong Kong to the Middle East, from London to Washington, and from Mexico to Chile.

A situation that gave force to Mervyn King's phrase, 'Ripples on the surface of our politics have become breaking waves as the winds of change have gained force.' Words that were heavy with meaning as the spectre of stagnation threatened the planet.

The least unforeseen event could bring the system to a skidding halt.

It was time to imagine something different, to abandon the worn idea of perpetual growth, which, to John Francis, was based on consumption and an evergrowing population, a system that was deeply flawed and very clearly unsustainable

He believed in the unlimited possibility of new technologies, which promised a better life for men and women, but refused the unrestrained growth of populations which would eventually submerge the planet under its own mountain of waste and result in the wanton destruction of the natural environment.

He believed in Cornucopia and the kind of self-discipline that allowed each and everyone to share the benefits of our world and enjoy longer and better lives

Over the course of the last decade, vast swathes of forest have been cut down, replaced by sugar cane, oil palm plantations and soya bean crops, to produced pulp and paper, and to raise cattle. For what? To feed hundreds of millions of men, women and children in Asia and South America and to provide them with school books and newspapers.

Hadn't Europeans and Americans done the same thing?

Reports fell with increasing frequency on John's desk at the Fitzwilliams Foundation that spoke of agribusiness as the principle cause of deforestation in countries like Brazil. Those reports rarely spoke of the one billion or so chickens, the dozens of millions of pigs, raised, slaughtered and consumed in the UK alone each year, and in each and every other developed country on a proportional scale.

And demonising men like Bolsonaro made for a good distraction and better press.

ST KYRIL

KYRIL KYRISTOFOROS BROUGHT WITH him a memory stick containing his successful documentary film *Rainforest* which he invited Pat and his friends to view at their leisure.

Kyristoforos was looking for a new project and talked about the Amazon rainforest, the fate of which had become the centre of attention of a host of eco-warriors and fellow travellers of all ilks, including luvvies concerned about their image, and politicians campaigning for re-election.

Pat saw it differently. A project that fitted in with his own plans, a platform from which he could cultivate relations with the leaders of the countries that converged in the Amazon lowlands adjoining the Andes would be of interest.

Later that evening, when Anna and Dee returned home, they joked Kyristoforos was more that a little Christ-like in appearance and in manner—Hollywoodian, smooth, good looking, in a word commercial. He had exuded benevolence, preached for the poor, for Africa, the climate, though they noted he had omitted one theme which he usually reserved for more radical followers—capitalism. He empathised with the downtrodden, it was easy after all he would never be one of them, he was God, whose son had sacrificed his life for them, not difficult considering with a snap of the fingers he could rise again, and he did.

Dee was a rationalist and when it came down to hard reality, he saw Brazil and its leader facing the problems of economic governance in a resource rich

land, where the future promised great things if managed with enlightened vision

Bolsonaro was not a demon, he was the democratically elected leader of a sovereign state, chosen by a majority of voters to lead them to the future he promised in his electoral campaign.

The Brazilian president had many things in common with Pat Kennedy. He did not belong to Brazil's elite class. Born in 1955, he commenced school in a small town near Sao Paulo, then at high school he became an army cadet, like many boys of his age and background in Brazil, he then attended military academy and graduated in 1977. He served in the Field Artillery Group, in the Mato Grosso do Sul, then entered the Army Physical Training School in Rio de Janeiro, before serving in a Paratrooper Field Artillery Group with the rank of captain.

Contrary to the image projected he never reached a higher rank and his career was neither glorious nor that of a strong-arm right-wing oriented colonel.

The event that marked his otherwise unremarkable career was his denunciation of poor pay and conditions in the army in the press, which got him 15 days detention. This was followed by a rocambolesque affair in which he was accused of planning to plant bombs in military units. At first found guilty, he was then acquitted by the Brazilian Supreme Military Court. By that time he was 33 and it was time for a new career.

In 1988 he was elected as a city councillor in Rio de Janeiro, then two years later to Congress, where he remained until 2018, a period during which he represented up to seven different political parties in Brazil's turbulent political system.

Then with 30 years as an elected representative of the people behind him he could argue he was an eminently experienced candidate for presidential office

Bolsonaro's platform was based on conservative values and law and order, in a vast, rich, multiracial and historically turbulent country, where for many

Brazilians crime and corruption were part of daily life, where poverty affected a large part of the population, where inequality was rife, where the favelas of its great cities contrasted with the gated residences of their wealthy districts.

He was remarked in 1993, when in a speech in parliament he declared: 'We will never solve our serious national problems with this irresponsible democracy'.

He made enemies and was victim of an attempted assassination—stabbed in the lower abdomen by a protester who claimed to be a supporter of Lula during a political rally in Juiz de Fora.

With his formative years as a trained soldier, he was inevitably marked by discipline, this together with his conversion to the evangelical Assembly of God. His baptism in May 2016, in the Jordan River in Israel, made for a rather upright personality with rigid views on behaviour and life in general, disapproving of more fashionable views on sexuality, drugs, human rights and climate change, opting for law and order as his principal platform, to combat rising criminality and violence.

Pat Kennedy's own fulgurant rise was anything but predestined. It would have surprised those who saw Sir Patrick's imposing figure standing at the head of a powerful international banking corporation, to learn he had followed a similar path to many of the world's other 2,000 plus billionaires, most who owed their success to a serendipitous rise from ordinariness to the summit of human possession.

John liked to tell that those who believed success was due to hard work and intelligence they were wrong, though he admitted it helped. Pat had worked hard, and not only was he intelligent, he was as sharp as a fox, with more lives than a cat.

His good fortune was to have met Michael Fitzwilliams, a banker, at the head of an old family controlled establishment in Dublin, who had recognised not only Pat's talents, but also that indefinable quality that few possessed, he was blessed with good fortune, landing on his feet whatever the situation, call it what you like, but Pat always came up smelling of roses.

Michael instrumentalised Pat's Karma to his own ends, unconsciously perhaps, in any case what Michael had not foreseen was his own fall and tragic end, which left the way open for his second in command, Pat Kennedy, to succeed him.

Pat's likes, men such as Jack Ma or Mark Zuckerberg, had certainly many qualities, but nothing that justified their incredible good fortune. It was clear, hard work had nothing to do with getting very rich, otherwise there would be countless billionaires.

By now many of you know Pat Kennedy, Sir Patrick to the media, a megarich capitalist living in Hong Kong with his wife Lili and their two children, that's when he wasn't jetting around the planet on business, or meeting the powerful on his yacht. What separated him from most other bankers was the fact he owned a large chunk of his bank, the INI Banking Corporation, he was not just an appointed CEO.

Pat had come a long way in a couple of decades, starting in Limerick, Ireland, where he grew up, the only child of a modest Catholic family. At that time the Catholic Church, the clergy and superstition reigned in many Irish families

If one thing had marked Pat Kennedy it was his schooling in Limerick City, where as a young lad he had attended a school run by the Christian Brothers, an education that was now a fading memory, as the few Brothers that remained were frail old men who had long ceased to serve their vocation—that of providing an 'Irish' education.

The order, which had wielded extraordinary power, was now less than a shadow of itself, the dying vestige of an Irish order that had struck terror into many a boy's heart.

Pat never forgot the serious beating he took for something he didn't do, administered by one of the Brothers. Their saving grace was the fact that in spite of their terrible reputation they had fought for Ireland and of the 15

heroes who had been executed for leading the Irish Uprising in 1916, seven had once been Brothers

Hadn't Eamon de Valera, Ireland's first president, said his country, 'owes more than it probably will ever realise to the Christian Brothers.'

Perhaps, in any case many a famous Irishman owed his education to the Brothers, even James Joyce, who attended the O'Connell Christian Brothers' School on North Richmond Street, be it for a short period, before going on to Belvedere College in 1893.

In more modern times the Irish writer Colm Tóibín, who hailed from Liam Clancy's hometown, Enniscorthy, went to the Christian Brothers.

The congregation was founded by an Irish merchant, Edmund Rice, to provide a Catholic education at the beginning of the 19th century, after it had been outlawed in Ireland, with the accent on an explicitly Catholic and patriotic education, one which went far in forming Irish identity.

Pat was lucky he had not been a boarder, one of those lads who were woken at 7am for mass, followed by a spartan breakfast, though lunch was somewhat more substantial with potatoes and meat, and supper just as frugal as breakfast.

Sex, not to mind sexual abuse, was a taboo subject at home in those days, though in the dormitories there were dark murmurings and certain prefects were best avoided, however Pat had never had any personal experience of that kind of abuse, and apart from the occasional unexpected whack, he saw his time at the Brothers, in retrospective, as a useful though hard passage that served him well once he started out on life away from home, though he never forgot the fear that reigned during his early years nor the unnecessary brutality that he witnessed.

He described himself to his friends as a lapsed Catholic, though his character was marked forever by his religious upbringing, and whilst he respected the sanctity of the Church, he no longer believed, with a few exceptions that is, which he explained to himself as superstition.

The traces were still there, Pat did not drink, did not run after women, was generally free from sin, though he did have one or two vices. The first, if it could be called a vice, was his insatiable curiosity, the second was money, rather the pursuit of wealth, which was a good quality for a banker, as was the absence the aforementioned sins.

Pat Kennedy was nominal head of what the press had baptised the 'Clan', a group of friends linked by their Irish origins and their wealth, which according to John, had increased by around 20% in 2019. Collectively theirs was worth more than the wealth of many small nations, that could however boast of their numbers, but who needed mouths to feed today?

The Clan counted no more than dozen members and their families, who like Pat were concerned about their future in a troubled world, not their immediate future, but just in case, like an insurance policy. They had often spoken of the dangers that could threaten their way of life, one they had had the good fortune to have inherited, worked for, or attained by pure serendipity.

The idea of a safe haven germinated, one far from the multiple dangers that stalked the world, and in particular their kind, the wealthy. Together with John Francis, Pat envisaged a number of scenarios, analysing and eliminating those that did not hold up to their survival criteria.

Finally two were retained, including the proposal put forward by Tom Barton, a site in the Colombian Andes, far from the outside world, bathed in the eternal spring of the Altiplano. A new city unlike those smart wired models imagined by hi-tech futurists, who gave more thought to flying cars, gadgets and entertainment, than where energy and water came from, or food production and waste management.

Pat named their project Salvator Mundi, a city closer to those of the ancient world, perhaps Pompeii or Knossos, cities rich in culture, of human dimensions, but with more humanity than modern society, theatres, forums, baths, gardens, libraries, art and where, in spite of humanist dreams, inequality would not yet be totally banished and in all truth would probably never be.

Mens sana in corpore sano, Pat liked to tell himself

The idea of idea being followed by cameras everywhere would perhaps work in an authoritarian society, but that is not what they wanted, their idea was to improve society, eliminate poverty and inequality, one where peer pressure ensured social order, like in small island societies, such as Palau and Micronesia in the Pacific, where it was coupled with easy living, plenitude and stability.

What harmed the quality of life was overpopulation, numbers greater than that which a given set of rules and a fixed ecosystem could sustain. With creeping pollution and the erosion of natural resources—water, animal and plant life, and the uncontrolled growth of populations, many ancient societies had been unable to resist the shock of cyclic climatic change, as archaeological and paleontological evidence had shown time and time again.

Pompeii and Knossos were destroyed by natural phenomena, but the disappearance of other cities and brilliant civilisations was now linked to the unsustainability of resources, as climate went through one of its perpetual cyclic changes, bringing with it drought and famine.

The most renowned was that of the Bronze Age and the rise of Mesopotamian civilisations, the Sumerian, Akkadian, Babylonian, and Assyrian empires, which like other defunct civilisations—the Khmers with their capital at Angkor Wat, the Maya, and that of the Indus Valley, were hit by natural events, namely climatic variations, evidenced by destruction layers—uncovered by archaeologists, some independent of human action, others witnessing strife linked to the social upheaval, when civilisations were unable to meet the challenge caused by changes in their natural environment accompanied by persistent droughts that hastened socio-economic pressure and the subsequent stresses that led to war and migration.

Pat was unfamiliar with the term destruction layer, but it wasn't difficult to imagine and Anna Basurko filled him in on the principals of archaeological stratums. Destruction meant fire, looting, wanton killing, bones, broken artefacts, abandoned weapons and occasionally gold, silver and jewellery

lost or forgotten in the panic caused by earthquakes, eruptions or enemy pillage.

These were the signs of collapse or invasion, especially when higher layers carried evidence of different cultures, identified by pottery and other recognisable vestiges.

The evidence was there and it was massive at countless archaeological sites from Greece to Egypt and the Black Sea to the Indian Ocean, leaving a trail of Bronze Age death and destruction spread over a period of one and a half centuries, as was confirmed by pollen in sediment cores from the Dead Sea and the Sea of Galilee that pointed to periods of severe drought that coincided with dates linked to the start of collapse.

It was a grim warning of what was to come, when the next cycle of change commenced, whether it was caused by mechanistic events—solar activity variations, orbital eccentricity, volcanic eruption, or ahistoricism—the tendency to be unconcerned with history or historical events, on the part of governments coupled with uncontrolled human activity, all of which could lead to climatic events in the form of extreme weather and rising seas.

As the boundaries between scientific disciplines overlapped and merged, biologists, geologists and atmospheric scientists worked together to unravel the complex history of the planet, new scientific thinking emerged and warned environmental and evolutionary change occurred much more suddenly and faster than that enshrined in gradualist orthodoxy, the theory had dominated scientific thought over the two previous centuries.

Only those prepared would survive.

Pat's bank, INI, ran itself, as do most large organisations, societies that functioned with mindless determination, like the termite colonies on the plains of Africa. His role was that of a figure head, looking into the distance, steering his business empire through the rocks and shoals that stalked the unwary, a steady hand at the wheel.

He saw his role as having his finger on the pulse of the world, not pouring over balance sheets and reports, he had shovels full of managers and accountants to do that, good men and women.

He was the captain of a leading multinational investment bank and financial services institution, headquartered in Hong Kong, a well oiled machine, providing services to countless clients, businesses, as well as caring for the wealth of privileged high worth individuals through its private banking arm, investing in the future through a network of branches spread across Asia, Europe and the Americas.

THE DISINHERITED

'THERE ARE MANY DISINHERITED peoples struggling for survival across the globe,' HG told Camille. 'They're not poor, they're culturally rich, living in harmony with the natural world, not some kind of noble savages.

Harrison's girl, HG, as Scott Fitznorman and her friends called her, was a long time supporter of IWGIA, the International Work Group for Indigenous Affairs, an NGO founded in 1968 to defend the indigenous peoples of the Amazon Basin.

In the 19th century, HG's family had founded the renowned trading company Harrison's at Kota Kinabulu in Sabah, then part of Raja Brooks' curious empire on the north-east point of Borneo.

HG was very familiar with the struggle of ethnic minorities in Borneo, herself she counted Kadzans amongst her very mixed ancestry. North Borneo was now part of Malaysia, a modern country, where the last tragic nomadic people, the Batek, were forced from their land by the greed of miners and loggers. Their homelands in the forests of Peninsula Malaysia, south of the Thai border, had been put to the chainsaw to make way for oil palm plantations and manganese mines.

The few remaining Batek hunter-gatherers had told HG the tragic story of how their lands had been encroached on, transformed by loggers, their forest destroyed, their environment poisoned, and how they had then been forcefully transferred, sedentarised in slum-like settlement areas by government, living in misery and the loss of their traditions and way of life.

The Batek were one of the tribes of Malaysia's 200,000 indigenous Orang Asli, the 'original people', who lived in Peninsula Malaysia, an Australo-Papuan people, a vestige of the very first wave of peoples to leave Africa, who arrived many thousands of years ago, a distinct, indigenous people, different from the Malays who arrived in more recent history, or the Chinese and Indians introduced by the British colonial authorities to work in their tea and rubber plantations.

The Batek were hunter-gatherers who had lived in symbiosis with the natural environment, like the Indians of Brazil, or the peoples of Niu Guini, and like many such peoples they were victims of forced relocalisation and were prey to religious movements.

'What constitutes a people?' asked Camille.

'Well you'd have to ask Levi Strauss or Noam Chomsky,' replied HG.

'They're Jews?'

'Yes and the Jews have spent 3,000 years trying to figure out who they are.'

'They're dead?'

'Who?'

'Strauss and Chomsky....'

'You could ask Dan Briscoe,' said HG in a more tender tone. 'He's an ethnologist-anthropologist. Irish, Jewish by the way. He's with the Fyssen Foundation here in Paris, studied at University College, London.'

Camille looked interested.

'Lives in Paris, not far from Bastille, near you in the 12th arrondissement, that's when he's not off somewhere studying the last hunter-gatherers, at the other end of the world—isolated tropical forests, South America, Equatorial Africa or South East Asia.'

'Oh.'

'Yes, we should never forget Darwin's words, *Homo sapiens* are very much part of the natural world, and perhaps our brains are simply not designed to solve the problems facing us now. Have you read The Hitchhiker's Guide to The Galaxy?'

'No.'

'Well, an alien civilisation builds a supercomputer named Deep Thought to calculate the 'Answer to the Ultimate Question of Life, the Universe and Everything', which took 7½ million years to compute.'

'And what was the answer?'

'42.'

'42?'

'Yes, 42, then Deep Thought pointed out that the answer was meaningless because the beings who instructed it never actually knew what the question was.'

'I see. Perhaps AI would know what it meant.'

'Perhaps.'

There was a silence. Then both they laughed.

'We can met Dan if you like.'

'Why not.'

* * *

Camille expected to meet some old fogey, instead Dan Briscoe not only looked like Brad Pitt, he was also charming, and with the same kind of soft Irish accent as Liam's

'Soon there will be no more original peoples,' he told Camille and Pat Kennedy, 'they will disappear, forgotten in muddy rubbish strewn villages, dressed in recycled clothes, probably evangelised, unemployed, dependant on handouts and suffering from all the diseases of civilization when their homelands are turned over to loggers, miners and plantation owners.

'On the other hand,' he added more positively, 'many are attracted by civilisation, and who are we do condemn them to reservations, tourist attractions. Life in the forest is hard when food is scarce, when illness or accidents strikes. Then, when the forest people meet with civilisation, they inevitably covet its advantages, food, tools, clothes, medicines and education'

Camille described Kyril's project, along the lines of Al Gore's documentary film *An Inconvenient Truth*, which had been a planetary success in 2006, part of the former American Vice President's campaign to educate people about global warming.

Pat remember the media hype, but at the time he had had other things to worry about than the state of the planet.

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'It grossed more than 50 million dollars,' she told Pat.
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Pat raised his eyebrows.

'He presented it more than one thousand times at conferences.'

'Who?'

'Al Gore.'

'But you can't do the same thing, I mean about the climate.'

'Kyril's film won't be about the climate.'

^{&#}x27;And its budget?'

^{&#}x27;One and a half million.'

'So he told me.'

'That's good, it's about the Indians, the indigenous people of the Amazon. He's still looking for sponsors.'

'Yes, that's what I understand?' he said innocently. He'd watched *Rainforest*, twice, and he'd been impressed.

'It's a great opportunity, on the footsteps of Casement.'

'Why not,' he replied. 'Let's speak with him again.'

THE ANDES

A WEEK LATER THEY MET Kyril again for dinner when he outlined the plan for his documentary film on the indigenous peoples of the Amazon rainforest, the uncontacted peoples.

Pat and Kyril were on the same wave length, they knew that time was short, politicians paid lip service to the pleas of ecologists and scientists. Leaders such as Macron liked to organise conferences, make declarations, proclaim themselves as reformers, but action was less than slow, especially when the next elections were in view

On the question of sponsorship Pat Kennedy agreed, on one condition—exclusivity. Liam Clancy would have the role of executive producer with his firm Cinestudios. Kyril its director. And Matt Halder its producer—his firm, Zyborg Filmstudio, based in Cologne, had produced Kyril's successful documentary film, *Rainforest*, which had made a deep impression on Pat.

It was rare that Kyril met men of vision, and Kennedy was one, and even rarer, one of those who had the means to pursue their ideas.

As Kyril expanded the theme of his film, he explained to Pat his idea was not simply to show the lives of the Amazon's Indians today, but to explore their past and the mysterious traces of a lost civilisation, one that had existed in a region now covered by dense rainforest.

Kyril's plan was to film each sequence in locations that corresponded to historical context, tracing the story of the various indigenous peoples, from their arrival on the South American continent to their present day existence.

'I've a preliminary list of locations,' he said pulling a sheet of paper from his inside pocket, 'look, here's the map.'

Pat's eyes light up as he saw the triangle traced between Brazil, Peru and Colombia. An expedition that would certainly provided some of the answers linked to his Doomsday project in the Cordillera to the north.

'Why not,' replied Pat almost nonchalantly. 'It's our responsibility to provided answers, how the Indians survived, we to have to learn how to survive, and where.'

Kyril wasn't sure what Kennedy meant by survive, but he nodded enthusiastically.

Their discussion wandered, from the Amazon forest and the fate of its indigenous peoples, veering to collapsology, a subject Pat had recently discovered, the study of the collapse of modern civilization and what could succeed it, the need to return to basics.

Kyril spoke of his Foundation Gaia and its centre in the South of France—his agroecological project and invited Pat to visit it.

'Is that near Sophia Antipolis,' asked Pat.

'Yes, why do you ask?'

'We have a research centre there—LifeGen. I'm planning to visit it soon. A visit to Gaia would fit in well after the DiCaprio thing in Saint Tropez,' Pat said looking at Camille to help him.

'Ah, you're invited to the gala,' Kyril exclaimed.

'Yes,' Camille returned eagerly. 'We're invited to the Leonardo DiCaprio Foundation's gala in Tropez.'

'Wonderful we'll all be there together.'

'What will you call it?' asked Pat abruptly switching subjects

Kyril shrugged, he hadn't given that question much thought.

'Indians, that will catch the imagination of the public,' said Pat, already imaging a dramatic *Apolcalypto* style poster from Mel Gibson's film of the Maya.

Kyril didn't miss the sense of Pat's words, he was already on-board.

'Let's do that Pat, an excellent title.'

Pat smiled. It was a done deal.

'How do you suggest we organise ourselves then?' Kyril asked.

'Well first set up a meeting with Matt Halder at his studios in Cologne, then the planning, logistics and script. Perhaps Camille could act as coordinator, what do you think Camille?'

Liam nodded in approval, turned to Camille, who was bursting with enthusiasm, took her hand, 'A great opportunity, and why not Anna for the historical background, they both speak Spanish.'

Liam was more down to earth, if it pleased both his friend and mentor, Pat Kennedy, and Camille, then why not. And Anna would look after Camille, he reassured himself

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Pat veered back to collapsology and survival, asking Kyril about his thoughts on the subject, what kind of realistic measures he suggested. Kyril lifted his hands, lowered his voice and replied, 'Find a place far from the eye of the storm.'

'Where,' asked Pat.

'In the mountains ... far away.'

'Where?'

'The Andes, that's where our documentary,' he paused, then added, '*Indians*, will commence, where they lived before the apocalypse, the arrival of the Spanish.'

Pat was suddenly very alert, this was interesting.

'With the arrival of the Conquistadors, who needed slaves and the farmland of the Altiplano, the Indians fled south, retreating as the Spanish settlers pushed further along the Altiplano where the climate agreed with them, until finally they found shelter in the impenetrable equatorial rainforest where their enemies could not and dared not venture.'

Kyril told him of his research on the indigenous peoples of Brazil, where some 300 tribes lived, almost one million people, a mere half of one percent of the vast country's total population. Their homelands situated almost exclusively in the Amazon Basin, spread over 690 territories, 13% of Brazil's land mass. Though only half of the Indians actually lived in their homelands.

'By the way Pat, how well do you know Brazil?'

'To be honest, I've only visited Brazil a few times, Rio de Janeiro and Sao Paulo, quick visits, business. Amazonas is new too me, though I've travelled in the south of Colombia,' said Pat omitting the details of his past perilous adventure.

'Well I don't have to tell you it's a big country, really big,' Kyril said.

He reminded Pat of a few facts, that Brazil was the fifth largest country in the world, after Russia, Canada, China and the US, about 8.5 million square kilometres, a population of more than 200 million people, the density about the same as that of Russia, which when compared to Europe or China, meant Brazil was almost empty, though in 1900 it had been less than a mere tenth of that.

'As you know Pat, Amazonas is covered by equatorial rain forests.' Pat's detailed knowledge was vague. 'And the Amazon's upper reaches, that's

where we'll film *Indians*, is where most of the uncontacted peoples live, where the rainforests overlap into Colombia and Peru.

'Most of tribes are small, the largest is the Guarani, about 50,000 people. The smallest consists of just one man,' he said with a sad smile. 'Those with the largest territory are the Yanomami, about 20,000 people, whose territory is about as big as Ireland's.'

'Are they dangerous,' asked Pat as images of his trek into the jungle flashed through his mind—when he was unwittingly caught up with Colombian army in a raid on drug traffickers factories 20 years earlier.

'No,' replied Kyril, who avoided mentioning poison arrows and other risks, but insisted on the fact that it was the Indians who were in the greatest danger.

'Are they the uncontacted peoples?'

'No, not necessarily, many live their traditional way of life and have some contact with the outside world. The others have no contact at all, they reckon there's about a hundred or so groups of really uncontacted peoples, very small groups, in the Putumayo region of Colombia, or Acre in Brazil, near the border with Peru, a lot of them are nomadic, like the Kawahiva, who are just a few dozen.'

The uncontacted peoples lived entirely off the forest and rivers and were traditional hunter-gatherers, nomadic, moving on from time to time, but also cultivating small clearings in the forest, gardens, to grow food and medicinal plants, mostly manioc, sweet potato, maize, bananas and pineapples, they used branches and palm leaves to build their homes and make their everyday objects.

The forest was their ancestral home and their knowledge of its topography, fauna and flora, was extraordinary, providing them with means to satisfy all their needs. They gathered roots, nuts, berries, fruit, medicinal plants, honey and insects. They hunted wild animals, including peccaries, tapir, monkeys, and birds like the curassow using blowpipes or bows and arrows, the darts and arrowheads tipped with poison.

When the first European colonists arrived in 1500, the population of what is now Brazil, was, according to some estimates, as many as 11 million, in about 2,000 tribes. In the century that followed almost 90% were wiped out, mainly by diseases. In the following centuries, countless others died, genocide on a huge scale, many were enslaved in rubber and sugar cane plantations, their lands stolen.

Today, those still remaining were fighting to regain control over their lands. Their problem lay in the fact Brazil was one of the two countries in South America that did not recognise ownership of tribal lands. In fact as far as the law was concerned the indigenous peoples were still considered minors and subject to widespread prejudice, even in government circles, where economic policies conflicted with tribal rights, contributing to the loss of their homelands and their way of life in symbiosis with the natural forest.

Unfortunately the Indians were victims of industrial man's expansion and conquest of the natural world. The expansion of agriculture and livestock raising in Brazil was a logical continuation of agricultural man's expansion into new territories, a process that had been going on for more than 12,000 years.

The march towards agriculture was not predestined, animal husbandry and tillage demanded a constant and hard effort compared to the three or four hours required each day by hunter-gatherers to find their food. Marshall Salons pointed out that the only societies in human history that lived in relative abundance were those of the hunter-gatherers.

This was illustrated today by the hard lives of smallholder settler farmers, working their land on the frontiers of Brazilian 'civilisation', in comparison with those tribal peoples who still live in harmony with the forest.

The dawn of the Anthropocene came with the founding of the first agrarian societies in the Mesopotamia region of the Middle East, before the birth of the first civilisations. A new era in the history of our planet was born, one in which the impact of human activity indelibly marked the ecosystems and the

climate of the planet, transforming the flora and fauna, domesticating species of economic value and exterminating the rest, clearing forests and creating new domesticated species. It was in fact a process that commenced much earlier, when *Homo habilis* and *Homo erectus* learned to make tools and to use fire some hundreds of thousands of years earlier. Fire enabled man to predigest edible plants and grains, the more indigestible types were digested by birds and animals, which were in turn killed, cooked and eaten.

Over this time span, earlier human species evolved into *Homo sapiens*, a single species that came to dominate the planet, modifying it to their own ends and in doing impacted almost every other living species of plants and animals.

The world had entered an era of accelerated change, when the creatures living on it would be confronted with a profoundly changed environment accompanied by extreme climatic conditions, phenomena barely understood by scientists, a time when man's very survival was in doubt.

Human beings had infested the planet, like microbes in a laboratory dish, enjoying favourable conditions at first, multiplying slowly, then exponentially, and finally, when all available food was expended, the culture would collapse, die, as nature's natural regulatory cycle went into action.

Over the past forty of fifty years the human population had doubled, at the same time what was produced and consumed had increased six fold. Such growth was unsustainable. The environmental equilibrium that human society had enjoyed to the present was now on the verge of collapse and no serious scientist could deny it.

Was this the start of terminal collapse? It was a question men like John Francis had been asking for many years. From his place at the head of the Fitzwilliams Foundation, he'd observed the evidence piling up. Would we face the same fate as the Roman, Maya or Khmer civilisations.

'Perhaps,' he told Pat. 'I'm too old, but you're not ... and our children are certainly not.'

If it were the case, then what would come after? Past experience had shown there was little unlearning, or going back to living in caves, but a kind of rebooting, resetting the system, in a smaller world. A new way of living, replacing consumerism and capitalism, and from Pat's viewpoint, it was his duty to his children to prepare for it.

The global economy was doubling every 23 years, and accelerating, the future would arrive in the blink of an eye. It would need a superhuman effort to counter climate change, to reduce carbon emissions, replace fossil fuels, reduce consumption.

The alternative was the onset of extreme stress followed by disorder, strife and collapse. As it stood the population would rise by nearly one third over the next three decades and producing food to feed them would be extremely challenging to say the least, requiring considerable energy to sow, fertilise and harvest, with more and more arable land, an impossible task, bringing extreme migratory pressure to bear on both the rich and poor nations.

Pat saw the world as nature's evolutionary laboratory, trial and error, birth and death, an endless cycle of rise, conquest and collapse. A constant Darwinian struggle, where America was challenged by China, Russia was trapped in its sombre recurring history, the Middle East caught in a never ending whirlwind of competing civilisations—Jews, Muslims, Arabs, Iranians, East and West.

To him the present cycle would end with the collapse of globalisation, and from its ashes something else would rise. What exactly, he didn't know.

He looked to his friend John Francis for guidance, but John was getting old

COLOGNE

LIAM AND CAMILLE CHECKED INTO the Excelsior, just a walk across the esplanade from the Köln Hauptbahnhof —Cologne's main railway station where they'd arrived on the Thalys from Paris. It was the fastest way of getting there, barely three hours, even the company jet would have been a hassle, as for travelling by road it was out of the question.

With France on yet another strike, it was a good moment to catch up with their friends in Germany for a weekend together, before they got down to serious business, the preparation of *Indians* with Matt Halder and his team.

It reality it was in part Camille's baby, after all she had introduced Kyril to Pat Kennedy, and her enthusiasm had gone a long way in persuading Pat to back the project under the patronage of his bank. Besides Liam being executive producer, he was Pat Kennedy's protege, he was one of Pat's outstanding successes, and Pat had big plans for his future, one that was already assured by Liam's own successful business ventures.

Indians would tell the story of Amazonian ethnology, the history of its different peoples and the social crisis facing present day rainforest dwellers, those confronted by modern predatory society. Most of the film would be shot in Amazonia, edited and produced in Cologne.

Camille admired the Dom, Cologne's magnificent Gothic cathedral, from the window of their suite where they had just enough time to install themselves before their friends, Gisele and her husband Matt, picked them up for lunch and a visit to the ancient cathedral. It wasn't Camille's first visit to Cologne and Liam suspected she was perhaps a little jealous of Gisele, one of his exes with whom he had spent a romantic interlude in the Caribbean. He pulled her leg, amused at the idea. He now saw Gisele as a good and close friend, though he had to admit to himself they had had some memorable moments together, including the Christmas they had spent four or five years earlier in Cologne and their getaway to the Schwarzwald.

It was in fact Gisele and Matt who had introduced them to Kyril, after Matt's company Zyborg Filmstudio had produced *Rainforest*.

Matt Halder was also a collector of ethnic art and a patron of Cologne's Rautenstrauch-Joest Museum. His grandfather had been a collector at the time of the Deutsches Kolonialreich, an empire that possessed vast territories in Africa and the Pacific. A large part of the collection had been bequeathed to the museum by Matt's father, though some of the most precious works still adorned the family home in the gentrified Belgisches Viertel, to the west of the Innenstadt, near the park, a stylish residential district where the ornate neogothic architecture, favoured by the city's wealthy bourgeois at the end of the 19th century, had miraculously survived the allied bombs of WWII.

Matt's place was a four storey residence built at the time when Prussia was at the height of its power and glory under the Iron Chancellor, Otto Von Bismarck, and the Emperor Wilhelm II. Behind the staid air was a hip district, where St Michael's church, once a house of worship, had been transformed into an art space, home to gigs, exhibitions, and pop up galleries. On the other side of the nearby park and its Japanese gardens was Ehrenfeld, where Matt's production company, Zyborg Filmstudio, was located in what was one of Europe's largest concentration of TV and film studios. In short it was part of Cologne's up and coming place to be with its thriving art, café and club scene.

Matt had produced a successful series of documentary films covering the history of ethnology for Arte, a Franco-Germany TV channel, focused on culture, environment and international reportages. It was how he met Kyril and produced his first documentary film *Rainforest*, which picked up a string

of awards at the Cologne Film Festival, one of the most outstanding international festivals for independent producers.

Matt, now a successful film producer, had abandoned a promising career at the family bank, now run by his brother, preferring the cinema, setting up his own production company, becoming a successful and internationally recognised director in the field of documentaries on the natural world and its multiple ecosystems.

* * *

That evening they were invited by Gisele and Matt for dinner at their place. Pat Kennedy had arrived first and was clearly excited to be back in Germany, bubbling away in his particular version of Goethe's tongue. The atmosphere was informal, and as drinks were served Matt gave them a guided tour of his collection—African masks, Papuan shields, Samoan statues, spears and textiles. Extraordinarily rare pieces, many of which had been collected by his great-grandfather more than a century earlier.

As dinner was served they discussed their plans for *Indians* and were soon into global warming. Matt recounted how Hans Joachim Schellnhuber, a renowned climatologist at the Potsdam Institute for Climate Impact Research, had formulated a mathematical equation whereby the risk could be calculated

Matt was a convinced ecologist who feared the world was nearing tipping point, when the rate of change became uncontrollable.

He likened the situation to that of the Titanic's captain when he saw the iceberg looming out of the freezing mist, all that could be done was to save as many as possible, whispering to Pat with a knowing smile, 'the best'.

The question was not when, but how much time remained, and who could be saved.

Matt pulled out a sheet of paper and scribbled:

Emergency =
$$R \times U = p \times D \times \tau / T$$

'There, you can see how simple it is. To understand Emergency, we have to quantify the relationship between risk R and urgency U. Schellnhuber borrowed it from the insurance industry. R is the probability of something happening p multiplied by damage D.'

Pat knitted his brows as he concentrated his attention on the formula.

'Take for example, sea levels, what is the probability they will rise by a metre and how much damage will that cause?

'Well, you see Urgency U is the time it takes to react to an issue τ divided by the time left to avoid a bad outcome T.

'This allows you calculate the do nothing, business as usual probability of a highly damaging event,' he said. 'You're a businessman, so you can understand that.'

Pat nodded trying to absorb the idea

'With this we can see the reaction time left for limiting global warming to less than 2°C is about 30 years, while the time needed for full global decarbonisation is at least 20 years. If the reaction time is longer then we're fucked, if you'll excuse the expression.'

'I see '

'In other words we'd just have enough time to see who'd go into the lifeboats!'

Pat seemed taken back by the brutality of the conclusion. It confirmed his worse thoughts, especially coming from a German, an outstanding member of a people he had always admired for their seriousness and organisation.

THE CONQUISTADORS

PAT KENNEDY HAD ALWAYS BEEN inspired by the adventures of Francisco Pizarro and his conquest of Peru. It was different to that of Mexico, by his compatriot and cousin Cortes, and in very many ways. Pizarro's voyage was at the outset one of discovery on a continent which no one suspected was the home to a powerful civilisation, one that had developed in isolation, ignorant of the existence of a world outside.

Pizarro had been born in Trujillo, a small town in Extremadura in the west of Spain. He was the illegitimate son of a Spanish officer nicknamed 'the Roman'. Trujillo was the birthplace of a number of ruthless conquistadors, amongst them, in addition to Pizarro, was Francisco de Orellana who discovered the Amazon, Diego Garcia de Paredes who founded the city of Trujillo in Venezuela, as well as Francisco Pizarro's brothers—Hernando, Gonzalo and Juan. Legend said that twenty American nations were conceived in the womb of Trujillo.

Today, all that remained of that flamboyant era was an equestrian statue of Pizarro, erected on the Plaza Mayor, and the palace of the Marquis of the Conquest, built by Hernando Pizarro. There also remains a number of fine homes built in the 16th and 17th centuries by the *Indianos*, the hardy Spanish adventurers who made their fortunes in the New World.

Pizarro was practically illiterate, he had spent half his life pig keeping before his fortune miraculously changed for the better in 1507, when at the age of 32 he joined a group of merchants leaving for Seville, Spain's point of departure to the New World.

The discovery of Seville was a shock for a peasant from a harsh impoverished region. The city, since the expulsion of the Muslims 15 years earlier, was in a state of effervescence. Palos, its port was the gateway to the New World, from where Columbus had sailed on his voyage of discovery.

Adventurers, hard men like Pizarro, were motivated by gold, men of whom the Franciscan Friar Jodoco Rique wrote from Quito in 1534: 'The lust for gold is so great that neither work, disease, or death can stop them. I believe that if there was gold in the mouth of hell, they would not be deterred.'

Pizarro's discovery of the Inca world and the incredibly rich court of its emperor, Atahualpa, his capture and execution, was the consequence of a rapid succession of unforeseeable events that neither the Spanish nor the Incas could have ever imagined.

It was against a background of civil war that followed death of the supreme Inca, Huayna-Capac, when Francisco Pizarro, appeared, with a small band of men and horses. He found Peru in the last throes of a bloody war of succession that had set Atahualpa against his brother Huascar.

To the Incas the appearance of the Spaniards could be compared to us today being suddenly confronted by Martians, astride huge fierce beasts, armed with strange and terrible weapons.

Pizarro came in the hope of finding riches, and not only did he find them, he also discovered an astonishingly exotic empire, the last remaining civilisation unknown to the Old World, one as great as Spain's, a vast new land of unimagined wealth and population of 10 million souls, comparable in many ways to the Holy Roman Empire ruled by Charles V of Spain.

The adventure commenced in September 1513 when Spanish explorers, after slashing their way through the dense tropical forests of Panama, beheld an ocean—the Pacific, el Mar del Sur, the South Seas as legend had it. That expedition, led by Vasco Nuñez de Balboa, counted amongst its men a young captain named Francisco Pizarro.

Soon a base was established, a town on the west coast of the isthmus, Panama, which became the port from which ships set out to explore the new lands on the Pacific façade of the New World.

* * *

Until the dawn of the 16th century, the peoples of the South American continent, and more precisely the Amazon, had lived in a hermetic world—their world, one that was changed forever when in 1500 a flotilla of strange vessels appeared at the mouth of that vast river and slowly made their way upstream.

The flotilla ws that of Vicente Yañez Pinzon, the owner and captain of Columbus's caravel *La Niña* who still held hopes of discovering India and the Spice Islands.

As Yañez sailed up river he thought he had reached the Ganges. Along the banks were 'many painted people who flocked to the ships with as much friendship as if they had conversed with us all their lives.' After a skirmish he captured 37 men 'bigger than large Germans' as slaves.

On the other side of the continent, Peru was discovered 24 years later on the first of Pizarro's three expeditions, which turned back after clashes with Indians along the coast, injuries and lack of supplies.

In 1526, Pizarro's second and larger expedition set out from Panama in two ships accompanied by his pilot Bartolome Ruiz, 160 men and several horses, and sailed south from Panama.

After dropping anchor at the Rio San Juan, the two ships separated and Ruiz continued south, crossing the equator into the South Pacific, there he sighted a large ocean-going balsa raft fitted with sails. It was the first sign of the existence of a developed civilisation. The raft's sails were woven in fine cotton and its cargo included Inca goods intended for barter.

The goods, according to a report despatched to Charles I, King of Spain, included:

'... many pieces of silver and gold as personal ornaments ... crowns and diadems, belts and bracelets, armour for the legs and breastplates; tweezers and rattles and strings and clusters of beads and rubies, mirrors decorated with silver, and cups and other drinking vessels. They were carrying many wool and cotton mantles and Moorish tunics ... and other pieces of clothing coloured with cochineal, crimson, blue, yellow and all other colours, and worked with different types of ornate embroidery, in figures of birds, animals, fish and trees. They had some tiny weights to weigh gold ... There were small stones in bead bags: emeralds and chalcedonies and other jewels and pieces of crystal and resin.' All of which was intended for trade with the peoples who inhabited the coastal regions to the north.

Ruiz kept three of the raft's crew to be taught Spanish and trained as interpreters for the exploration of their evidently rich land.

On Isla de Gallo, after much wrangling as to their next step, Pizarro drew a line in the sand, and declared, 'There lies Peru with its riches. Here, Panama and its poverty. Choose, each man, what best becomes a brave Castilian. For my part, I go to the south.'

Pizarro continued, sailing further down the coast of Peru with his small army of 62 horsemen and 106 foot soldiers. They reached the first Inca town, Tumbez, in 1528, which confirmed the existence of a greater civilisation beyond. To their astonishment they found themselves before a hitherto unknown rich kingdom, a city with llamas, pottery, metal vessels, fine clothing, in short an undiscovered civilisation, one that had evolved in total isolation from the rest of mankind.

The Inca empire stretched almost five thousand kilometres along the Andes, from what is now central Chile in the south to Colombia in the north. On one side lay the Pacific Ocean, to the other the endless Amazon rainforest. A vast domain, comparable to the Roman Empire at its apogee which ran from the Atlantic to the Red Sea.

The Inca emperor, Atahualpa, soon learnt these strange men had landed and were pillaging his lands, unfortunately for him, he was too concerned with his own war to be worried about a small band of marauders. In 1532, after leaving the coastal plain, Pizarro and his men headed inland into the sierra. Then, on reaching Cajamarca, a temple centre, they installed themselves in its main square which was surrounded on three sides by long buildings.

Waiting for the strange newcomers was Atahualpa, camped a short distance from the centre with an army of 40 thousand trained soldiers. With just 150 men Pizarro realised he had marched into a trap. His only solution was to employ the tactics that had proven successful in the conquest of the Aztecs in Mexico. He invited the Inca leader to meet him in the vast 200 metres long main square.

Atahualpa agreed.

Pizarro positioned his cavalry on both sides of the square, his foot soldiers hidden in the buildings flanking it. He then awaited Atahualpa's arrival in front of a stone compound situated in the centre of square where he had placed his cannons and musketeers.

At midday the Inca army positioned itself on the plain outside of the temple and Atahualpa advanced as in a grand procession.

Pedro Pizarro, a cousin of Francisco, a chronicler, described the scene:

'All the Indians wore large gold and silver discs like crowns on their heads. They were apparently all coming in their ceremonial clothes.

In front was a squadron of Indians wearing a livery of chequered colours, like a chessboard. As these advanced they removed the straws from the ground and swept the roadway.

They pointed their arms towards the ground to clear anything that was on it—which was scarcely necessary, as the townspeople kept it well swept. They were singing a song by no means lacking grace for us who heard it.'

Pizarro persuaded the Inca to enter the square, which he did bringing 'with him five or six thousand men, unarmed except that they carried small battle-axes, slings and pouches of stones underneath their tunics'.

Following, on 'a very fine litter with the ends of its timbers covered in silver, came the figure of Atahualpa. Eighty lords carried him on their shoulders, all wearing a very rich blue livery. His own person was very richly dressed, with his crown on his head and a collar of large emeralds around his neck. He was seated on the litter, on a small stool with a rich saddle cushion. He stopped when he reached the middle of the square, with half his body exposed.'

'The litter was lined with parrot feathers of many colours and embellished with plates of gold and silver.... Behind it came two other litters and two hammocks in which other leading personages travelled. Then came many men in squadrons with headdresses of gold and silver. As soon as the first entered the square they parted to make way for the others. As Atahualpa reached the centre of the square he made them all halt, with the litter in which he was travelling and the other litters raised on high. Men continued to enter the square without interruption. A captain came out in front and went up to the fort on the square which contained the artillery ... with a banner placed on a lance', which bore Atahualpa's royal standard.

Vicente de Valverde, a Dominican friar accompanied by an interpreter, 'went with a cross in one hand and his missal in the other. He advanced through the troops to where Atahualpa was.'

The Inca was surprised not to see Pizarro, then, in an exchange during which he demanded the Spaniards return every object that they had stolen or consumed since their arrival in his kingdom, he threw a book the Friar had shown him on the ground.

With that Valverde cried out, 'Did you not see what happened? Why remain polite and servile toward this overproud dog when the plains are full of Indians? March out against him, for I absolve you!'

Pizarro gave the signal for the attack and the cannons were fired into the crowd and with the sound of trumpets the cavalry in their armour charged.

The terrified barely armed Indians fled before the horses, steel swords and armour, it was a massacre, the royal litter carriers were cut down amongst

the of piles dead and dying, and Atahualpa was captured as the Spaniards pursued the Indians into their camp cutting down all they met.

'In the space of two hours—all that remained of daylight—all those troops were annihilated That day, six or seven thousand Indians lay dead on the plain and many more had their arms cut off and other wounds.'

Atahualpa's army was sent home, but not before being relieved of their gold and silver by the Spanish, excited at the sight of so much treasure, something the emperor did not fail to notice. The Spaniards with their prisoner advanced to the Inca capital of Cusco, where Atahualpa organised a great reception for the invaders.

It was at that point Atahualpa offered a ransom in exchange for his freedom. When asked how much, he replied a room full of gold. 'The room measured 22 feet long by 17 feet wide, and filled to a white line half way up its height—he described must have been about two estados (over 2 metres) high. He said that up to this level he would fill the room with various objects of gold—jars, pots, tiles and other pieces. He would also give the entire hut filled twice over with silver. And he would complete this within two months.'

The Spaniards were astonished, the room measured 88 cubic metres.

During the time needed to collect the gold and have it brought to Cusco the Spaniards received reinforcements from Panama.

Atahualpa imagined that once the storehouse was filled the Spaniards would leave with their loot and he would be released to rule his subjects. To accelerate the procedure the gold that lined the Temple of the Sun of Cusco was included and on Atahualpa's suggestion Pizarro sent his men to oversea the stripping of the temple.

The native chronicler Huaman Poma de Ayala wrote: 'These buildings were sheathed with gold, in large plates, on the side where the sun rises, but on the side that was more shaded from the sun the gold in them was more debased. The Christians went to the buildings and with no aid from the

Indians—who refused to help, saying that it was a building of the sun and they would die—the Christians decided to remove the ornament ... with some copper crowbars. And so they did, as they themselves related.'

The Spaniards prised off seven hundred plates, 'The greater part of this consisted of plates like the boards of a chest, three or four palmos (50cm x 50cm). They had removed these from the walls of the buildings, and they had holes in them as if they had been nailed.'

'They reported seeing one golden sacrificial altar that weighed 19,000 pesos (570kg) and was large enough to hold two men. Another great golden fountain was beautifully made of many pieces of gold: it weighed over 12,000 pesos (360kg) and was dismantled for transportation to Cajamarca.'

The Spaniards ordered the melting of the gold which was carried out by Indian goldsmiths in nine forges. Over eleven tons of gold objects many of them sacred treasures—vases, statues, jewellery and decorative objects, masterworks of Inca goldsmiths, the tragic inestimable loss of an entire civilisation.

The gold and silver was shared between Pizarro and his men with the royal fifth put to one side for the King of Spain.

Horseman received 50 kilos of gold and 100 of silver, foot-soldiers half of that. Whilst Pizarro himself took seven times that of a horseman and in addition a throne of Atahualpa that weighed 83 kilos.

Based on the present day value of gold, the treasure plundered from the Inca's in the form of Atahualpa's ransom can be estimated at about 500 million dollars, to which should be added the silver, precious stones and other objects.

After sharing the spoils they decided, '... that Atahualpa must die ... ' accusing him of plotting to kill the Christians. He was sentenced to death and was executed in the square of Cajamarca.

On Saturday, 26 July, 1533, Atahualpa was 'brought out of his prison and led to the middle of the square, to the sound of trumpets intended to proclaim

his treason and treachery, and was tied to a stake. The friar was, in the meantime, consoling and instructing him through an interpreter in the articles of our Christian faith.... The Inca was moved by these arguments and requested baptism, which that reverend father immediately administered to him. His exhortations did much good. For although he had been sentenced to be burned alive, he was in fact garrotted by a piece of rope that was tied around his neck.'

GOLD

PERU LAY BETWEEN THE ANDES and the harsh dry belt of coastal desert. To the west lay the vast empty Pacific, to the east the endless forests of the Amazon. To the south the wilds of Araucania and Patagonia with their vast empty regions marked by volcanoes, lakes and forests.

It was a hard country dominated by three types of terrain, the coastal plain, the Andes, and the lowland jungle of the Amazon Basin. To the west the coastal plain was desertic, a phenomenon caused by the cold waters of the Humboldt current that flowed close to the coast where the land was warmer causing the moisture to evaporate from it rather than the inverse. Inland from the coastal plain was the harsh jagged snow peaked Andes, the second highest mountain range in the world, and its longest, creating a formidable barrier between the narrow coastal plain and rainforests of the Amazon, blocking the clouds from drifting westwards with their rain.

The result of this topographical morphology was the absence of the fertile expanses that were present in other regions of the world where different civilisations had sprung up. Most of its flat lands were made up of desolate puna montane grasslands and shrublands or too high for normal farming. To complicate matters Peru had few domestic animals, edible plants or trees outside its Amazon region.

In their isolation the Incas predecessors had developed a unique series of civilisations over thousands of years, that came and went with the fortunes of the cyclic climatic changes that affected the whole Pacific façade of the South American continent.

These civilisations, of which the remains have been discovered by archaeologists, include the Chavin culture that was parallel in date to that of the golden age of Greece. In the north was the Mochica civilisation, know for its pottery and textiles that survived in the desertic climate, and to the south was the Nazca civilisation. All of which were succeeded by the Inca who ruled all of Peru until Pizarro and his men erupted into their empire wreaking destruction, a disaster for Atahualpa, one which signalled the end of the Inca civilisation.

At the same time another empire rose, that of New Spain, to which countless soldiers, adventurers and colonists were attracted by the lure of gold and silver. Peru was rich in deposits of gold, silver, copper, lead, zinc and oil. Today, Cajamarca is the site of Yanacocha, one of the world's most profitable gold mines.

At the time of the conquest the source of the Inca's gold was unknown and remained a secret until 2001, when an Italian archaeologist, Mario Polia, discovered a report in the Vatican archives made by a missionary, a certain Andres Lopez.

The report, dated from 1600, described a city called Paititi, filled with gold, silver and precious stones, situated deep in the Peru's Amazonian rainforest, the location of which remained a closely guarded secret deep in the Vatican's archive.

Sir Arthur Conan Doyle was inspired by the legend of Paititi to write his novel *The Lost World*. In fact many legends were attached to the mysterious city, amongst those was the idea it was an Inca refuge and many explorers set out to find the city sometimes described as Eldorado.

One of them was the ill fated Fawcett expedition in 1925, led by Percy Harrison Fawcett that disappeared into the jungle and was never heard of again. Many other explorers and adventurers left their bones to rot lost in the dense humid rainforest of the Amazon, amongst them was a French-American expedition whose three leaders were killed by the Machiguenga Indians.

More evidence came to light when satellite images revealed strange forms isolated in the depths of the jungle. It raised the question of how far the Incas had pushed the frontiers of their empire into the Amazon? The heart of their homeland surrounding Cusco was not rich in the exotic goods they coveted—feathers, animals, medicinal plants and hardwoods, all of which existed in abundance in the rainforest, if they knew how to find them, it was why they had certainly established trading posts deep in the forest where they exchanged goods with the forest peoples.

This led to the search for lost cities and certainly more than one of them survived the fall of Cusco, serving as refuges for those who fled the Spanish invaders who plundered Cusco, bringing death and disease with them.

* * *

Ken Hisakawa, Pat Kennedy's archaeologist friend from Columbia University in New York, set out with a small expedition from Iquitos to explore a site venerated by a local recently contacted Indian tribe. It was part of Pat Kennedy's patronage of Ken's research into how the Pre-Colombian peoples had survived the cataclysmic collapse of their world.

The site was reached following a series of rivers and trails into the tangled jungle at the end of which lay the decayed remains of what had perhaps been an Inca outpost, a fortified city, a refuge deep in the jungle. What they discovered were the walls of what had once been fine stone buildings, now overgrown by vegetation, roots and creepers, it reminded Ken of temples in the Yucatan far to the north in Mexico.

The expedition used Lidar maps with 3D data developed from airborne and satellite imagery for their exploration zone. What they discovered was a site in the midst of what would have been a deforested zone, the remains of large buildings—now smothered vines and creepers, dwelling places, traces of what would have been gardens and fields, from which stone roads radiated out to other settlements.

It was a remarkable discovery, proof that the Incas had continued to survive far from their heartland, vestiges comparable to other major archaeological sites.

Ken and his men did not linger long, once his men had sufficient photographic evidence, they packed their equipment and returned to the river. He feared the *guaqueros* or *huaqueros*—looters, and illegal miners, in search of gold, a metal valued by the Incas, for different reasons, panned in streams and rivers or dug from shallow pits in ore bearing seams and crushed to separate out the gold.

The Incas has crushed the ore with granite pestles and reduced it in smelters fired with dried lama dung and hand held air tuyeres to reach the required temperatures. Sometimes it was allied with copper for the manufacture of temple and other artefacts. The Inca and their predecessors had achieved a high degree of skills in metallurgy as witnessed by objects that dated back to 1500BC.

The emperor who symbolised the sun and controlled the use of gold—a manifestation of his power, which was reserved for civic and ceremonial purposes by priests and high ranking members of Inca society.

Gold was also valued for its immutability, an offering to the dead, as unlike silver and copper it did not tarnish and was not perishable like other offerings such as food and textiles. It was buried with emperors and nobles who were adorned by symbols and jewellery made from hammered gold sheets and wire, amongst the symbols were lamas, that represented the food, wool and transport needed in the afterlife.

THE INCA EMPIRE

THE INCA EMPIRE WAS THE largest civilisation to develop south of the Caribbean. It succeeded earlier scattered cultures, emerging in the south-central mountains of Peru, then expanded across the western highlands and coast, conquering and absorbing neighbouring peoples, until it englobed a vast region that stretched from present-day Chile in the south, Bolivia, Peru and Ecuador on the north, and from the Pacific to the Amazon forest.

By the time Pizarro arrived, the Inca ruled over a population of an estimated 10 million souls, from their capital in the Cusco Valley.

Unfortunately for them their empire lasted just 100 years, brought down by civil war, disease and the arrival of the conquistadors who laid waste to all they saw, building New Spain on the ashes of the Inca civilisation and the bones of their leaders and priests.

They left behind their monuments and their people, the common folk, but tragically no written history. Much of their artistic and cultural treasure was destroyed, their gold and silver treasures and artworks melted down, their temples raised to the ground to make way for the edifices of the Christian god. They believed their world was created at Lake Titicaca by the gods they worshipped, with the sky, the inner earth, the outer earth, the Sun, Moon, stars and planets, and in the divinity of their emperor, all of which was condemned to oblivion, replaced by the religion of the Spanish invaders—Christianity, based on sin, guilt, penance, hell fire and redemption.

The idea that at the beginning of the third decade of the 21st century, lost Indian tribes still lived in the remote Amazon rainforest, fascinated Pat Kennedy, whose existence would form the theme of *Indians*, a film that would show the world how men had once lived, and how they might live again after the collapse.

They were called indigenous peoples, Indians, tribespeople, savages or chunchos. They were the original peoples of the Amazon rainforest, living in isolation, in scattered in small and different ethnic groups, mostly nomadic, speaking their own languages and dialects, with their owns traditions and way of life.

They had been first seen by Europeans when the Spanish and Portuguese arrived, but they were long known to the Incas and their predecessors with whom they had exchanged goods, bartering the products of the forest, feathers which the Incas treasured, coca leaves and other plants, jaguar, crocodile and snake skins, in exchange for tools and ornaments—made from stone, copper or gold, textiles and sea shells.

They were of little other interest to the Incas, since they had little of value, no towns or civilisations to conquer, they were nomads who evaporated into the forest when threatened.

They lived by hunting, fishing and gathering plants and insects, some cultivated forest gardens in small clearings.

Certain had fled the predatory white men who came in search of gold, timber for homes and ships, and farmland. Then the invaders' gold and silver mines needed slaves, later came the rubber boom that also needed slaves, followed by loggers, cattle ranchers, oil palm, sugar cane, pulpwood and soya plantations, or oil, gas and mining companies, drug traffickers, and a new phenomena—tourists.

There was even a proliferation of explorers and researchers of all shades who came in the name of science.

The list of intruders was long, the dangers many, and when it was not those bent on invading or stealing their lands or territorial reserves, their women, and killing those who resisted them, they were those who came to save souls—Evangelical churches, their mission to convert the forest peoples to

the true god, frowning on their nakedness, their body paint and other heathen adornments.

JOUVENCE

PAT'S QUEST FOR LONGEVITY was driven by the idea that humans, like other creatures were genetically programmed to die, but if the key could be found to modify this programme, then perhaps life could be extended, and possibly extended indefinitely.

He was emulating other billionaires, like Sergey Brin and Larry Page, who had set up their research firm Calico, or Jeff Bezos of Amazon, and Peter Thiel founder of PayPal with Unity Biotechnology. Their laboratories like Sierra Sciences were studying ways and means to lengthen telomeres, the key it was hoped to extending cell life by reducing the biological ageing process.

Reprogramming genes had been successfully achieved in animals, a process that could be soon applied to humans. The benefits were two fold, the first was staying young and living longer, the second was that any cure for ageing would generate unbelievably huge profits.

In the meantime Pat's goal was to live long enough to live forever, to look beyond dying to a future of unlimited life. Pat did not believe in quacks and charlatans, but he did believe in rational science and its branch of gerontology and life extension. Like other billionaires he made more money than he could spend, he had everything he could desire, but not the time to enjoy it.

Kings and emperor had searched for the elixir of life in their quest for immortality, and now, thanks to modern science, that dream was closer than ever before

The key was wellness, staying alive until breakthrough came. He was nearing 60 and if he could stay alive another 20 or 30 years, that breakthrough would extend his life until the next discovery.

It was not an entirely hedonistic desire, but he also cherished the Christian idea he could make a better world for the survivors. Living longer in good health through genetic engineering.

Living longer meant nothing if it was in a polluted overpopulated world being slowly destroyed by climate change. A better environment went with living longer.

Some like Elon Musk aimed for the stars, colonising Mars, Pat Kennedy believed humanity's place was on Earth, a damaged Garden of Eden. His plan was to repair the planet, start again, after the collapse, with a smaller population, wiser, more intelligent, using science and the kind of long term planning that would go hand in hand with human longevity.

Like John Francis he believed short term political goals in democratic society were unadapted to the long-term needs of the planet, whilst authoritarian societies were built around the rule of leaders who perpetuated their rule around oppressive fixed ideological concepts in the interests of an autocrat or an oligarchy who cared little for the freedom of the individual.

Pat imagined an open society, the Athens of Plato and Socrates, but where slaves were replaced by machines, a sustainable society, one in which its members lived long and healthy lives, lives that were valued by all, as described by Plato in 380BC, in his dialogue *The Republic*, in which Socrates described a communistic, egalitarian city-state ruled by philosopher-kings—called guardians, made up of both men and women. Instead of procreating within a family unit, these leaders left the city once a year for a wild sex orgy. The resulting children, happily ignorant of their real parentage, would be raised by the state, to become the new generation of guardians.

Of course it was utopian and there had been many who dreamed of utopia, the Greek word for 'no place', which perhaps William Butler Yeats had in

mind when he wrote his poem Sailing to Byzantium ... That is no country for old men

The English lawyer, statesman, writer and Catholic martyr, Thomas More, born in 1478, beheaded by King Henry VIII, wrote *Utopia* in 1526, in which he describes a travellers account of an island ruled by General Utopus, a nation based on rational thought, communal property, a six hours working day—'the rest of their time, besides that taken up in work, eating, and sleeping, is left to every man's discretion; yet they are not to abuse that interval to luxury and idleness, but must employ it in some proper exercise, according to their various inclinations', no love of gold, no real class distinctions, no poverty, little crime or immoral behaviour, religious tolerance, and little desire for war.

In the 20th century, George Orwell in his book *Homage to Catalonia* described another version of utopia, one which described the anarchist occupation of Barcelona during the Spanish Civil War. When rank was suspended and people addressed each other as 'comrade' in the anarchist's new but short lived world.

Of course Huxley's *Brave New World* was another vision. Pat Kennedy had read them all and was determined to learn from them in his quest to survive ecocide and collapse.

* * *

Pat's yacht, *Las Indias*, was a constant reminder of corruption—not his, but its previous owners. The scandal surrounding it continued to echo in the media with the latest episode involving Riza Aziz—producer of the film *Wolf of Wall Street*, now charged with embezzling hundreds of millions of dollars.

Riza Aziz, the stepson of former Malaysian prime minister, Najib Razak, had together with Jho Low ran a Hollywood production company called Red Granite Pictures. How he got involved with Low is a long story and not with a Hollywoodian ending, since he was facing charges of money laundering to the tune of 250 million dollars

Exactly where the two unlikely crooks went wrong is not too difficult to pinpoint. It wasn't their underestimation of the law, it was their stunning naivety and extraordinary sense of impunity.

Aziz and his associates were carried away by an illusion of power and licence, the belief that his father, the prime minister of Malaysia and head of the political party that had ruled the country for 60 years, could do anything, and ended up by consciously or unconsciously confusing the money of the state with their own.

The family had stood at the summit of the country's political power system since independence and was closely linked to Malaysia's hereditary ruling class.

Najib Razak, amongst many other things, was the chairman of 1Malaysia Development Berhad (1MDB), a state-owned investment firm that was established on his instructions in 2009, as part of his government's economic programme, an undertaking which up to that point was like many other sovereign wealth funds, nothing unusual. However, just six years later, it was revealed 1MDB had debts to the tune of a staggeringly unbelievable sum of money, 11 billion US dollars.

Malaysia, a wealthy Southeast Asian Nation, ranked 41st in the world, a former British colony and still member of the Commonwealth, was reputed as being an above board democratic society, though there were many undertones of racism against its very large Chinese and Indian communities.

It was embarrassing because part of the 1MDB money had been transferred from a bank account in Switzerland, in amounts of between 1.2 million and 133 million dollars, to a Red Granite Pictures bank account in the US.

It seemed that Red Granite Pictures had used stolen 1MDB money to fund Hollywood productions, from *Wolf of Wall Street* to *Dumb and Dumber 2* and *Daddy's Home*. The company escaped criminal prosecution by agreeing to pay a 60 million dollar fine, whilst insisting the payment was not an admission of wrongdoing.

How Red Granite Pictures, a relative little known Hollywood film producer, had suddenly come up with 100 million for Martin Scorsese's film *Wolf of Wall Street*, was a mystery. But when Jho Low appeared at Red Granite with a million dollar birthday present for Leonardo DiCaprio—the Oscar presented to Marlon Brando for his role in *On the Waterfront*, the mystery became less mysterious.

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A QUESTION OF CLIMATE

JOHN FLEW BACK TO LONDON via San Francisco, where he stopped off to meet with Dee and Anna and discuss the plans for the coming exhibition of the Treasure of the *Espiritu Santo*.

His visit coincided with a wave of wild fires that were sweeping across California said to be provoked by climate change. John was unmoved by such stories, and he explained to his friends his reasons for that.

To his mind it was part of the natural cycle that had regularly occurred throughout the region in the past. Before the middle of the 19th century men knew little of what happened in many distant regions of the earth and especially the weather.

California was explored for the first time by Europeans in 1542 who discovered a few small Indian tribes eking out a living by subsistence farming and concluded there was nothing of interest to Spain in the arid region. As a consequence California remained practically unexplored for the next two and a half centuries.

San Francisco Bay was not discovered until 1769. Then in 1821 Mexico became independent and covered a vast area that reached as far north as today's the state line with Oregon, and to the east Nevada, Utah and Arizona. Following the Mexican-American War, California became a new American state and its population was estimated at a few tens of thousand including

Indians, Hispanics and American settlers, and it wasn't until the Gold Rush—1845-1855, did it reach 100,000 in the new Free State.

It could therefore be seen that human records and memory relating to annual fires Were extremely recent, and if they did occur they were inconsequential as the population was so small as to be almost non-existent compared to the 40 million Californians today living in a much smaller territory than the Mexican Cession of 1848—a territory of 1,370,104 km2.

It was part of a story scientists specialised in paleo climatological were discovering.

Recently, scientist's revealed that the East Asian Monsoon has been present for at least 145 million years, except during the Late Cretaceous, and the variations of CO₂ in the Earth's atmosphere had little effect, as far as humanity was concerned for the simple reason *Homo sapiens* were not even a twinkle in nature's eye.

There was also a much more recent climate event called the Younger Dryas, which had caused a rapid cooling of the earth 12,800 years ago, when the temperature fell by 8°C. Many reasons for this had been put forward, but now the analysis of core samples, taken in the South East of the USA, pointed to the impact of a comet or an asteroid, which resulted in a mini-ice age.

'The point I am making is climate is a very complex phenomena,' John told Dee, 'there are few changes except when they are caused the impacts of celestial bodies, and when these happen they affect all life on earth, for example, the Younger Dryas event caused the disappearance of mega fauna species in North America and the decline in the population of recently arrived men from Asia.'

'So you are saying climatic change is normal.'

'Yes, and unfortunately for us it always affects the fauna, that includes us, which is problematic, because of our huge numbers and the vast habitat we now occupy.

'Now don't get me wrong, I'm not a denier. It's evident that we are responsible for CO₂ emissions, pollution and the destruction of wildlife. But I'm also saying that populations of living creatures also rise and fall, sometimes very dramatically.'

Anna arrived with a broad smile and interrupted their conversation with the news of something directly concerned with her own work, the announcement that archaeologists had discovered the anchors of Hernan Cortes' ships off the coast of Mexico at Vera Cruz.

Anna's field was undersea archaeology, which explained her enthusiasm, plus the fact we had commenced to explore the vestiges of a culture that had its roots in the Inca civilisation, born across the border from what is today Colombia, in Peru, conquered by Pizarro, a second cousin of Cortes.

The anchors were found under a metre of sediment in the Gulf of Mexico, near Villa Rica de la Vera Cruz, the settlement Cortes founded when he landed, now known simply as Vera Cruz. The discovery coincided with the 500th anniversary of the Conquista, an anniversary the descendants of the ancient civilisations they destroyed saw as the darkest day in their history.

The anchors were identified by wood parts made from a species of oak that grew in northern Spain used to build the fleet the conquistador scuttled in 1519, when Cortes burnt his bridges to prevent a mutiny, though not before salvaging the materials needed to build a settlement at Villa Rica.

Cortes conquered the Aztecs and Francisco Pizarro went on to conquer the Incas and execute their last tragic emperor, Atahualpa.

CLIMATE AND ARCHAEOLOGY

THE CLIMATE WAS OF NO consequential importance to the planet Earth in the sense that since its cooling it had always been swept by winds and storms and by heat and cold. However, today, change could be of huge importance to humanity, its present occupiers, living at a moment in time when the climate smiled on human society and provided it with an abundance of food and water.

It hadn't always been like that.

The forces that influenced the climate of the planet were in constant flux. The climate was influenced for example by the orbit of the earth around the sun, which varied according to forces active in the solar system, then there was the rotation of the Earth itself with its wobbles, the orbit of our satellite the Moon, the active molten heart of our planet, the tectonic movement of the continents and volcanic action at the edges of the plates that formed those continents, spewing from time to time huge quantities of gases high into the atmosphere.

In the third millennium humanity added its hugely increased activity to the equation, by the release of fossil carbon into the environment, the result of its energy needs that had increased in leaps and bounds over the course of the last one or two millennium as men progressively learnt how to better harness nature for their needs.

Before that time men lived within the natural ecosystem, in a sustainable equilibrium, like the other creatures with whom they shared the Earth. With the Neolithic Revolution man abandoned his nomadic life as a huntergatherer to settle in the first small agricultural communities that sowed wheat and barley, cultivated small gardens, and raised the sheep and cattle they had domesticated to provide meat, milk and skins.

Çatalhöyük, in Turkey, one of the largest and most populated Neolithic settlements, was discovered in 1958 by a British archaeologist, James Mellaart. It bore witness to the birth of human civilisation.

It led archaeologists, anthropologists, paleo-environmentalists, climatologists, botanists, architects, geologists, geophysicists and chemists, to ask a fundamentally philosophical question, why did *Homo sapiens sapiens*, after 200,000 years of nomadic life, suddenly sedentarise to become farmers

Many archaeologists frowned when they were likened to Hollywood's Indiana Jones, but Anna Basurko had seen a few very colourful colleagues, any one of whom could have easily filled the role, though admittedly few wore pith helmets.

The chance of discovering a tomb like King Tut's was low, but certainly not negligible. Today, the discoveries were highly scientific, thanks to the use of DNA by anthropologists, or strontium-90 by geologists to determine the age of rocks and minerals. Archaeologists also used Lidar imagery for large scale surveys, and satellite archaeology on a regional scale.

Archaeology was in fact part of a much wider discipline—anthropology, which studied all aspects of the human species, both ancient and modern, over the entire existence of the civilisations that evolved during the course of human history.

Throughout the 19th century, archaeology was almost always associated with the discovery of treasure—Troy, Mycenae, Angkor, the Valley of the

Kings, Aztecs, Maya and Incas, Eldorado and Lost Cities, and of course royal tombs filled with gold and silver.

In retrospective, it was regretfully more to do with looting than scientific research, carried out by well-intentioned amateurs and adventurers, with tombs pillaged, temples ransacked, and archaeological evidence trampled on, as documented by Heinrich Schliemann's maladroit excavation of Troy—often the case in the 19th and early 20th century when gentlemen archaeologists were the only ones with the means, education and curiosity to develop the science.

* * *

There were many explanations why civilisations collapsed. In the case of the Maya, in around AD900, the most important factor was climate change compounded by the relative high density of their population and its associated agriculture. They were in fact victims of their own success. With maize the staple diet of Maya city dwellers, a system of monoculture developed which was more vulnerable to climate change. The one hundred year long dry period between AD800 and AD1000 suggested by archaeologists, which led to the collapse of Maya civilisation and migration to the north of the Yucatan, was confirmed by paleotempestological—the study of past tropical cyclone activity, thanks to paleoclimatological and oxygen isotopes identified in sediment cores from the Great Blue Hole off the coast of Belize—the world's largest sinkhole, spanning 1,500 years.

This was corroborated by the study of bones from Maya sites in Belize dated to periods stretched over one thousand years, from Middle Preclassic to Terminal Classic periods. A further period of drought between 1020 and 1100 AD, corresponded with the collapse of Chichen Itza, equally due to crop failures and famine.

The conclusions of the research data pointed to the fragility of human societies exposed to crop failures induced by climate change—especially those that were very dependent on monocultures, which would have led to

famines and unrest in large Maya population centres and almost certainly conflict between cities.

A MINI CRASH

THE SAME LAW ALSO APPLIED to businesses, that of sudden and catastrophic change, as witnessed by the announcement of swinging cuts at the Deutsche Bank's City headquarters. Liam Clancy sympathised with those caught up in the sudden upheaval, it reminded him of his own story, when he was terminated at Anglo-Irish in Dublin more than a dozen years earlier.

People who he thought were his friends, those with who he spent the day in the office, went out to lunch and dinner with, had fun together, suddenly ignored him. It served as a lesson, made him realise who his real friends were

Outside the Deutsche Bank that Monday morning, were Lehman Brothers-like scenes as the bank pulled out of equity markets and more than 3,000 staff members—most of them in the trading division based at Winchester House, the London Wall HQ of DB—a stones throw from the Bank of England and from INI's City HQ at the Gould Tower, were told to report to the auditorium to be fired

Trading in equities was an increasingly tech driven sector that had changed considerably since the days when the Golden Boys ruled the City of London and Wall Street.

Nearly 40% of those employed in the City HQ of DB suddenly found themselves on the street. It was at 11am precisely when the axe fell, when the unfortunate victims discovered their security passes were no longer valid, and with no other choice they headed for local pubs or wine bars, like Balls Brothers on Austin Friars, a block away from their now former place of

work. They carried cardboard boxes and white envelopes, some of them with tears in their eyes in search of a corner where they could cry in their beer or wine and order a nostalgic farewell lunch of bangers and mash, many of them wouldn't easily find another job in the City.

Already, senior employees in New York had been been forewarned, when they discovered they could no longer log into the bank's system over the weekend. Come Monday morning the bad news was confirmed when traders from the equities floor were terminated soon after arrival.

The bank dumped 74 billion dollars worth of assets into a bad bank in its restructuring effort after years of scandals and crises as it struggled to get back to profitability.

The human cost was a loss of 16,500 jobs worldwide, just over 20% of the banks employees, an unprecedented event for Deutsche.

Was it the precursor of what would happen went the next economic retraction occurred, whatever its cause? What was certain was the lower ranks would bear the brunt, while those ensconced at the summit of their glass towers would wince when their wealth fell a few hundred million or billion dollars, euros, pounds or whatever, then retreat to their island homes to wait-out the crisis.

AMAZONIA

DAN BRISCOE INFORMED THEM there were about 300 tribes living in Brazil, some 900,000 people. Most of the tribes were formed by groups of less than 1,000 individuals, in all just a small fraction of the vast country's population—mixed and remixed after 600 years of Portuguese-Brazilian history and colonisation.

Brazil's government had recognized nearly 700 territories for its indigenous population, totalling about 13% of the entire country and nearly all of that was in Amazonia, though a great many of the indigenous peoples lived in other regions, for example in the savannahs, Atlantic forests of the south, and the dry interior of the north-east where the first European colonists arrived in 1500.

'The Amazon rainforest is so huge that it beggars the imagination,' Dan Briscoe told Camille and her friends. 'Its vast canopy spreads 3,000 kilometres, uninterrupted, from its eastern edge to the Andes lowlands, the home to about 10% of the world's plant and animal species, a pristine wilderness'

They nodded, their eyes fixed intently on Dan.

He laughed. 'That's where we've got it all wrong. Far from being untouched, the landscape and ecosystem of the Amazon has been shaped by humanity for thousands of years. Long before the arrival of Europeans in the Americas, millions of people lived there, building vast earthworks, growing food and producing fish on farms and in lakes.

Today, we don't fully understand why those societies disappeared, but studying their way of life could give us clues to how we put the rainforest to use without destroying it.

The first Europeans to explore the Amazon in the 1500s spoke of cities, roads and cultivated fields, amongst them was the Dominican friar Gaspar de Carvajal who accompanied an expedition in the early 1540s, and reported seeing towns and large buildings.

'What happened to all that we don't exactly know, but we can guess. Many of the people who lived there died of disease, others, like the Guarani, one of Brazil's largest tribes, were chased from their lands,' Dan told them.

'The Guarani, what happened?'

'Their lands have been transformed into vast cattle ranches and plantations.'

It was a fact. Others tribes like the Yanomami still occupied millions of hectares of forest, whilst the smallest tribe consisted of just one man, the sole survivor of his people, now living in the last remaining house of sticks and leaves on the edge of what was left of his people's forest home.

The peoples of Amazonia, were unique, living in large regions of Brazil as well as its neighbours. There were few other regions of the world where tribes of men and women continued to live isolated from so-called civilisation. People who until recently were fancifully described as 'lost tribes', today 'uncontacted peoples', that is without ever having contact with the world outside their ancestral home, living in total isolation, often motivated by fear following centuries of often brutal even murderous colonisation.

The government of Brazil had adopted a no-contact approach, on the supposition the Indians would choose isolation given the choice. Historically contact with the outside world had often proven to be disastrous for isolated tribes, and those who had chosen isolation had despite government promises of protection, seen miners, loggers, and hunters encroach on their homelands.

The Upper Amazon, over 80,000 square kilometres of unbroken jungle, was a priceless treasure, the home to the largest concentration of biodiversity on earth. It was also *terra indigena*, a space inhabited and exclusively possessed by indigenous people, the home to some 40 uncontacted Amazonian tribes, pockets of indigenous communities with little or no exposure to the trappings and disease of the modern outside world.

The region's natural riches were prey to Brazil's landless poor who penetrated into protected territory to fish its rivers or poach endangered species. Loggers cut down the dominant species—kurana and cedars with impunity. Drug traffickers used the region to set up their transit points on the way to Central America—clandestine airstrips cut into the remote jungle.

A GARDEN OF EDEN

IN THE LAST CENTURY THE INHABITANTS of a vast jungle region of western Amazonia, where Peru meets with Brazil and Bolivia, were enslaved by rubber barons. In 2020, the survivors' home, a Garden of Eden, were threatened by new dangers—wildfires and deforestation.

Not surprisingly, Pat Kennedy learnt, the Catholic church sided with the tribespeople, as always the church's vocation had been to save souls, hopefully not in the same way as Friar Diego de Landa had in the Yucatan—deliberately destroying in an autodafé the near totality of the Maya's unique cultural heritage, their codices, books written in Maya hieroglyphic script on bark paper.

The record of the Catholic church in Latin America was not glorious, used as an oppressive force by the conquistadors, bringing the choices of obedience or eternal damnation, death and slavery, for those who rebelled against the authority of their exploiters.

In modern times the Catholic church was faced with competition, as often strange evangelical movements and sects expanded their mission across the Amazonia, some setting up storefront missions amongst the wooden shacks in the shanty towns that sprung up around legal and illegal mining and logging camps.

Amongst these was a sect called the Israelites of the New Universal Pact whose followers believed that Peru was the promised land and were dressed like time travelling transfuges from biblical times.

Even Jair Bolsonaro was a follower of an evangelical movement.

Certain saw the destruction of the forest as a divine retribution for the sins of man as in the biblical story of Sodom and Gomorrah or the seven plagues of the Old Testament.

Others promised salvation to 'naked savages', arriving in jet planes, equipped with modern technology and fists full of dollars, preaching a new vision of salvation in a fight to save the lost souls from the devil to create a heaven on earth in the untouched forest.

The Amazon Basin stretched from the Andes in the west to Brazil's Atlantic coast, a vast ecosystem threatened by the relentless expansion of the human race, where the strong oppressed the weak, with Jair Bolsonaro encouraging land grabbers, loggers and miners who with their rapacious appetites were plundering the protected lands Brazil's indigenous peoples.

It was part of a long story of destruction that commenced at the beginning of the 20th century, when the rubber baron, Carlos Fermin Fitzcarraldo, who had inspired Werner Herzog's 1982 film Fitzcarraldo, ruled that corner of the Amazon.

Today a province in Peru bears his name, which also adorns the town's main avenue, schools and monuments, celebrating the rubber boom that brought death and destruction to entire tribes as the rubber tappers took control of the forest in the region of Madre de Dios.

Stories are told of how Fitzcarrald tricked thousands of tribespeople to meet on a river islet, where they were massacred, leaving the bodies to rot in the river. Those who escaped fled into the forest where they hid in fear far from so-called civilisation.

The killing of indigenous peoples defending their territories continued. Their shooting down of their leaders was a common occurrence, murdered in attacks by gangs working for agribusinesses in their unabated determination to illegally exploit the natural resources of indigenous peoples and their lands.

Whilst the indigenous peoples of Brazil saw their forests ransacked, millions of hectares of the Chiquitano dry forest, in neighbouring Bolivia, were consumed by the fires started by cattle raisers, encouraged by their now former president Evo Morales, the country's first indigenous leader, in his misguided plan to create new pastureland by massive slash-and-burn clearance for cattle farming and beef exports to China.

ALONE IN SPACE

AS THE FIRST ARTIFICIAL OBJECT, Voyager-2, quit the solar system and penetrated into interstellar space, after covering 18 billion kilometres, the creatures that made it swarmed all over the face of a planet they called Earth. During the 40 years since Voyager-2 left on its epic journey voyage, the Earth's the numbers almost doubled, multiplying like a virus, and were now on the verge of destroying their host unless a remedy to stop their almost exponential growth was found.

Seen from afar, those creatures that inhabited the planet Earth, who called themselves *Homo sapiens*, members of the primate family according to their scientific classification, were endowed with a certain form of intelligence. These primates in their present state of development were divided into a number of different social classes, principally: intellectuals, capitalists, workers and farmers. Their tribes were organised under various forms government headed by a leader, often symbolic.

Man, as they were collectively called, had evolved from his primitive state of hunter-gatherer into so-called civilisations, large groups sharing a common culture living in geometrically variable territories, exploiting the natural sources of the seas and lands that surrounded them, namely forests, plants, animals and minerals, and as man's population grew, his environment was altered, leading to numerous existential problems including changes in the Earth's climate.

* * *

'At the point where we are now,' Kyril told his friends, 'even if the climate goals set by international agreements are met and global net zero emissions

are achieved, the time lag needed to offset the effects of increased temperatures means the world will soon be faced with rising sea levels and extreme climatic events, for decades and perhaps centuries to come.'

His words were a reiteration of numerous scientific reports published for all to read.

'If the objectives of the 2015 Paris climate agreement, COP21, are reached,' said Kyril hammering home his point, 'sea levels will continue to increase.'

COP was the acronym for Conference of the Parties, the name that the United Nations Framework Convention on Climate Change, UNFCCC, went by, a multi-lateral meeting of governments that took place each year in different cities around the world.

The first COP took place in 1992, but one of the most notable was COP21, held in Paris in 2014, when an historical landmark agreement was reached with a commitment to combat climate change signed by 195 nations.

The conference concluded global was warming was real, driven by human activity, and above all by the exponential growth of human populations.

Over the course of recent centuries and more especially during the last 50 years or so, deforestation, increased use of soil, and the combustion of fossil fuels had released vast quantities carbon dioxide, methane and other gases into the atmosphere. The accumulated effect has been a constant increase in air temperatures.

This was translated into the melting of the Arctic Sea and Greenland ice sheets at ever increasing rates, with the growing threat of rising sea levels, the release of methane gas from the permafrost, and more frequent extreme weather conditions in the form of hurricanes, flooding and droughts.

The changes would if allowed to continue lead to famine, war and massive migration from the most affected regions.

The facts were there, in reality there was little hope of achieving the objectives set, as five years after the conference, only the EU fulfilled its promises. The US had backed out of the agreement, Russia had done absolutely nothing, and at best the other signatories had accomplished nothing more than a little window dressing.

According to one scientist, trying to reverse the trend would be like trying to turn the Titanic on a dime. The consequences for 300 million people would be severe flooding at least once a year by 2050, as glaciers and the polar ice caps melted.

Nature had always dealt with changing climate, whether it was caused by celestial or geological events, how it would deal with the disruptions to the biosphere in the Anthropocene remained to be seen. To exactly what degree humanity was causing climate change was still an open question, however, humanity's impact on the biosphere was beyond all doubt, it was there to see, wherever one looked the effects of the Anthropocene were clearly visible, in the mountains, in the seas and rivers, in the forests and meadows, in deserts be they ice or sand, and in the atmosphere that surrounds us, even in near space, the thermosphere, filled with more than half a century of orbiting space junk.

* * *

So much for science and macro considerations, which nevertheless concerned each and every living person, who, individually, could do little to reverse the situation, though perhaps Sir Patrick Kennedy, with his vast wealth, could.

Kennedy, a British subject, whose bank, a triumvirate, with one of its headquarters and many of its prized assets in the City of London, had a vested interest in the UK and its economy, though most of its capital lay offshore spread through its multiple structures.

Pat was in fact a citizen of the world, as not only did he hold a British passport, he was also a proud Irishman, naturally possessing an Irish passport, in addition he held a resident permit of HKSAR, that is Hong

Kong, his declared home, even though he spent a great part of his year jetting out to the units of his far flung banking empire and his many distant homes.

His wife, Lili, now held Irish citizenship, having forfeited her Chinese passport, as China did not recognise dual nationality and having Hong Kong citizenship was a potentially problematic.

As CEO of the INI Banking Corporation, he should have been happy with the UK's withdrawal from the EU, which would certainly benefit his bank, a model of global capitalism, even though personally he was against leaving.

He was therefore one of a small group of capitalists who stood to gain much from Brexit, whatever its form, starting by shorting the pound. In fact the bank's London base was only loosely tied to the British economy, as were the investment funds it managed.

Pat was one of the mega-rich, he was living proof that the wealth of the world was held by an ever shrinking number of rich individuals and corporations, who used their huge financial power and knowledge to circumvent taxes through the offshoring bases they controlled. Using profits to concentrate their power through buy-backs, to become transnational entities controlled by a narrow group of individuals, and without the kind of traditional bonds of the past to a region, a country, or even their own workers, and whose deep down loyalties were to themselves alone.

It was, according to John Francis, a derivation of the economic theory developed by the Chicago School in the 1930s, at the University of Chicago. Amongst its most notable proponents were Milton Friedman, Alan Greenspan and Ben Bernanke. Its principal concept was based on the idea that free markets best allocated resources in an economy and that minimal government intervention was best for economic prosperity. Thus, by extension, the only purpose of corporations was to maximise profits.

It reminded Pat Wolfe of what he had been told by his lawyer back in the 70's when setting up a company in Luxembourg. Pat had fumbled his reply

when Maître Tresch asked the routine question as to the object of the company.

'Mr Wolfe,' announced Tresch, pronouncing the w like a German, and wearing a deadpan expression, 'there is only one objective of a business entity, and that is lucrative, otherwise you need a non-profit making association or a foundation.'

Pat Wolfe, one of the close circle of friends that formed the Clan, never forgot the lesson. Profits, profits and profits. The rest was window dressing, and anyone who got that wrong was in for a shock. It was the iron law of capitalism.

The growth in the size and numbers of those transnational entities in London had progressively dissociated a large part of the City's business from the mainstream of the British economy. The City was the centre of a globalised capitalist system, where much of the capital it controlled was not owned by the British ruling classes or the institutions they had traditionally controlled.

The British ruling classes, once great capitalists with national, imperial and global interests, had been replaced by global capitalism, controlled by galaxy of offshore institutions, vehicles or whatever, including—sovereign wealth funds, transnational pension funds, hedge funds, multinational corporations, and mega-rich individuals, to mention a few, without dwelling on the many forms of tax avoidance structures, corrupt and criminal organisations, not forgetting a broad spectrum of dictators and the like with their families.

Today, London was a centre where world capitalism conducted its business, not where British capitalism conducted the world's business.

International capitalism was found wherever one cared to look in the UK, the nation's main airports owned by Spanish investors, the automobile industry sold off to German and Indian businesses, utilities like water, gas and electricity own by foreign investors, nuclear power plants built by the French, civil aircraft built by Airbus, jet fighters built by international

consortia, aircraft carriers with French technology, wherever one looked it was the same story.

Brexit was part of a malaise, a weak state and the state of the political parties that had governed the UK for more than a century, through two world war, the Cold War, the collapse of the USSR, the UK's accession to the EU, and now the misguided exit under the troubled leadership of those same political parties.

They had overseen the slide of British economy, the transformation of a great industrial nation to that of a second rate power, dithering and blundering decisions, short-term gains, both financial and political, oblivious to the pain suffered across a region that had once been the industrial heart of an empire and now to a large extent an aided rust belt, whilst the powerful and the governing elite ran the City and sought to turn the UK into a low tax zone, like a larger version of Singapore or Hong Kong, on Europe's doorstep. One journalist described the political vision as that of a delusional, revivalist, banana monarchy.

Amongst the City of London's best performing businesses were the major oil companies, the leaders in carbon emissions, fossil fuels were their raison d'être, though they now projected a green image of their shift to renewable energies. Reality was very different, from Petronas in Malaysia backing Formula One and Motorcycle Grand Prix racing, to Exxon's huge developments in Mozambique. The oil companies would be pumping out oil and gas for the next half century at ever increasing rates, exactly as BP's annually published previsions for the future announced.

The facts were there, the 20 biggest oil producers had no other serious ambition than to produce more and more hydrocarbons, opening new fields in virgin territories—the jungles of Amazonia, the Siberian Tundra, the Artic and Africa, and fracking in many developed countries.

The biggest emitter of greenhouse gases was Saudi Arabia's national oil company, Aramco, which had been responsible for more than 4% of all emissions during the period between 1965 and 2017.

Such state owned companies, few of which were well-known to the general public, with the exception perhaps of motor sports sponsors like Petronas or Petrobras, were part of the vital economic development plans of many developing countries and their peoples through the exploitation of fossil fuel reserves

Collectively these companies now accounted for the production of more oil and gas than privately owned energy corporations such as Exxon, BP and Shell.

The value of the world's production of oil and gas in 2019, was nearly 90 trillion dollars. That's 3% of the global economy and only covering the value of oil and gas pumped from wells. After shipping, refining, advertising, sales and distribution that figure rose to over 5%.

New economies were not only driving the demand for oil and gas, they were also emerging as major producers, especially Brazil, Russia, India and China, all of which had little short term interest in forgoing the benefits of the revenues from fossil fuels or their use.

There were a few exceptions like Norway's Equinor, but only small rich countries like Norway could afford the luxury of a greener vision of the future

Feeding the teeming billions was more important than how they would die, and besides there were more mouths where they came from, those billions that fed the egos of power hungry leaders and national prestige, in a world where numbers still counted.

It was not a passing lack of accountability, it was realpolitik in a dog eat dog world.

Indian and Chinese leaders never failed to mention their 1.4 billion strength, size counted on the geopolitical chessboard.

Enlightenment would only come through development and development would only come from economic force—driven by energy, and fossil energy

would be the only low cost easily accessible source of power for decades to come.

The finger pointing blame game was a luxury that only the rich and well informed could afford to play from their comfortable armchairs.

Without the production of Saudi Arabia's Aramco, Russia's Gazprom and the National Iranian Oil Company, the government's of those countries would be broke, which was almost the case of Iran following the sanctions imposed by the US.

Today, OPEC countries accounted for an estimated 90% of known reserves and produced nearly half of the world's oil and gas, those countries were beyond the influence of Save the Planet campaigners, and their role would grow in the close future, for the simple reason their national governments' revenues depended to a large degree on the royalties derived from their continued production of hydrocarbons.

The strategies of those companies were shrouded in a thick veil of national secrecy, whilst their commitments to the Paris agreements were nothing but empty promises, but the same could be said of the major Western oil companies, whose real objectives were hidden behind an opaque screen of green fumistry designed to confound their enemies with promises of a transition to cleaner energy. Asking desperate governments, like that of Venezuela's Madura regime, for transparency, beggared belief considering they were supported by equally doubtful friends, notably Russian and Iran, making change an extremely difficult task.

Continuing on the same path only brought the what scientists called the Sixth Great Extinction closer. If the tragedy were a fiction, it would require the efforts of Batman, Superman and Captain Marvel combined, to turn the tables and save the planet from the forces of evil that were plotting its destruction

John recalled how we were all conditioned by self-interest, and by extension national interest. We consumed fossil fuels to generate our electricity, fill the tanks of our cars, kerosene for the planes that transported

us to the sun, diesel to drive the harvesters that gathered the grain to feed the animals that put the food on our tables whose dejections produced the methane that contributed to global warming..

Even if climate change was invisible to most people, environmental pollution was everywhere, as Liam Clancy discovered when he visited Delhi eighteen months previously. It was sad to say, humanity and its numbers were the victims and at the same time the source of the problem, everywhere, from mindless overconsumption in the great cities of the developed world, to Delhi's overcrowded miserable third world slums.

* * *

Liam's first visit to India hit him like a shock and not merely psychological, it was also physical, starting with his eyes, smarting from the pollution, then his nose, followed by an irritation that picked at his throat. He recalled how his driver had struggled to advance through a tangle of vehicles under the metallic blue haze that hung over Delhi like a leaden dome. After an impossibly long journey from the airport the driver announced they were finally approaching the hotel which lay in the heart of New Delhi.

Liam despaired as he observed cows ruminating on the central separation of the Outer Ring under the Nehru Place Flyover near Kalkaji Mandir metro station. They crawled past the so-called residential colonies and enclaves with their leafy streets and upmarket low rise apartment buildings, some unfortunately facing the polluted ring.

The wooded avenues perpendicular to the ring in the Safdarjung Enclave in South Delhi and Green Park were the homes to vast multimillion dollar residential complexes that formed a startling contrast with the dwelling places formed by greasy tarpaulins under the footbridges.

Liam like the rest of the Clan was booked into the Imperial nearby to Connaught Place. Built in 1931 it was an elegant colonial style hotel, from where, according to John, they could easily visit the many historical sites of New Delhi.

The luxury of the hotel was incomprehensible when he observed the huddled masses of poor, dirty, grimy, children, young mothers with infants in their arms, begging on the ill light pavements of Delhi, or on construction sites, all breathing the poisonous fumes produced by the monstrous snarl of traffic chaos, in a country that planned to put a man into space and bought advanced jet fighters to ward of its real or imagined enemies.

In spite of that, or because of that, India could boast an impressive growth rate of 7.5% as it plunged into a catch up race with China.

The recurring questions asked by visitors to India was that of the advantages or disadvantages caused by a couple or more centuries of British colonisation? The traces of which were still visible. Of course the rule practised by all civilisations was always to the advantage of the coloniser, from the earliest civilisations to the start of the 20th century, and Britain's colonisation of India was no different.

During the long period of British rule in India, per capita income stagnated and industry collapsed, at the same time little was done done to eliminate recurrent famine and widespread disease.

Be that as it may, it is worth remembering that under the Mughal Empire, which the British replaced, the population stood at 160 million in 1700, that now stands at 1.4 billion, which is an entirely Indian feat, as is the number of cows, estimated to about 300 million, contributing more to global warming than the vehicles the animals obstruct

Perhaps the Brits should claim reparations and apologies from Rome for five centuries of colonisation that led Europe to the dark ages.

Or, better still, seen from the standpoint of Liam and his friends, Irish men and women, why shouldn't Dublin claim compensation from London for 800 years of occupation and oppression by the English crown.

That was a philosophical question and in Delhi, on that particular day, their immediate concern was shopping—for clothes, the dress code included saris for the ladies, sherwanis for the men, and churidars for both. In the meantime they all headed off on a joyfully exotic shopping spree seated in a luxury air-

conditioned people carrier, its smoked windows to hide them from the wretched street dwellers. Pat O'Connelly compared themselves to bloated overfed aliens visiting another world, gawking out at street urchins making back flips, their faces painted with large princely black moustaches, once an indicator of social class, at a time when untouchables were forbidden facial hair

Even in developed countries the evidence was everywhere, for those who looked a little closer, in the form of garbage incinerators, which had not existed in the days of their grandfathers when packaging and waste were on a much more modest scale. One only had to look at the freeways, motorways, autobahns, autoroutes and autopistas, overflowing with endless convoys of heavy-goods vehicles carrying products in each and every direction on the pretext of free trade.

Pat Wolfe remembered the first motorways in England, almost empty of traffic. He also remembered garbage collection, mostly waste food—potato peelings and the like, with almost no packaging. Waste paper and old clothes were collected by rag merchants for recycling.

It was another world, not as beautiful or happy as that of Steven Zweig, but nevertheless a world of yesterday.

* * *

The Fitzwilliams Foundation prided itself on its independence, unlike certain others, those funded by the oil and petrochemical industries that paid biased scientists and researchers to publish alternative theories that scorned environmental change.

BP was more open in that its published forecasts spoke of the change from fossil fuels to renewable energy—nothing very new, but it did predict fossil fuels would continue to be the driving force supplying the world's energy needs for the foreseeable future, and since the demand grew, due to increased living standards and population growth, the needs would continue to grow at a faster pace, consuming even more coal and oil, and though the percentages varied slightly, the result was an enormous demand including that for coal,

especially in India and China in absolute terms. That information was publicly available, for anybody with an internet connection, from BP—the horses mouth

Pat Kennedy's friend Bernard Looney, a fellow Irishman from Kerry, was CEO of BP, and his energy company's reports were clear, barring a Black Swan event, or an extraordinary breakthrough in science, oil and fossil fuels in general would continue as the primary source of energy for decades to come

The chances of achieving the objectives agreed at the Paris conference were almost zero, unless existing fossil fuel consumption was halted, a pipe dream, given the energy companies intention to accelerate production and investment. According to their own estimates those same companies would spend some five trillion dollars over the coming decade for the development of new reserves of fossil fuels.

The United Nations body, the Intergovernmental Panel on Climate Change, was founded with the goal of providing the world with an objective, scientific view of climate change, although it did not carry out related research or monitor climate itself, instead it reviewed published scientific reports produced by leading climate scientists, to provide governments with objective views of climate change, in order that they consider the risks related to natural, political and economic impacts.

However, there were many critics, more or less objective. Some said the risk was exaggerated, other said it was understated, certain criticised the methods, but whatever the viewpoint, the evidence of a dangerously over polluted planet was visible for all to see, and largely due to over population.

Overpopulation together with the exhaustion of readily available resources had been at the root of the downfall of many past civilisations, which John described as self-destruction. It was as though a natural built-in timer cut in, as it did in all species, whenever uncontrolled growth occurred, like lemmings running over cliffs.

To a certain degree climate change had become a political plaything, as political leaders vied to be greener than green, an effect that was visible at the UNFCCC's Paris Agreement in 2015, where IPCC's Fifth Assessment Report was central in the discussions.

The needs of humanity were such that the objectives of ecologists were impossible to meet. One only had to look at the privileged elite, that one percent of the world's population, very vociferous when it came to giving lessons, but who spent a good part their time jetting between continents on business, or to homes far from the unwashed crowds. John Francis was the first to admit the Clan was amongst the growing number of the mega-rich who saw the use of private jets as part of their daily lives. They had become addicted to their jets as others had to their iPhones.

Private jet travel for the rich, celebrities, entertainers and those who ruled the world of business and finance, had become an indispensable accessory, even if they produced up to 40 times as much carbon per passenger mile as regular commercial flights. The demand for new private jets grew at a phenomenal pace, some 700 new aircraft a year, a huge market worth 250 billion dollars over the decade to come.

Like those of Pat Kennedy's Clan, the rich could fly from Hong Kong to London or Panama non-stop, in comfort with work and sleeping spaces for passengers and crew.

Private jets had become the new status symbols of oligarchs and their like, as had yachts and mega-homes.

Men like Pat Kennedy travelled by jet almost weekly, clocking up many hundreds of thousands of kilometres each year in their planes, which were often like second homes, generating 1,600 tons of carbon annually.

Capitalism, consumerism and growth were driving the planet. Long live capitalism. Communism was dead. Russia, China and their satellites—with the exception of Cuba and North Korea had seized on consumerism to drive their economies to satisfy, pacify, the masses, and in the case of China theirs was a remarkable success, flooding the world with manufactured goods,

transported by road, rail, sea and air. Consuming vast quantities of steel, aluminium, copper, fibres, plastics and oil in the form of fuel and petrochemicals, to build factories and manufacture throwaway goods, to produce energy and fuel transport, to build infrastructure, roads, bridges, railways, seaports and airports.

Growth, growth and more growth.

It was a never ending process with banks and investors providing credit for profit and so perpetuate the cycle, to fulfil the promises of politicians and leaders, contributing to the gathering storm that threatened to submerge the planet under a mountain of plastic, enveloped by a pall of poisonous gases, bringing climate change nearer and nearer, faster and faster, ecological breakdown and the collapse of civilisation as we know it.

Wishful thinkers thought it could be stopped, but John Francis was convinced it was like Topsy. For him the Extinction Rebellion was a nice salve for well-thinking public figures and concerned middle-class activists, but could the world's poor and hungry be sacrificed on the altar of a righteous ecological movement.

Capitalism was like the rogue elephant, in the disguise of fossil fuel, and like Topsy, it would require a powerful and terrible electric shock to put it down.

Evidence had shown that fossil fuel companies represented one of the principle driving forces of environmental collapse, and knowingly so, given the relentless growth of the world's oil, gas and coal consumption, unequivocally linked to every aspect of the pollution that threatened the continued existence of modern society.

Since 1965, the top 20 companies have been responsible for 35% of all energy-related carbon dioxide and methane, 480 billion toxic tons.

In addition to the well-known household names, were Aramco, the Saudis national oil and gas company, and Gazprom its Russian equivalent, the world's two biggest producers of fossil fuels, the principal earners of the dollars that kept their countries afloat, which in the interest of maximal production overlooked costly environmental issues.

Activists hurried to point out that humanity was now paying the price for these polluters, but they always omitted to say humanity had benefited from a century of remarkably cheap energy.

If at the beginning of the 20th century, a satellite image could have been taken of the earth, it would have shown a dark picture, today as humanity approaches the end of the first quarter of the 21st century that image is different, it shows a bright sparkling world, one where humanity has emerged from the darkness of the past.

But at what price?

One of the Clan, Jack Regan, who had spent his life in the engineering business, told Liam, how each barrel of oil generated the same amount of energy as the physical effort produced by the man pulling their rickshaw—for the equivalent of 40 hours every week, for three years, that is to say 6,240 man hours of hard physical effort.

The market price of that barrel (160 litres) at the time of writing was 60 dollars, that's 20 dollars a year for their Delhi rickshaw driver, less than 40 cents a week, one cent an hour. It didn't require a rocket scientist to realise their rickshaw driver, living in Delhi would be dead from starvation after a week or so with that kind of wage, given the food budget for one person per week was 25 dollars, in a city where uncooked white rice was priced at 40 cents a kilo.

The fact was never in human existence had men possessed such abundant cheap energy, which rendered brut muscle force valueless, and as long as fossil fuel remained so cheap and abundant it would not be replaced. It was why the hand pulled rickshaw had disappeared, it was why we had abundant and affordable food, heat, light, transport and clothing. It was why big fossil energy corporations were not about to go out of business, especially when the world's demand for oil and gas was almost insatiable, and until that

changed, the energy industry would continue to invest in the production of those fuels.

The progress of new alternative technologies was slow and would continue to be slow, because of high investment costs, and, the low price of conventional fossil fuel, which had proved to be much more abundant than imagined a couple of decades back when pundits forecast a 'peak oil' scenario, an event that had been consistently pushed forwards to a future horizon. At the same time prices, measured in constant dollars, had, apart from a few spikes, remained cheap, and as a result the world had stumbled into the trap of addiction, the unlimited supply of cheap energy, which was suddenly eating into the lungs of the planet like a growing cancer.

Objectively, like all addictions, tobacco, alcohol and drugs, it was the quantity that did the damage, not the harm caused by one man's needs, but that multiplied by billions of human beings and the animals that lived with them.

A WALK IN THE PARK

JOHN, AS HE TOOK HIS TWO CHILDREN on a weekend walk across the river in Battersea Park, realised for the first time in his life, and very tardively, the meaning and pleasure of parenthood, a simple and natural pleasure that all human beings could experience. Hadn't the rest of the world the right to do the same? Of course, but population control didn't mean no children, simply less he reasoned.

Ekaterina had already left for South America with the others, that is Camille and Anna, 'trailblazers', said Pat, to reconnoitre the selected sites and make the preparations for Kyril's film, which according to John's mind, was an adventure trip into the Amazon.

John had encouraged Anna, she deserved a break from her gallery, especially as it was now running smoothly. She had engaged a young Finnish au-pair to care for the children, Matilda, who spoke fluent Russian and excellent English, though the latter was with an American accent. Matilda was also from a Russian Orthodox family, as were a minority of Finns, not that she was religious in any special way, but Ekaterina felt it was part of her own culture, something she wished to pass on to her children, even though she had not much time for the popes of the Orthodox Church.

The Amazon was ecologically fashionable, making the headlines, with Greenpeace accusing commercial forestry and big agribusiness companies of 'destroying our children's future by driving us towards climate and ecological collapse'. They spoke of transformative changes in agriculture, words that had little meaning in the villages of Amazonia, the Philippines, Indonesia or the Congo.

Whose children? Ours? Theirs? Brazil's? thought John looking at the blond locks of his own two children, Alena was twelve, her brother Will nearly three—who was happily waving at the birds from his stroller, pushed by Matilda.

Greenpeace as usual spoke of urgency, crisis talks, but never mentioned population control policies, there were always two discourses, the good and the bad, one for the rich and the other for the poor, John thought. He was one of the rich, the very rich, very privileged, but he also enjoyed the simple pleasures of life, a relaxed Sunday with his children.

How many Africans could enjoy such a simple pleasure, those whose lives consisted of grubbing the earth for their next meal.

John was sure the world was on the brink of tectonic change, he had asked himself what would happen when the poorer two thirds of the world's population started to consume resources at the same rate as the richer countries, something that was already happening. A simple glance at China's development over the previous three or four decades was telling, as more meat, fish, oil and gas, together with all the other resources were consumed to sustain its population as they pursued growth through industrial output.

If the poorer populations were to consume as much as the rich, then the resources needed would have to be multiplied by five, the equivalent to a population of more than 30 billion. It was what scientists called the Anthropocene conundrum, survive or bust!

The problem lay in the fact that modern societies taught those who lived in them to strive for more, be winners, not losers. Unless the loop of consumer capitalism—never-ending growth, ever-rising production, non-stop consumption, and an endless stream of mouths to feed, was broken, the planet would inevitably strike back, wreaking a terrible vengeance on humanity, one that would vie with that of the Book of Revelation's seven plagues.

The world needed another model. John had his ideas, Cornucopia, one that was more egalitarian, where the distribution of wealth was shared in a

workless society where procreation was a reward for positive contribution to the community.

That was John's theory, an elite, followed by a mass of happy obedient citizens, content with enough—not more, free of drudgery, happy to exist with what wise deciders chose for them, consuming less energy—wind and solar power, a brave new, but smaller world, regulated by AI. Why not? Yes, why not, but the route would be hard and filled with perils. A revolution, a transformation of the society we know, a new concept of work, or non-work, consumption, or non-consumption.

Such ideas were anathema to mainstream political thought and economics, to boot brave new world ideas were seen as anti-libertarian concepts, the stulifying of the individual.

How the collapse of society as we know it would come about was both easy and hard to predict—war, economic collapse, revolt, social disintegration, disease, cataclysmic natural disaster, the rise of AI, or a combination of all

But would the end come in a catastrophic event—a Vesuvius-like explosion spewing hot ash and sulphurous fumes over Pompeii, or a slow decline—like that of the Roman Empire?

THE INCAS

THE POPULATION OF THE small city of San José del Guaviare was some 20,000 or so souls. It was the capital of the Department of Guaviare and lay on the south bank of a broad and winding river of the same name. To the north, it was connected by road to Bogota, to the south, across grasslands and sparse secondary forest, to the village of Calamari, beyond which the unsurfaced road went nowhere, fanning out into narrow trails that were swallowed by the vast forest of the Chiribiquete National Park. The department covered over 16,000 square kilometres, the home to de-isolated groups of the indigenous Nukak people.

It was the first location for *Indians* advanced production team, who set up their base in a lodge on the south edge of the town, put at their disposition by the national park authorities for the duration of their stay.

The next day after an early breakfast, the small group led by Ernesto Montaldo, gathered before the lodge. There was Matt Halder, Alfonso, Kyril, Anna, Camille and Pat O'Connelly, accompanied by two park rangers. After a few moments three rather rugged looking slightly worn Toyota Land Cruisers pulled into the driveway of the compound, Ernesto gave the signal and they climbed in and the small convoy set off.

Their plan for was to reconnoitre a site near Nuevo Tolima. Ernesto had selected three sites, all located within a couple of hours from San Jose. The first and the closest lay just 25 kilometres or so to the south-west, which he suggested could set the scene for the introduction to *Indians*.

At Serrania la Lindos the road bifurcated onto an unsurfaced trail past rock formations called Ciudad de la Piedra, turning right they continued until they reached their destination, a protected archaeological site.

They left the Land Cruisers with the drivers and continued on foot to the Mesa that towered above them, following behind Ernesto they made their towards an area of denser vegetation that concealed the foot of the cliff. There they climbed a steep and narrow slope until they reached a natural shelter under the rock face, where raising their heads, their eyes met with an astonishing panorama of ochre glyphs spread over a wall 30 metres long and 10 metres high.

The enigmatic glyphs depicted vampires, snakes, birds, tapirs, jaguars, dancers and hunters in a variety of graphic styles, stick characters, barely sketched silhouettes and almost lifelike figures, which according to Ernesto, were the works of several different cultures, extended over thousands of years, some of which on surfaces that had been plastered over and reused many times.

Ernesto explained the work was that of a culture, or cultures, that had existed in distant prehistoric times, but most surprising was the knowledge that the descendants of those same peoples still lived in the same forests.

They were peoples whom Jair Bolsonaro described as being like '... prehistoric men with no access to technology, science, information, and the wonders of modernity.' He went further by adding, 'Indigenous people want to work, they want to produce and they can't. They live isolated in their areas like cavemen.'

Perhaps that was true, but it shocked a certain number of people, who may or may not have been familiar with the needs and wants of the indigenous peoples.

It was certainly true that hundreds of thousands of the forest peoples continued the way of life they had lived for millennium, and it was not for outsiders to criticise them. On the other hand, many of them wanted the gifts, toxic or not, of modern civilisation, and that was their choice.

Most Americans and Europeans knew as little of Brazil as its leader knew of them, as one journalist remarked, Bolsonaro had never heard of Boris Johnson, so what! What Brit had heard of Bolsonaro before his election as leader of the fourth largest nation on earth.

* * *

That evening after an early diner, Anna sat on the veranda of the lodge watching the lights of the passing cars on the road beyond the compound, when a muddy SUV turned into the driveway and pulled up before the lodge. An old man stepped out, spotted Anna and made his way to the veranda.

'Ruenas noches'

His Spanish would have sounded local to the others, but Anna detected an accent. He introduced himself as Rudi Dietl and announced he'd learnt of Matt Halder's arrival in San José.

As they spoke Matt appeared and hearing Dietl speak recognised a fellow German and presented himself.

'Halder,' he said formally holding out his hand.

Dietl replied the newcomer with equal German formality.

They shook hands and Matt invited him to join them inside where it was cooler. Dietl gladly accepted and followed them to the lounge where a waiter served them cold beers

Dietl introducing himself as an ethnologist, formerly with the Max Plank Institute, now studying the language and traditions of the Nukak people.

The Nukak, he informed them, was a group of hunter-gatherers, who numbered around 500, living in small groups between the Guaviare and Inirida rivers, in south-east Colombia, who had avoided almost all regular contact with outsiders. They made headlines as an unknown people when a

group of about forty of them emerged from the jungle one day at Calamar, a settlement not far from San José, carrying their blowpipes and darts coated with curare manyi, a poison made from plants.

Matt asked him if would like to meet Ernesto, who at that moment was tied up on some other business in San José.

'No,' Dietl replied a little hastily.

'Would you like to help us?' he asked more carefully, sensing a problem.

'Naturally,' he replied, then adding cautiously, 'there is something else, something I'd like to keep between us.'

'I can leave you together if you prefer,' Anna offered.

'No, no, please, you may be of help.'

Looking around as if to assure himself they were alone, he placed his woven shoulder bag on the table. Then carefully withdrew a small dark green stone object, which he announced had been given to him by one of the Nukak men, it was a kind of flute.

'Carved out of lydite,' he said, 'a kind of stone. It was found in an area called Serrania la Lindos '

'I see, that's near Nuevo Tolima,' said Anna.

'That's right.'

'Does this have any particular significance?'

'Well, it's very strange. Firstly, it's a valuable archaeological object, secondly, there's no reason for it to be here, in this region, I mean Serrania la Lindos, which is about 15 kilometres from here, or anywhere else in Amazonas for that matter.'

'It's not my field,' Matt said looking to Anna.

'Perhaps it was brought here,' she volunteered taking the box shaped flute in both hands. 'Looking at it, I'd say it's pre-Columbian, definitely not from here. If I remember rightly, lydite is very hard, difficult to carve, to make holes like these,' she said pointing to the neat holes in the flute.

'Do you know exactly where it was found?'

'Not precisely.'

Anna, as an archaeologist, knew that the most important factor relating to a find was its horizon, knowing precisely where an object was discovered, its context with the site

'Have any other objects been found?'

Dietl looked uneasy, hesitant. Then he seemed more determined.

'First,' he said glancing around again, 'I would like your word this information will be kept secret. If ever word got out the site would be flooded with looters and black marketeers, those who feed the international black market with stolen pre-Hispanic treasures. Here, you have to remember, was a war zone until very recently. Arms are everywhere, with people who know how to use them.

'It's why I don't want the Institute of Anthropology in Bogota involved, at least for the moment.'

They nodded their approval, even though Anna thought to herself that would be complicated

'I'm counting on your word,' he said hesitantly, then, fumbling in his shirt pocket, he pulled out a small plastic envelope. He carefully withdrew a small wad of tissue paper and unfolded it.

Inside was a small object. At first glance it looked like the cap of a beer bottle. He placed the open wad on the table, then leant back into the rattan armchair

Anna and Matt leant forward. There in the folds of the paper lay what looked like a gold medallion with a raised warrior-like figure in the middle surrounded by a circle made of small pieces of turquoise.

They hesitated, then Anna gently pressing on the edge of the paper flattened it for a better view.

'Beautiful.'

'Who made it?'

'That I don't know, but it was found at the same site, Serrania la Lindos, in the ground.'

'What is it?' asked Anna.

'At a guess I'd say it was an earring, probably Peruvian, pre-Inca,' said Scott Fitznorman, who appeared behind them, startling Dietl.

'Don't worry,' Matt reassured the old man with a smile, 'Scott's one of us.'

Dietl was not reassured and quickly picked up the earring.

'Please, I promise no one else will be involved, but Scott Fitznorman is one of our specialists, you can trust us,' said Matt quickly, adding, 'Anna, make sure no one else comes out.'

Dietl hesitated a moment, then replaced the earring on the table.

'Possibly from the Moche pre-Inca period, that's in Peru, about a thousand kilometres west of here.'

'Moche?'

'A civilization that flourished in the coastal valleys of northern Peru, when Rome ruled the ancient world of the Mediterranean,' said Scott.

'A civilisation,' murmured Anna, 'sometime between 100BC and AD700, which, if I remember rightly, was succeeded by the Chavin and then the Chimu civilisations'

The Moche had flourished in what is today the Peruvian Department of Lambayeque, where thousands of archaeological sites have been discovered. Their most famous pyramid, the Huaca del Sol, the Temple of the Sun, in the Moche Valley, was built with 130 million bricks, moulded from four million tons of clay, comparable though not as old as Cheops, on a site of six hectares

The Moche developed their art with an extraordinary degree of styles, with naturalistic and brilliant murals, ceramics, and metalwork, making their civilisation one the most resplendent in the pre-Columbian world.

'But what's it doing here?' asked Anna pointing to the earring.

'Trade or something like that,' replied Scott, 'the Moche would have travelled into the tropical rain forests for all kinds of exotic goods that didn't exist in their desert kingdom, animals like boa constrictors, jaguars, parrots, toucans, and monkeys, some of which figure on Moche ceramics and jewellery.'

'With whom did they trade?'

'Well as we know,' said Scott, 'from recent archaeological discoveries, parts of the Amazon rainforest, believed to have been uninhabited, had been home to a long gone civilization, buried and forgotten in the overgrowth of the jungle.'

Dietl nodded in agreement.

Scott explained how Pre-Incan civilisations built settlements on the fringes of the forest, parts of which were colonised, as was evidenced by traces of mounds, roads and what appeared to be ditches, which, thanks to satellite images, confirmed extensive pre-Colombian settlement dating back 3,000 years or more. 'They would have certainly been in contact with the people of

the forest, who supplied them with goods in exchange for pottery, stone artefacts and jewellery,' he surmised.

Archaeologists believed as many as one million people may have lived in those settlements and what is seen today as primary rainforest is in fact abandoned cultivated land, not visible on the ground.

Many of the settlements were strategically built, fortified enclosures, earthworks and geoglyphs, marked by megaliths, evidence of flourishing communities and the sanctuaries that they used to observe the stars, determine seasons, civic and ceremonial centres, as in other known ancient civilisations

Beneath the dense vegetation of the Amazon forest, pottery shards, charcoal and other objects were found, the vestiges of distant peoples.

These discoveries caused archaeologists to re-examine preconceived ideas of the Amazon being a vast empty quarter, empty of the human species that is. On the contrary between the settlements and the forest many millions of people lived across the vast region, undoubtedly exchanging goods with the peoples of the Andes to the west and to the north.

'What happened to them?' asked Anna.

'Well the Mochicas lived in the north of Peru on the arid Pacific coast. There they dug canals to irrigate their crops, built palaces, temples and huge adobe pyramids,' Scott hypothesised. 'It was dry, very dry, and it was certainly climatic fluctuations that destroyed the delicate ecological balance that sustained their way of life.'

Their territory spread through the valleys of the Jetepeque Lambayeque rivers, where Sipan and Pampa Grande are located.

They developed copper metallurgy and metalworking of which some magnificent examples had been found in the tombs of their rulers, including that of the Lord of Sipan, discovered in 1987, by the Peruvian archaeologist Walter Alva, the spectacular hoard of golden treasure rivalled that of Carter and Carnarvon's in Egypt. The Mochicas mastered the techniques of rolling,

gilding, embossing and casting, and that of alloying metals—gold, silver, copper, lead, tin and even mercury.

Those early civilisations evolved into the Incas, whose empire covered Peru and what is now Ecuador. The former a vast country twice the size of Texas and two and a half times greater than France.

More than half of Peru lies to the east of the Andes in the western Amazon basin, covered by dense forests, where just 5% of its present day population lives

From their capital, Cusco, the Inca, ruled some 10 million subjects, speaking over 30 different languages. It was a rich city of 150,000 inhabitants, where the pyramidal temples were covered in gold and precious stones, a sight that astonished the first Europeans who marvelled at its architecture and riches. Their empire was covered by a network of roads totalling more than 40,000 kilometres in length.

The above image is an impression of the last Inca Emperor Atahualpa in his regalia, who was captured in the Battle of Cajamarca in 1532. Atahualpa was later executed in Cajamarca on the order of the conquistador Francisco Pizarro. The following year the Spaniard entered and occupied the imperial capital of Cusco and sealed the fate of the Inca Empire.

* * *

Peru was also the home to the oldest city in the Americas, the Sacred City of Caral-Supe, the foundation of which dated from 2500BC. The vestiges of the city lies 350 kilometres to the north of Lima, in the Supe Valley, near the Pacific coast. It was first surveyed in 1905 by a German archaeologist, Max Uhle. However, it was not until several decades later did a full-scale archaeological excavation take place, which revealed a vast city complex.

The natural formations that mark the site are in fact stepped pyramids, the seat of a complex society with its ritual edifices. In 2000, carbon 14 analysis revealed that Caral dated back to around 3000BC

South America and lost civilisations had attracted explorers and adventurers for centuries, in search of the mythical city of Eldorado, starting with the Spanish. In more recent times it was an Englishman, Colonel Percy Fawcett, who ventured into the Amazon forest in search of 'Z' a legendary lost city, which he believed existed somewhere in the uncharted depths of the Mayo Grosso.

Fawcett disappeared without a trace, never to be heard of again, leaving behind one of the great exploration mysteries of the 20th century.

He called the Amazon, 'the last great blank space in the world' and made several exploratory expeditions into its uncharted territories, starting in 1906. His exploits made headlines around the world, and in 1916 the Royal Geographical Society awarded him its prestigious Gold Medal for his mapping exploits in the Amazon.

Fawcett was fascinated by a Portuguese fortune hunter's 1753 account of a stone jungle metropolis of great size and grandeur, and little-by-little became obsessed with seeking out his modern day Eldorado, which he called the city of 'Z.'

In 1925, Fawcett was 57 when he set off with his son into the unexplored Mato Grosso in search of Z, accompanied by native guides and pack animals. Forging through the jungle at 15 to 20 kilometres a day.

His last despatch was dated May 29, 1925.

Some said he was dead, others claimed he had gone native and was living in the jungle, or that he was being held prisoner by a tribe of cannibals along the Xingu River.

In any case he disappeared without trace never to be heard of again.

THE HOUSE OF THE GODS

IT WAS LATE MORNING when the low clouds lifted and a cluster of monolithic tabletop mountains emerged from the emerald green canopy of the jungle.

'Tepuis,' announced Diaz, 'that's what they are called by the Indians, the house of the gods.'

The formations stood 550 metres above the floor of the equatorial forest, 800 metres above sea level, with almost vertical cliffs, topped by a savannahlike vegetation, a unique biotope.

It was under their sheer rock faces the first hunter-gatherers to arrive in the region left their trace with one of the greatest concentrations of cave paintings in the Americas. Some 75,000 Palaeolithic paintings, covering the facades of the caves and niches in the rock, 100 metres above the forest.

'Their discovery made anthropological history,' Diaz told them.

After a march along a jungle trail, enveloped by an astonishing array of flora and fauna, they reached the foot of the rock face. It took another half hour of effort to climb to the shelf, where pausing to get their breath, they discovered the spectacular prehistoric panorama of paintings that decorated the Cerro Azul. A dense and varied mural composed of ochre figures—men, animals and plants, almost 100 metres long and 20 metres high, painted by Neolithic man.

As they watched the monkeys swing through the canopy in the jungle below, they realised nothing had changed since the time when those ancient men had painted the same kind of monkeys on the rock face. The figures and handprints reminded HG of the paintings she had seen in so many other places, messages from forgotten worlds, where men had lived in harmony with nature.

Thirty years had passed since Carlos Castaño-Uribe, an anthropologist of the Universidad de los Andes and his companions discovered them. At that time the war with the Farc raged and any further expeditions were impossible.

Since the peace agreement with the Farc, the risks were of a different nature, the invasion by big business, and according to Diaz, the pressure caused by the general colonisation by landless campasinos, which he told them promised an apocalyptic future for Colombia's national parks, the habitat of the indigenous peoples, and their treasures.

Kyril was marked by the extraordinary similarity not only with the rock paintings in France, but also those of South Africa, Libya and Indonesia where the latest discoveries included a limestone cave on the island of Sulawesi, where paintings showing human figures hunting animals were dated back 44,000 years.

The images of the Cerro Azul depicted a group of part-human, part-animal figures, known as therianthropes, hunting tapirs, sloths, capybaras, herons, monkeys, turtles, sting-rays, deer, and what appeared to be giant sloths which were believed to have already been extinct 11,000 years ago, as well as the enigmatic representations of what were believed to be spears or ropes.

The Sulawesi examples of human and animal interactions dated from the Upper Palaeolithic and predated those of Europe by 20,000 years. Sean Cinnsealaigh, from Maynooth University's Department of Anthropology, in Ireland, explained the theory that the painting of anthropomorphic creatures suggested an ability to imagine the supernatural.

The rock paintings recalled those Scott Fitznorman had seen in the Lubang Jeriji Saleh cave in the East Kalimantan province of Borneo, depicting wild cattle, painted with ochre, one of which seemed to have a spear protruding from its flank

Borneo's rock art included thousands of paintings in limestone caves, which were first described by a French explorer, Luc-Henri Fage, and dated to around 40,000 before present. In addition there were the ubiquitous hand stencils, made by spraying ochre paint from the mouth over a hand pressed against the wall.

A uranium series analysis was used to fix the date on the calcite crusts formed over the oldest paintings in Borneo, which bore a remarkable resemblance with those in Brazil, when Palaeolithic man started depicting his world

It confirmed the idea figurative art had emerged in South America at about the same time as it had in Southeast Asia and Europe—where the walls of the Chauvet caves in Ardeche, in France, were covered with charcoal images of horses and rhinos, about 30,000 years old.

The oldest rock art found in Spain was associated with Neanderthals, at Caceres, and dated by a uranium-thorium method to more than 64,000 years ago, whilst in South Africa a piece of rock was found bearing an ochre geometric form estimated to be 73,000 years old.

* * *

Human beings evolved in a broad ranging habitat where the climatic conditions generally remained within a relatively narrow temperature band. Over time Neanderthals adapted to extreme cold in Europe, whilst in Africa man adapted to a warmer climate. It was in fact easier to survive the cold than extreme heat and humidity once man mastered fire and learned to use animal skins for clothing.

'What determines man's survival when the climate warms,' Kyril warned them, 'is the wet bulb temperature, which measures the combined effect of temperature and humidity, not just the ambient air temperature.' It was a scientific fact, human beings, like all mammals, produce metabolic heat generated by the normal functioning of their bodies. Any surplus metabolic heat was evacuated to the surrounding air by radiation, convection and sweating, which helps us maintain our bodies at a constant temperature of 37°C. If the ambient air temperature is above our body temperature, it stands to reason it becomes more difficult to evacuate heat. That's where sweating takes over, when the resulting evaporation of water cools the body, as long as the wet bulb temperature remains below 35°C.

However, when the wet bulb rises above 35°C and the dry bulb is at body temperature, the humidity present in the air is 85%, and evaporation cannot take place. In these conditions the body temperature rises rapidly and death occurs within a few hours

'This explains why people living in desertic conditions can stand higher temperatures,' said Kyril, 'because the air in that kind of climate is very dry, which means it has a greater capacity to absorb our sweat.'

The danger was greatest in regions, which included North America, Europe and the East Coast of China, where wet bulb temperatures, driven by human activity, were rising fastest, and where, according to research by the American Geophysical Union, by mid-century, all summers would have wet bulb conditions that exceed historical records.

In recent prehistoric times, in certain regions of the planet, such conditions also occurred due to natural and cyclic climatic change, this no doubt contributed to the collapse of early civilisations when conditions became untenable for man, beasts and crops, which was doubtlessly the case on the Pacific facade of South American and parts of the Amazon basin.

* * *

Since 1978 over 75 million hectares of Amazon rainforest had been lost to the chainsaw, in Brazil, Peru, Colombia, Bolivia, Venezuela, Suriname, Guyana, and French Guiana.

'The media has bounced around all kinds of figures concerning deforestation of the Amazon rainforest,' John explained, 'generally accompanied by scare stories of the dramatic effects it could have on the world's climate.

'But, if you look at a map you can see less than half of Brazil is covered by the Amazon rainforest. So you have to be careful. Of course you can see,' Kyril added pointing to a map he'd looked up on his iPhone, 'deforestation is huge, but it is not only in Brazil, look at Paraguay, Bolivia and Peru.'

The rate of loss had in fact declined in Brazil after reaching an annual 27,000 square kilometres in 2004. In 2019 it had fallen to under 10,000 square kilometres, still too much considering the pledges made by governments to reverse deforestation and restore trees.

The plan to stop world deforestation by 2030, was further away than ever, especially in Latin America, South East Asia and Africa, homes to most of the world's tropical forests.

The problem was accentuated by a vicious circle, climate change contributed to the drying of forests and fires, which in turn released more CO₂ and increased warming. In many countries deforestation was caused by charcoal production, rapid urbanisation in Africa had increased the demand for charcoal. In Madagascar, the Caribbean—especially Haiti and the Dominican Republic forests were being destroyed at a frighteningly high rate as populations exploded and their only source of cooking fuel was charcoal. It was Africa's most used source of domestic energy, the charcoal economy was a booming business—tree cutters, charcoal burners, transporters, middlemen, agents and financiers were all engaged in literally chopping down the world around them to feed more and more mouths, with demand expected to triple by 2050.

Deforestation in fact was driven by demographics, food demands, agriculture, cooking needs, which contributed 30% of CO₂ emissions, compounding climate change, a phenomena that would take centuries to reverse.

ANOTHER CRISIS LOOMS

PAT KENNEDY WAS HAVING MORE and more difficulty in shaking off the feeling that Hong Kong's future hung in the balance. It was a question that returned almost daily, not only had the protest movement been riding the tiger, but the demonstrators were putting the territory's future as a financial centre in peril.

Certain analysts were convinced Hong Kong was headed for a financial crisis, and not just any cyclic adjustment, but a fully fledged banking crisis. The same kind of meltdown Ireland had experienced during the financial crisis of 2008, when its major banks collapsed, causing the government to step in with a rescue plan and many bankers ending up before their judges charged with multiple financial crimes, manipulation and unprofessional behaviour

After seven months of anti-government protests, the economy was suffering, though strangely enough financial markets had remained stable.

Stocks were trading at near all-time highs, interbank borrowing rates had seen modest increases, and the Hong Kong dollar had even strengthened within its trading band against the US dollar with deposits stable. Not only that but the city's historical indicator, property, was as buoyant as ever.

So where was the problem? he asked as if to reassure himself.

It didn't take much reflection, the answer lay on the other side of the border to north, the Mainland where the economy was slowing for the first time since the onset of the global financial crisis. China was facing the transition from an export driven economy to a home based consumer economy, complicated by an ageing population, and against the background of an ongoing trade war which wasn't about go away, even if Trump was not re-elected.

It wouldn't take much to push China's economy into recession with serious consequences for INI.

Pat remembered how Michael Fitzwilliams, his mentor and predecessor, had avoided the worst of the Irish banking crisis through diversification, and how he himself had engineered the merger with the Amsterdam Bank, since absorbed, and then opening into Russia with Sergei Tarasov, and lastly Hong Kong where he now headed the financial empire he had helped build and inherited

Pat's passion for history had taught him many things and perhaps the butterfly effect was a good metaphor for explaining certain phenomena, the idea that small causes can result in great changes, in for example the weather. Edward Lorenz, an American mathematician and meteorologist, was the founder of modern chaos theory, focusing on the behaviour of dynamic systems, highly sensitive to initial conditions, popularised by the idea that the effect of a butterfly flapping its wings could result in a tornado some weeks later in some very distant place.

The same thing applied to history, who could have thought the fall of the ancient city of Byzantium would profoundly change the history of Europe and the world for the next six centuries to come.

When the last stronghold of the ancient Roman Empire was captured by the Ottoman Turks, they cut the cord that linked the Orient to the West—the Silk Road. An event of huge historical importance, one that launched the age of discovery with Vasco da Gama setting out to discover an alternative route to India and the Spice Islands. The explorer was followed by Columbus and Magellan, then the conquistadors, Cortes and Pizarro, who marched on and conquered the Aztec and Inca empires

It was the reason why, half a millennia later the exploration of space had started in earnest, why China was laying the foundations for its Belt and Road Initiative, why the great powers raced to be the first to develop AI, and why Trump targeted Huawei.

And it was why Pat was establishing a foothold in Central America and Colombia, and why he now eyed Brazil.

NOTRE DAME

IT WAS EVENING IN HONG KONG when Pat, to his horror, watched Notre Dame ravaged by flames in real time. He grabbed his phone and called Padraig in Paris, who looked on helplessly from his 6th floor apartment on quai des Celestines, almost opposite the ancient cathedral on Île de la Cité across the Seine.

It was a tragedy, part of French history, the history of humanity, going up in smoke, Pat Kennedy thought as he'd watched the flames leaping from the cathedral's roof.

A couple of months later, he together with his friend walked past the now walled-off monument, as architects, engineers and stonemasons set about the work of restoration. It was a miracle that the essential structure of the 850 year old monument had survived.

Pat's visit to France coincided with the preparations of the G7 in Biarritz, where the political leaders of the planet's wealthiest and most powerful nations got together for what seemed more like a media event than a serious review of the state their world.

That morning the media's 'breaking news' flashes were focused on another fire, that of the Amazon rainforest.

The two friends stopped for lunch on the terrace of a restaurant on the Left Bank, almost facing the cathedral. It was a touristy spot, but O'Connelly assured Pat it was good, not that Pat cared much, he was not that fussy about the culinary choices relating to his basic daily energy intake, and left the menu to his friend with the words 'something light'.

His thoughts wandered as he looked across the Seine, the scaffolding of Notre Dame that hid the charred timbers of what remained of its roof, one thousand year old beams cut from an ancient French forest. It brought to mind the images of the forest fires in the Amazon. He Googled a map of Brazil on his mobile, switched to the satellite image, there was not much to see, a uniform green expanse, he slide his fingers across the screen, a name appeared, Madre de Dios. He stopped. Notre Dame. Two fires, the name of God's Holy Mother invoked twice.

Was it an omen?

Perhaps it was that lingering vein of superstition that still remained in his mind, a vestige of his Irish upbringing, in any case he took it as a divine message.

He had been pondering his future plans for South America, the research work carried out by his friend John Francis. Their very successful expedition to the Alta Guajira in Colombia. His mind was made up.

He turned to his friend, 'I've been thinking Padraig.'

O'Connelly was suddenly alert, he recognised that visionary look in Kennedy's eyes.

'Where are you with your book?'

Nonplussed O'Connelly wondered what book, for the moment he had written nothing on Notre Dame. Esmeralda and Quasimodo had already been written about in length, he had nothing to add to Victor Hugo's classic.

'Peru, the Incas,' Pat said to refresh his memory.

'Oh, yes, well it's more about gold, its history and role in South American society, old and new.'

Pat Kennedy's bank had financed mining companies in Colombia and Peru, and he was becoming worried about the bad image it projected. The problem was mining companies hid behind cascades of offshore companies in the Caribbean and elsewhere, which didn't protect them from the next whistle blower who popped up with a new version of the Panama Papers.

Pat's eyes wandered towards the twin belfries of Notre Dame, images Victor Hugo's premonitory vision sprung to his mind when Quasimodo used fire and stones to save Esmeralda: 'All eyes were turned to the top of the church. What they saw was most strange. Upon the top of the topmost gallery, higher than the central rose-window, a vast flame ascended between the two belfries with whirling sparks, a vast flame, fierce and strong, fragments of which were ever and anon borne away by the wind with the smoke. Below this flame, below the dark balustrade with its glowing trefoils, two spouts, terminating in gargovles, vomiting un-intermittent sheets of fiery rain, whose silvery streams shone out distinctly against the gloom of the lower part of the cathedral front. As they approached the ground, these jets of liquid lead spread out into sheaves, like water pouring from the countless holes of the rose in a watering-pot. Above the flame, the huge towers, each of which showed two sides, clear and trenchant, one all black, the other all red, seemed even larger than they were, from the immensity of the shadow which they cast, reaching to the very sky. Their innumerable carvings of demons and dragons assumed a mournful aspect. The restless light of the flames made them seem to move. There were serpents, which seemed to be laughing, gargovles velping, salamanders blowing the fire, dragons sneezing amid the smoke. And among these monsters, thus wakened from their stony slumbers by the flame, by the noise, there was one that walked about, and moved from time to time across the fiery front of the burning pile like a bat before a candle.'

To Pat's way of thinking everything was foreseeable, if only people cared to look.

'Wouldn't it be a good idea, to look a little closer at their links to the Amazon?'

Dee was nonplussed, Pat had a disconcerting way of springing out his ideas

'You know, ancient civilisations.'

SAN FRANCISCO

PAT O'CONNELLY, WHO WAS CALLED Padraig by Pat Kennedy, flew into San Francisco where he planned to spend a month with Anna before both they left for Bogota. She had arrived from Madrid, he directly from Hong Kong, where he had discussed the outline for Pat Kennedy's Amazonas project for Kyril's documentary film *Indians*. Pat had asked him to script the film and act as narrator for its English version, Padraig's name as a best selling author would be an added distribution booster.

Anna called Padraig 'Dee', her abbreviation for Dedalus, from Stephan Dedalus in Joyce's *Ulysses*. One, because she liked to see Pat O'Connelly in the role of a rebellious Irish author, which he tried in vain to convince her he wasn't, and two, it avoided confusion with Pat Kennedy. Soon the rest of Clan was calling him Dee, except Pat Kennedy who continued to call him Padraig.

Dee had developed a vague plan for a working-holiday with Anna whilst she undertook research work at the Hearst Museum of Anthropology in Berkley and the Getty Museum in Santa Monica.

He had also been given a mission by Pat Kennedy, one he felt a little uneasy with. As a journalist turned writer, Dee was used to documentary and factual research work, which was why Pat had asked him to look at Verily Life Sciences, which was located in South San Francisco, and amongst other things was researching life extension. Of course Pat's own firm LifeGen could access public information and certain published research data, but he wanted an on the spot visual report, a difficult task considering Verily was

owned by Alphabet, Google's parent company, two mastodons who jealously guarded their secrets.

No transparency, dubious goals, were among the doubtful comments on an organisation that was pouring trucks full of money into what certain said were ill defined ideas, something that Pat Kennedy didn't want to be doing at LifeGen

His goal was extending lifespan through two lines of research, the first was by pharmaceuticals and replacement of physical parts, the second stem cell treatment and gene therapy, with the goal of reaching the age of 125. The former treatments would keep him in good shape, making it to 100 plus, then the latter, thanks to scientific progress in the intervening years he could expect to live longer and perhaps enjoy an indefinite lifespan.

For many years Dee had owned a fine property situated in the Pacific Heights district of San Francisco, which he hadn't used or even visited for some some time. It had been very profitably rented out on short leases, furnished and with a live-in housekeeper, to well-off business people and tourists sojourning in the city. The house was available and he decided with Anna they use it as a base, whilst he reacquainted himself with the city and they worked on their respective projects.

The city's famous skyline gleamed under the Pacific sun, but below on the streets Dee was struck by the huge number of poor. There had always been a concentration of down and outs in central districts, but the numbers seemed to have exploded.

It was a contradiction, on the one hand the city was more prosperous than ever, more billionaires per capita than in any other city on the planet, a booming hi-tech sector powered by Silicon Valley. But at the same time there was a growing number of poor, a sure sign that something in society was not functioning.

He couldn't avoid seeing dealers peddling their poison, certain in full view of police patrol cars parked outside what seemed to be government buildings. Dealers and users mixed on the streets, openly smoking fentanyl—a

powerful opioid many times more stronger than heroin. Addicts lay on the streets in the heart of San Francisco's down-town area, nearby an upmarket Westfield shopping mall thronging with the haves dressed in designer clothes checking out Louis Vuitton handbags, Tiffany jewellery and Rolex watches.

The mythical city by the bay with its wealthy liberal classes, where Tony Bennett left his heart, a reference for progressists, prided itself on having the world's highest salaries, attracted its best talent, and boasted properties like Pat's that went for seven and eight figures.

Yet the numbers of homeless, drug addicted and mentally ill people, increased inexorably, transforming entire city blocks and street corners into tent cities, dark pools of dystopian misery, where the ghosts of former people shuffled past in search of a dime.

In certain down-town areas it was if he was visiting one of the third world's poorest cities, instead of the first among the first, in the world's richest and most powerful nation.

California, land of hope and promise, was the home to almost half of the US homeless. Flower Power seemed a long way off from the tech giants and the fabulous villas of showbiz stars.

It was easy to slip into gloom as the world slithered towards the fate of Ozymandias, as the destructive sands of time eroded the metaphorical statue, the monument to a once great leader, now in ruins and forgotten:

I met a traveller from an antique land,
Who said—"Two vast and trunkless legs of stone
Stand in the desert. . . . Near them, on the sand,
Half sunk a shattered visage lies, whose frown,
And wrinkled lip, and sneer of cold command,
Tell that its sculptor well those passions read
Which yet survive, stamped on these lifeless things,
The hand that mocked them, and the heart that fed;

And on the pedestal, these words appear: 'My name is Ozymandias, King of Kings; Look on my Works, ye Mighty, and despair! Nothing beside remains. Round the decay Of that colossal Wreck, boundless and bare The lone and level sands stretch far away.'

* * *

Across the Pacific, Japan in its glorious isolation, raced to build 22 new coalfired power plants, a direct consequence of the Fukushima nuclear disaster. It was calculated they would emit almost as much CO₂ annually as all the cars sold each year in the US.

Humanity was caught in a trap of its own making, its exponential multiplication, if Japan, one of the most advanced nations on earth could not wean itself off coal, how could the poorer countries fulfil their engagements.

Paper promises were worthless.

Japan's policy of financing coal-fired power stations in developing nations, in the same way as China and South Korea, belied its ambition of being a model for clean energy as it prepared for the 2020 Olympics

At the United Nations climate talks the previous year in Madrid, Japanese activists in yellow Pikachu mascot outfits had unfurled 'No Coal' signs and chanted 'Sayonara coal!'

GEOGLYPHS

DEE HAD EXPLORED THE HISTORY of Pre-Incan civilisations that had existed along the Pacific flank of the Andean ridge, but he had not given much thought to its eastern watershed that drained onto the Amazon plain.

He decided to join Anna on her visit to Bogota for her research programme. There she commenced by helping him with an introduction to Ernesto Montaldo, a friend of Kyril's, an anthropologist at Icanh, the Colombian Institute of Anthropology and History.

Ernesto agreed to help Dee and commenced by explaining how the humid climate of the Amazonas forest destroyed wood and even bones. However, recently, due to progressive deforestation, stone arrowheads and pottery shards started to appear in places that did not correspond to conventional thinking, artefacts that were solid evidence of human presence in ancient times.

Slowly preconceived ideas were reconsidered as new discoveries were made—the vestiges of geoglyphs and traces of what were hundreds of villages, farms and roads, which had until very recently been buried deep beneath the dense foliage of the forests in different regions of the Amazon, including Amazonas in Colombia, the Brazilian states Mato Grosso and Acre as well as in Peru.

These discoveries were made thanks to satellite imagery which revealed the presence of massive earthworks, forming highly geometric geoglyphs, certain of which were more than one kilometre long, situated in parts of the Amazon that had previously been neglected by archaeologists, especially areas away from major rivers, along which those archaeologists had, it seemed, erroneously assumed were the preferred sites of ancient communities.

This evidence contradicted the commonly held misconception that the Amazon was a virgin landscape, untouched by man. In fact a much larger population than had ever been previously imagined, had lived and prospered in the vast region, men and women who over generations had transformed the natural environment.

These communities dated to pre-Colombian times, a revelation that raised more questions than it answered, which had led Pat Kennedy and others to ask why, between 40,000 and 30,000 years ago, almost simultaneously, at vastly distant points across the planet, mankind started drawing images on rock faces and cave walls and erecting the first stone monuments.

Homo hablis, the tool maker, had appeared about two million years ago, and Homo erectus one million years later. Erectus it seems evolved into several other species including—Neanderthal, Denisovian man, Homo floriensis and Homo sapiens, none of which left any trace of symbolic art before the Middle Palaeolithic. Then, suddenly, images started to appear, and during the Upper Palaeolithic there was an explosion of human creativity, images painted by men, images of the world in which they lived.

Most geneticists and evolutionary theorists believed that anatomically modern humans were armed with a new arm—language, and with sophisticated language they mastered the use of new tools and weapons and commenced to change the natural environment.

'Suddenly?'

'Yes,' said Ernesto. 'Compared to the 98% of the time during which early man's know-how barely advanced beyond the use of fire and basic stone tools. Issues such as the origin of human communication and many others are the subject of some very heated discussions among linguists, psychologists, and biologists today.'

He told Dee how archaeologists believed that large areas of the Amazon forest may have been savannas in what he called the pre-Classic period, when the peoples of the San Augustin culture practised slash and burn agriculture, pushing deep into the outer fringes of the eastern Amazonian rainforest, marking their presence by extensive geoglyphs over a wide zone from Columbia to Bolivia.

'For example,' Ernesto explained, 'pre-Inca artefacts, found near certain geoglyphs in Acre State, Brazil, have provided us with new clues as to who their builders were, our colleagues' work in Brazil has included radiocarbon testing which indicates the structures were built between 1,000 and 2,000 years ago.

'It is probable fewer people now live in the Amazon regions of the Mayo Grosso, Acre, Rondonia, Colombian and Brazilian Amazonas, Loreto and other Peruvian departments, than before the arrival of the Europeans five centuries ago.'

Ernesto reminded him how gold, emeralds and precious stones were part of pre-Columbian civilisation, and how Colombia, as well as being one of largest producers of gold and emeralds in South America, was the home of the Muisca civilization, which had flourished between AD600 and AD1600, giving birth to the legend of Eldorado.

SAINT TROPEZ

PAT AND HIS FRIENDS RETURNED to Saint Tropez for a moment of work and relaxation on his yacht, where they could review their plans, anchored offshore away from the paparazzi, who always seemed to be out in force when wealth was around, like the evening bugs drawn by the smell of perfume in the still warm air.

They were in good company, Jeff Bezos and his glamorous girlfriend, Lauren Sanchez, were a boat's ride away onboard David Geffen's 140 metre long yacht, the *Rising Sun*, with their pals.

Pat's yacht was more than a simple bauble, it was a mobile boardroom from which he controlled his business empire with all the latest tools science and technology could offer, it could sail over 6000 nautical miles on one tank of fuel, as it had recently done, from Cartagena in Colombia, following the winding-up of the exploration of the *Espiritu Santo*, a Spanish galleon, a treasure ship that had sunk off the Alta Guajira.

Soon, after some work, *Las Indias* would sail for Belem in Brazil, a transatlantic voyage of eight days, more than 4,000 nautical miles, skirting the Canaries and Cape Verde, at an average speed of 24 knots. There it would be joined by film crews before sailing up the Amazon to Manaus and Iquitos to pick up the team who would visit indigenous peoples in the Putumayo and Javari regions.

Pat's tranquillity was interrupted by news that the Malaysian government had filed criminal charges against 17 current and former directors of companies owned by the Goldman Sachs Group, all of whom were alleged to have been involved in a multi-billion dollar corruption scandal linked to that country's sovereign fund 1MDB.

Of course the bank refuted any wrongdoing, accusing former Malaysian government members and 1MDB of lying.

An estimated 4.5 billion dollars had been siphoned out of 1MDB by Jho Low and his associates, between 2009 and 2014, revealed by Tim Leissner, a former partner of Goldman Sachs, Asia, who had pleaded guilty to conspiracy to launder money and other charges.

Why was Pat concerned? Well his bank had been innocently involved in the financing of the mega-yacht bought by Jho Low, a Chinese citizen, who was now on the run. The yacht was subsequently bought by an offshore subsidiary company owned by INI from the Malaysian government and renamed *Las Indias*.

Pat had escaped the chaos of Hong Kong, after the Airport Authority had announced only departing passengers with travel documents would be allowed to enter the terminal as the anti-government activists geared up for more action. As usual he entered and left the airport by the VIP terminal, far from the unwashed crowds, he was one of the very privileged travellers, his Gulfstream waiting to fly him to the Riviera.

He was pleased to get out of Hong Kong in view of the celebrations to mark the 70th anniversary of the founding of the People's Republic of China whilst clashes with the demonstrators intensified.

Hong Kong was facing its worst crisis, since it returned to China from British rule in 1997, as protests posed the biggest popular challenge to Xi Jinping since he came to power, at a bad moment too, just he was grappling with the effects of the growing trade war with the US and a slowing economy.

Ekaterina had decided to join them at Saint Tropez, as the Houghton Arts & Music Festival that she had planned to visit was cancelled, after the UK was hit by a wave of extreme weather, a hard blow, for the performers and visitors. It was not the only event, there was also the Cowes Regatta, which

had got off to a sunny start, but with the approach of another tropical storm it too was cancelled, along with other events and concerts. Ecologists were quick to point to the storm as the harbinger of climate change with the warning such extreme weather conditions would become more and more frequent.

* * *

As the media and politicians wrung their hands in anguish over impending doom provoked by Jair Bolsonaro's forest fires, Camille complained about Prince Harry and Meghan Markle, the Duke and Duchess of Sussex, royal eco-warriors, who had just returned from Ibiza on a Gulfstream 200, where they had spent six days celebrating Meghan's birthday. Guests in another jet-setters' paradise overlooking the azure waters of the Mediterranean, where renting a villa according to Camille cost anything up to 150,000 dollars a week, the kind of slum celebrities like DJ David Guetta or Sir Paul McCartney liked to hangout.

Their break at Bahia de Porroig, situated on the south coast of the Balearic island with its pristine waters, was far from the usual tourist haunts, it was the spot where some of the island's most exclusive homes could be found.

Barely back home in the UK, the couple were off again, this time photographed boarding a Cessna jet, destination Elton John's sumptuous Belle Époque villa, Castel Mont-Alban, on the French Riviera, high above Nice, on the summit of Mont Boron, overlooking a parkland reserve and of course the Mediterranean.

The yellow turrets of the villa could be seen by the hoi polloi in the world below, its lights twinkling through the pines. The sumptuous villa with its splendid pool was decorated with an art collection that included paintings by Andy Warhol and sculptures by another American pop artist Roy Lichtenstein.

Past guests included celebrities like Liz Hurley, Catherine Zeta Jones, Donatella Versace and of course the Beckhams.

Elton John tweeted:

'After a hectic year continuing their hard work and dedication to charity, David and I wanted the young family to have a private holiday inside the safety and tranquillity of our home. To maintain a high level of much-needed protection, we provided them with a private jet flight.'

However, Elton John's insistence, that he felt compelled to provide them with a private Cessna 500 XL to ensure them 'much-needed protection' was perhaps an exaggeration.

In the good old days royals flew British Airways with old fashioned security, a couple of CID officers, and even though times had changed and there was no pressing need for a private jet in view of the royal couple's convictions on global warming.

Harry had made his position clear in Vogue magazine in an interview with Jane Goodall. A special issue, edited by the duchess herself, who chose climate activist Greta Thunberg as one of her 'forces for change'.

It came in the wake of the Google's Summer Camp, focused on global warming, where world figures and celebrities arrived in a fleet of jets that would have put most countries air forces to shame and on an armada of mega-yachts.

Barefooted and in shirt sleeves, the prince gave an impassioned closing speech on the urgency to combat climate change. It must have slipped his mind he had arrived not far from the ancient Greek temple of Agrigento by private jet, ferried by helicopter to the luxury resort reserved for the camp, and lodged on one of the mega-yachts anchored a few cables off shore.

A REFIT

WHEN LAS INDIAS REAPPEARED, it was almost unrecognisable, it wore a new and more sober coat, light grey above the waterline and a deep red below, which apart from anything else had the advantage of no longer attracting the unwanted attention of the paparazzi, those who normally supplied the Daily Mail and Hola with pictures of scantily clad celebrities sunning themselves on the decks of yachts anchored off places like Saint Tropez, while the rest of the world struggled on its way to work in the morning rush, crammed into overloaded strike infected railway and metro systems.

The *Las Indias* had undergone a refit at a shipyard in nearby Toulon, 'transformed into an honest vessel,' Pat quipped. In reality it had undergone a carefully planned transformation, one that equipped it for extended exploration missions, not only oceanographic surveys, but also for his new venture, part of the banker's growing realisation the time had come to return something of what the world had given him, in the hope of building a better future for the world, or at least part of it.

It was perhaps the beginning of a deeper sense of responsibility, as it could not be said his own children would ever be in need.

However, in spite of his good intentions, the *Las Indias* beneath the paint job still retained many of its original features, Pat was not about to forego the onboard comforts of his yacht, previously and unjustly described by certain of his detractors as a floating bordello. Those comforts would be needed in the kinds of places he had in mind for his new venture.

The yacht's new features including a launch and recovery system for surface or submersible vessels. In addition were larger shipside doors and a broader flight deck to accommodate two helicopters and a long range drone for coastal and inland Lidar exploration surveys.

The *Las Indias*, built by Oceanco in the Netherlands, at its Alblasserdam shipyard, had been delivered to her first owner in 2013. The extravagant yacht's interior has been conceived by Winch Design, lined with marble and gold leaf, and decorated with several valuable works of art, since safely stored in France

With its twin 4,828 horse power diesel engines, a top speed of 19.5 knots, and a fuel capacity of 270,000 litres, the yacht was capable of going anywhere, crossing seas and oceans.

Originally registered in the name of Jho Low, of Jynwel Capital, a Malaysian registered business, the yacht had been bought with stolen cash, siphoned off the sovereign wealth fund that went by the acronym '1MDB', and the complicity of former Malaysian Prime Minister Najib Razak.

Low was now on the run, wanted by the US authorities, on 'suspicions of criminal mismanagement, fraud, bribery of foreign public officials, and aggravated money laundering'.

At the height of his notorious career, Low was dubbed the Asian Great Gatsby for his lavish parties and his Hollywood friends including Robert De Niro and Leonardo DiCaprio and other hangers-on.

The yacht was said to be the 54th largest in the world, which in 2018 had momentarily gone missing, the whole 90 metres of it, together with its swimming pool, helipad, movie theatre, spa and sauna, and staterooms for 18 guests and quarters for a crew of 28.

It was why Pat had decided to convert it to a working vessel dedicated to a more worthy cause—his plan to save a small part of humanity, from self-inflicted ecocide, a crime Anna Basurko informed him was defined in an obiter dictum by the International Court of Justice, which identified a category of international obligations, called *erga omnes*, namely obligations,

owed by states to the international community as a whole, intended to protect and promote the basic values and common interests of all.

THE AMAZON

KEN HISAKAWA HAD ARGUED, if a civilisation had existed in the western region of the Amazon, it would have certainly been near the Andes, where the Incas and their ancestors lived. His thesis was confirmed by the discovery and exploration of hundreds of enigmatic earthworks in Acre, to the west of Amazonia, sites that Ernesto Montaldo had described.

The more recent discoveries of roads, ancient earthworks, civic and ceremonial buildings, which came under the heading of geoglyphs, were of impressive size, some enclosures up 300 metres in diameter, surrounded by broad, deep, ditches. In all more than 450 geoglyph sites had been identified and mapped in a zone of more than 10,000 square kilometres.

Who had built them? Why? And what happened to the people who had lived there? Those were questions the *Indians* expedition set out to answer and record

Ken Hisakawa's preliminary survey had determined these geoglyphs had been built between 1,000 and 3,000 years ago, an idea reinforced by laboratory dating tests—radiocarbon for charcoal and thermoluminescence for pottery.

Was this pre-Inca colonisation, or evidence that the sites had been inhabited by Paleoindians, a completely different civilisation, a culture created by the first peoples who had migrated from Asia into America many thousands of years earlier.

Ken's preliminary archaeological work suggested the sites were used as religious centres based on the evidence of broken vessels that may have contained food and drink left as offerings.

Where precisely those devotees lived he and his colleagues had yet to discover, but in any case the existence of the geoglyphs challenged the long held belief that Amazonia been an empty quarter before the arrival of Spanish and Portuguese explorers, ending the myth of an untouched equatorial wilderness.

The archaeological evidence collected by Ken confirmed complex societies had developed and prospered along the major rivers and in areas rich in the kind of resources necessary for their survival. It was evident that forests had been cleared to build the geoglyphs and to provide homes and farmland for their builders.

The big question was what caused those people to abandon the land on which they had settled and prospered, evidenced by the monumental infrastructure left behind, now rediscovered by satellite imagery after being buried for centuries under the jungle that had repossessed its kingdom.

The earthworks necessary to build the platforms would have required an extraordinary amount of labour considering the lack of iron tools, pullies and beasts of burden. The volume of earth moved was enormous, requiring hundreds, maybe thousands, of labourers over a considerable period of time, requiring premeditation, organisation and tenacity.

Estimates as to the population of Amazonia varied between one and five million people, who had left a considerable vestige of their existence in the form of pottery shards, charcoal, seashells and other fragments of their forgotten world.

* * *

Zyborg's film crew flew to Peru after Ken persuaded his friend Pat Kennedy that there was there was much to be seen and discovered in that remote region, starting with Jaen, a small city situated in the Cajamarca Region, to

the extreme north of the country, which according to local history the site of the present town had been inhabited by Indians who had originally come from the Amazon plain.

In 1549 the Spanish arrived and planted a cross in what would be the Plaza de Armas, its main square, and traced their grid-like town centre assigning house plots for their settlers. They named the newly founded city, situated some 700 metres above sea level, Jaen de Bracamoros—after Jaen in Spain, and Bracamoros after the Pakamuros Indians who lived the region.

Jaen soon became an important missionary centre in the North of Peru and like all Spanish colonial cities its focal point was the Plaza de Armas and its Cathedral. However what interested Ken and the film crew was a 'huaca'—a revered site in the Quechuan language associated with veneration and ritual, situated to the south-east of the city.

The site was called Montegrande, which at first glance appeared to be nothing more than a small hill, a mound of earth, except for the pottery shards unearthed by local peasants.

Work on the mound had uncovered evidence of what appeared to be a huge pyramid, built more than 3,000 years ago. It was a discovery that overturned all preconceived ideas of the region's prehistory. For the first time, indisputable proof confirmed the existence of an ancient civilization that had existed where the Amazon rainforest had until recently stood.

Such a monumental structure could not have been built by hunter-gathers, but by a sedentary society, one with a structured hierarchy, an organised system of beliefs, and surrounded by farms to feed its population.

Today, 50 kilometres to the east of Jaen was the Pacaya–Samiria National Reserve, covering almost 21,000 square kilometres of rainforest. Beyond lay the dense Amazon forest through which the Marañon River flows to join the Amazon and the river port city of Iquitos, 1,000 kilometres to the east as the crow flies, twice that by river.

Gone were the ideas of ancient forest dwelling hunter-gatherers and credence was given to reports by the early Spanish conquistadors who

described towns and cities in the Amazon basin, built along the banks of its many broad rivers, which also provided the primary means of transport for people and goods. Cities that crumbled, were forgotten and disappeared, repossessed by the jungle, under its thick canopy, its broad leaves, entangled in the grasp of its labyrinth of creepers, vines and lianas.

Those who had built the Montegrande pyramid were part of an evolved society, and investigations showed that the pyramid had been modified at various times over the centuries by the people whose dwellings stretched along the banks of the Amazon's many tributaries, for whom it was a religious centre, the hub of a broad trading network that stretched across a region that is now part of Peru, Colombia and Brazil

The pyramidal mound, which locals had taken for a natural hill standing in the middle of a plain, had long puzzled the occasional archaeologist who passed through the region, certain of whom had surmised it had been a burial mound, a vast one at that, since it covered more than 8,000 square metres at its base, its summit 12 metres above the plain, on which a spiral of rocks was laid out, coiled in the shape of a massive serpent, or perhaps a snail shell.

Even more astonishing were its stucco covered walls, stairways and platforms, and even more extraordinary the remains of what were probably ritual fires on the summit of the pyramid.

Pat Kennedy was excited by the theory that hallucinogenic vilca seeds were used in the rituals at the pyramid, Ken told him these were trance inducing with visions of spirals which seemed appear to have dominated a culture where snail shells were omnipresent.

Pat's growing fascination for these stories worried John Francis who wondered if his friend was becoming a mystic of some kind, in search of spiritual truth or ultimate reality. It often happened to those who acquired great wealth and power, those possessing an innate intuition, insight, trust in their inner self, one that bestows a sense of destiny, a need to serve others, to guide them.

Pat abhorred the thought that human sacrifices could have been part of the rituals practised by those ancient peoples after many children's bones were found at a smaller pyramid, bones that bore signs of malnutrition and disease, perhaps sacrificed by priests, one of whom died 2,800 years ago and was named Lord of Snails by the archaeologists, who was found adorned with a layer snail shells, disposed in a spiral form, his body facing the rising sun. Apart from the stones, a handful of shards and bones, there were no sculptures, no inscriptions, no message, just a few coloured frescoes, one of which showed a caiman crocodile with its mouth open.

THE CAQUETA RIVER

THE FILM SCRIPT OF *INDIANS* CALLED for sequences to be shot in a number of geographically distant locations, for which Matt Halders' production team organised itself into different film crews, each of varying size, depending on the importance of the subject and the difficulty of the location in question.

Matt's philosophy was 'Make a drama, not a documentary, if you have a message, it has to shake the audience, stop them sleeping at night.'

He told Pat, 'I chose this art form, the cinema, this incredible, wonderful art form, to tell stories. If I wanted to make political speeches, I'd have joined a party. If I wanted to give a sermon, I'd have joined the church. If I'd wanted to give a lecture, I'd have become a teacher. I chose to be a filmmaker and I make movies, I don't give lectures.

The equipment was varied, for archaeological sites the choice was wide but in the jungle compact cameras were necessary as it was impossible to transform malocas into film studios and besides transport was a problem. The advantage of Las Indias and Sundaland II was they were floating studios with vast carrying capacity and equipment could be selected according the the location conditions. In addition scenes could be edited and if necessary more footage shot.

The subject of *Indians* was of course the indigenous people living in isolation from the outside world, many of whom lived in the heart of the Colombian Amazonian rainforest and the first of the sequences on their way of life would be shot by the lead film crew in the Curare-Los Ingleses Indigenous Reserve and its adjoining areas, including a large part of the Río Pure National Natural Park.

The park covered nearly one million hectares of jungle in Amazonas in the extreme south-east corner of Colombia, nearly 1,000 kilometres from Bogota. It was juxtaposed with the Cahuinara National Park along the banks of the Rio Caqueta. Both part of a vast territory of Amazonian forest.

A satellite image of Amazonas and the Rio Pure National Park showed nothing but a solid dark green mass. It was an expanse of endless jungle overlapping into Peru and Brazil. It was one of the world's last untouched quarters, where small groups of men and women still lived in perfect harmony with untouched nature, in isolation from the outside world.

The inhabitants of Rio Pure, those living in the so-called modern world, had long known of the existence of the people of the interior, about 2,500 Indians, believed to be members of two closely related tribes, the Yuri and Passe.

Those Indians were protected by the Colombian government, whose vision of rainforest conservation was based on the principal of upholding the rights of indigenous tribes to their ancestral lands, whose way of life depended on a symbiosis with their natural surroundings.

The government had adopted the UN Declaration on the Rights of Indigenous Peoples in 2007 and the Political Constitution of 1991 recognising the fundamental rights of indigenous peoples and ratified the International Labour Organisation Convention 169. The ILO had been engaged in issues relating to indigenous and tribal peoples since the 1920s.

At the national level, the indigenous peoples were represented by two main organizations: the Organización Nacional Indígena de Colombia and the

Autoridades Indígenas de Colombia, which together represented the majority of the country's indigenous peoples.

In 2014, President Santos of Colombia signed a decree that created a special regime to put into place the administration of the indigenous peoples' own systems, a precursor to the Organic Law of Territorial Management, which defined the relations and coordination between the Indigenous Territorial Entities and the Municipalities and Departments.

It was estimated that the indigenous population of Colombia was 1,500,000 persons, which represented about 3.5% of the country's total population, of these some 60% lived in reserves.

Matt Halder had worked on a project with the ONIC, the search for isolated indigenous communities using high-resolution photography to scan the different national parks of the Amazonas region.

It was with their help, *Indians* would be filmed in a series of sequences retracing the history of the Amerindians, from their arrival in Amazonas to the present day, centred around a first contact with forest people in a zone where illegal loggers had been detected.

The idea to commence in Colombia had originated when Dan Briscoe had been asked whether it was possible to film the tribal peoples in Brazil, his reply was why not, but why go to Brazil when they could start in Colombia without running the risk of problems with the Bolsonaro administration.

The idea that isolated tribes still lived in Colombia, was vaguely new to the production team, even though Colombia shared part of the northern Amazon forest with its neighbours, where, in the Caqueta River region of the Rio Pure National Parque, the Carijona tribe lived.

What they didn't realise was the vastness of Colombia's Amazonian rainforest, Lola was of course familiar with the geography of her country, though not all of its one million plus square kilometres, much of which was dense empty jungle. The Caqueta—or the Japura as the nearly 3,000 kilometre long river was also known, flowed eastwards into Brazil to join the Amazon.

A month later the team and the lead film crew together with Dan Briscoe flew into La Pedrera, a small town situated in the Departamento del Amazonas, in the south of Colombia bordering the frontier with Brazil. The department was the size of New York State, nearly four times bigger than Belgium, but in comparative terms nearly empty with a population of just 75,000 compared to New York's 20 million or Belgium's 11 million.

Looking out of the window of their small plane as they descended the details of the endless jungle were magnified, an endless carpet of green stretching out before them, as it had for the last hour, ever since they had taken off from Leticia, which lay at the most extreme southern point of Colombia, in a region bordering Brazil and Peru.

The only break in the monotonous green was a deep ochre coloured river that wound its way eastwards and the occasional patches of mist that drifted past.

As the plane turned, two hills appeared, rising up out of the plain, incongruous landmarks on an otherwise uniform landscape. Beyond they made out a dark line cut into the jungle on the opposite bank of the Caqueta River, it was the La Pedrera airstrip.

The iron roofs of a few scattered low wooden buildings appeared, contrasting with the ubiquitous green. They circled and glided in low over the river, skimming past the buildings and landed with a bump on the rough airstrip where after taxing a short distance they turned back towards the village where the runway became an unpaved laterite track.

To Camille it seemed like a journey to the end of the world and when she finally stepped out of the small plane on the rough and ready airstrip, a feeling of space, distance and mystery descended over her.

Beyond lay the jungle, over which they seemed to have flown for hours, first from Bogota to Leticia, then in the small twin engined Beechcraft to what seemed like nothing more than a clearing in the forest.

La Pedrera was a small one horse town, planted in the middle of the dense rainforest that was crossed by the many winding streams and rivers that fed the Amazon

As the others descended from the plane a small delegation approached to greet them. There was the representative of the Cahuinara Park and Filipe Diaz the anthropologist, together with assistants and baggage porters.

A stocky man in jeans and gumboots stepped forward to greet Alfonso, he was introduced to the girls as Felix, their guide for the next few days. He then turned to Diaz and spoke quickly in Spanish as the baggage was unloaded from the plane and carried by the porters towards the terminal building, which in reality was nothing more than a few wooden shacks with corrugated iron roofs.

After Dan Briscoe warmly embraced his colleague, he commenced to introduced his small group—Lola Barton, Anna Basurko, Camille Clancy, Lili and HG, two figures approached, the first taller, a solid more vaguely familiar form, the second shorter and slighter.

The first wore a broad smile.

The women looked at him agog, then broke out in happy laughter, and ran to embrace him.

It was Pat Kennedy.

'Nice to see you girls,' he said beaming with pleasure.

'What are you doing here Pat?' asked Camille.

'It was only natural I join the party. This is Ken,' he said the turning to his companion, 'Ken Hisakawa, from New York.'

Dan Briscoe was just as surprised to see Pat Kennedy.

'Where's Matt and Kyril,' asked Pat.

'They're still at Tolima Linda, a fantastic site, they're shooting some additional footage. They'll be flying in this afternoon with the camera crews.'

Diaz smiled, he was delighted, he'd prepared the surprise, and was rewarded by the reaction of the five women, who were younger and more attractive than he'd expected, though a little worried as he wondered if they—in their fashionable jungle kits, knew what they were in for.

They were then guided to a somewhat more imposing building a little distance away, where a large panel announced *Sede de la Cahuinara Parque*, probably the largest building for hundreds of kilometres around, where a briefing was planned before they set out for the tribal area.

Camille stared at the patches of low mist hanging over the trees behind the building, but much more strange was the small group of barely dressed Indians, their poker-faces scrutinising the new arrivals, and more in particular the five very white women who stood a head over them.

Looking around she remarked the absence of motor vehicles. 'Unnecessary,' Felix informed her pointing to the river. There were no roads, just a few trails, all communications and transport was by river, on the other side of which Camille saw the hills which were much higher than they had appeared from the plane.

If Leticia was a very distant backwater, La Pedrera was at the end of the earth. Even Anna who was used to distant places had a strange feeling of isolation, space, and perhaps anxiety. HG was on the other hand unimpressed, she even felt at home—in Borneo, where apart from the mountains in her own state, Sabah, it looked the same, jungles, rivers, isolated villages and wooden houses, even the local people looked the same, only the language was different.

After an animated briefing and a light lunch, they left the office following a path that led to a small group of rickety wooden houses on the banks of the muddy river, where the porters were loading the baggage onto a couple of longboats equipped with powerful motors and covered with awnings to protect the passengers from the equatorial sun.

As they waited Camille observed wide-eyed the unhurried daily life in the small riverside jungle settlement. A few small children watched them curiously. An old man laying in a hammock suspended between the posts on a veranda ignored them. In the background a generator chattered as the womenfolk prepared a meal in front of a small TV set.

As they waited they refreshed themselves with soft drinks, which like all other supplies were brought in by boat or on the plane that arrived irregularly. There were no roads, nothing but jungle trails and the river. Most of their food came from a few small garden plots where they grew manioc, or fish from the river, supplemented by game hunted or trapped in the jungle—peccaries, birds, monkeys and other small animals.

The only source of cash income for the locals came from work as guides, boatmen and baggage porters, accompanying officials, foresters, botanists, zoologists, ethnologists and occasional missionaries on their trips into the jungle.

They also traded with the small isolated communities that lived in the forest, exchanging machetes and metal pots for game and other products.

It was not strange to Anna, the scenes reminded her of the archaeological expeditions she had made in Central America.

Diaz then invited them to board the boats and some minutes later they waved goodbye to what was the last outpost of civilisation they would see for a week or so, as they set off.

* * *

The dazzling Amazonian sunlight reflected off the broad river which was flanked on both sides by a wall of dense jungle. After more than two hours along the Caqueta River they turned up one of its many tributaries, where after another hour they halted at a muddy bank marked by a crude jetty and the porter's proceeded to unload the baggage.

'This is where we shall camp tonight with a small family group of nomadic Indians,' announced Filipe Diaz.

As if by magic three almost naked Indians appeared out of the dense vegetation, then, after a short exchange with Diaz, they pointed to a barely discernible path and started out, followed by Dan Briscoe, the women and porters.

Camille realised their expedition, and expedition it now was, was finally underway, as they made their way over the uneven path into the forest, accompanied by a cacophony of cries from unseen birds and monkeys and the buzz of insects that swarmed around them.

After the cool breeze on the open river, the heat and humidity was suffocating now that they were closed in beneath the canopy and the surrounding vegetation—so dense that the path was barely discernable, soon it seemed they had been swallowed by the jungle.

After what seemed like an eternity they emerged into a small clearing, where a few men of the Carabayo tribe were waiting.

They beckoned them to follow.

They were the tribespeople of the Curare-Los Ingleses Indigenous Reserve, who unlike the Carijona and the other tribes that lived in the neighbouring region of Rio Pure National Natural Park, had virtually no contact with the outside world. In fact they had avoided all such contact with civilisation.

Their history was one of a centuries-old struggle to avoid the white men, the *Cariba malo*, fleeing deeper and deeper into the forest to escape hunger, influenza, malaria, and slavery.

Their maloca stood in a clearing, a large square shelter built of branches and cover with a thatched roof of palm leaves, which reminded HG of those in Borneo. A little distance away the porters set about putting up the tents and installing a field kitchen observed by the headman.

Matt and his five man team arrived late and the next morning they started filming on the edge of the maloca where the Indians and their children's watched them like those in villages across the world would watch a travelling circus arrive in town. Until recently they had no contact with the outside world, for hundreds of years, perhaps never.

They like others had fled the *Cariba malo*, the evil white man—rubber tappers, missionaries, miners, drug dealers and guerrillas.

For centuries many Indians had chosen the depths of jungle, to avoid hunger, disease, missionaries, and the chains of slavery. The knew the *Cariba malo* was there watching them beyond the forest, they heard his chainsaws and saw his planes high in the sky above their home in the Pure National Natural Park.

* * *

Towards eleven they set off with the headman and three others to film them hunting monkeys with their blowpipes, an arduous task in the dense forest, though their choice of compact cameras proved to be a boon.

They were in luck and the hunters bagged a couple of large birds, a monkey and another unidentified animal.

That evening after a diner of roast monkey washed down a brew prepared by the Indians and beer, Diaz told them the story of their work with the isolated Indian tribes.

'Have you ever heard of Roberto Franco,' Diaz asked.

Anna and Dan were silent, the others shook their heads.

'Well Roberto was one the great specialists of the isolated tribes of the Colombian.'

The camp fire flickered and the insects buzzed as they waited for him to continue.

'They are no more than a hundred families and they owe the survival to Roberto Franco,' he told them

'Where does he live?' asked Camille.

'He died six years ago in a stupid plane accident in the jungle.'

'Oh'

'I remember the day of the accident,' Diaz said quietly. 'September 6, Roberto was returning from Florencia after a trip to the indigenous people here in south Chiribiquete. He with the others took a small plane, a Navajo, back to Bogota. There were ten of them in the plane. It stopped in Araracuara, the mythical indigenous site that housed the Casa Arana.

The Navajo was in bad condition, its gas tanks leaking, and was heavily overloaded when it took off again. Ten minutes after taking off, at half three in the afternoon, it plunged into the jungle in a trail of smoke.

It needed an Air Force plane to search for wreckage and it wasn't until eight that evening that same day when they announced there were no survivors.

A tragedy, Roberto had spent more than 20 years studying isolated peoples. His work described how the Yorimanes and Yurimaguas, Brazilian Indians, known for their tattooed faces, had survived the Spanish and Portuguese conquerors, and how towards the end of the 19th century, descendants of those ethnic groups fled to the jungles of Colombia to escape the rubber tappers, following the Caqueta and Putumayo rivers until they reached the Pure River, changing their name to Uuris, Passes, Uainumas and Jumanas.

'There are half a dozen malocas in this area, ancestral long houses, the focal centres of the indigenous family groups here in the Amazon, especially those in the region where the borders of Colombia, Peru and Brazil overlap.'

Enlarged family groups shared a maloca with separate entrances for men and for women, where married men and women slept together, and unmarried men and women slept separately. Each maloca had its own food garden, where bananas, papaya and pineapple, manioc were grown.

During festivities and ceremonies, traditional dances were performed in the central space between the long houses.

'These malocas are the homes to families, who share their women, at times stealing them from other ethnic groups. Here at the headwaters of the Pure river, they're protected from intruders by dense jungle and swamps,' Dan said waving his arm into the darkness beyond.

Camille and the others didn't need to be told that after their long trek to reach the maloca.

'But there are many threats,' he continued, 'threats to their existence with the Brazilian border being so near. Drug traffickers build air strips in the forest, then there's illegal loggers, poachers hunting their game and fishing in their rivers, and not least illegal gold miners poisoning the streams.

'After the peace agreement with the Farc, drug traffickers opened up new routes, that's why there are military bases near the Putumayo and Caqueta rivers here in Colombia and in Brazil.'

Pat Kennedy knew what he was talking about, he remembered his own dramatic experience in the jungles of Colombia.

'Wasn't Araracuara a penal colony,' asked Anna, referring to a region renowned for its natural beauty, home to caimans, river dolphins and other rare species, but also had a dark history during the rubber boom, in the days of Roger Casement, and the wars, which caused the deaths of some 40,000 Indigenous people.

'Yes,' Diaz told them. 'Between 1938 and 1971, and more than 5,000 Colombian prisoners passed through the Araracuara penal colony. Some of Colombia's most dangerous murderers and criminals were imprisoned there in the jungle, a hell hole by all accounts, surrounded by dense jungles, deep

canyons, fast rivers and impassable rapids, far from anywhere. Its airstrip was built by the prisoners just beyond the canyon, apart from that there was nothing else, apart from a couple of shacks, cut off by Devil's Canyons, 80 metres deep and just 30 wide, through which the Caqueta thunders.'

There was a silence as they absorbed his his words.

'Incidentally,' he added as if to soften the sinister history, 'the surrounding rocks are marked with ancient petroglyphs.'

Pat perked up at the mention of petroglyphs—images incised in rock faces, often by forgotten prehistoric peoples.

Filipe told him of the thousands of such images that had been discovered on rocks between Araracuara and La Pedrera by archaeologists from University College London, together with pottery at sites dating back more than 12,000 years, proving the existence of developed human settlements in the middle of what was now dense rainforests. The same archaeologists had determined very significant climate change in the middle Holocene period caused significant depopulation across the entire Amazon basin.

The initial human colonisation of South America was a rapid process that led to the spread of hunter-gatherer populations into every major biome on the continent within a few millennia, starting at the latest, according to conventional thinking, around 14,000 years before present. Then some 6,000 years later, as a result of sudden and frequent climatic changes, which affected rainfall and by extrapolation agriculture, a widespread population decline took place.

* * *

After saying goodbye to the family of the maloca they continued their journey up river to visit another group of Carabayo Indians. After four hours past monotonous green walls, at one of the rivers endless twists and turns, they spotted two Indians on the bank who made a sign. Diaz disembarked and after a brief parley they followed suit as the porters unloaded their gear

onto the bank. Without giving them time to stretch their legs the guides were already disappearing into the forest, Felix made a sign and they followed.

After an hour's march they arrived in a large clearing in the middle of which was high longhouse, larger than the maloca of the previous day. There the elders stood waiting on the hard packed earthen floor, they were dressed in their traditional costumes, mostly feathers, shells in their ears and thorns through their noses, ready to greet them.

The Indians were almost nothing else and strangely enough they recalled the Iban of Borneo, in fact HG had difficulty in imagining she was anywhere else but in an Iban village in Sabah or Kalimantan.

One of the woman took Camille's hand, she said something incomprehensible, Camille looked down and saw her hand stained red from the dyes on the woman's fingers.

They were welcomed as honoured guests and invited to be seated whilst Diaz exchanged news with the headman.

* * *

The Carabayo had lived, as did most isolated tribes, in their forest home for countless generations, perhaps millennia, collecting fruit, roots, larvae and insects, hunting birds and monkeys with arrows and darts tipped with curare, a poison that causes asphyxia and death, though no harmful effects when eaten in the meat of dead animals. The used bamboo knives to skin animals and cut meat, stone axes to cut trees as well as other tools for their everyday needs.

They were the descendants of the Tiger People, fierce warriors, who it was said painted their bodies with stripes, pierced their noses with thorns, like tigers whiskers, and ate their enemies, who had fled along the Caqueta to the Bernardo River in the 19th century to escape the colonists and rubber tappers

'In reality no one knows exactly how many of these isolated tribespeople people live here,' Diaz told them, 'anything from 50 to 500 people in small family groups.'

The question anthropologists like Diaz and government officials posed was how to best to protect such isolated tribes from the diseases of the outside world for which they had no immunity.

'Keeping visitors away was one solution,' said Diaz with an apologetic smile. 'Especially missionaries, who want to civilize and convert the Indians, forcing them to abandon their ancestral traditions.'

In neighbouring Brazil, the government had a long-time policy of seeking to open up the Amazonian region by sending explorers into the jungle to establish small airstrips and outposts and open roads. Their goal was to contact the tribes through the Indian Protection Service and later the National Indian Foundation (FUNAI) with the objective of integrating the indigenous peoples into modern society, formed a group of integrationists known as *sertanistas*.

The consequences were often disastrous as the indigenous peoples lacking immunity to diseases were decimated, many communities lost from 50% to 90% of their populations. Many survivors ended up in squalid jungle settlements, alienated, suffering the ills of civilisation—alcohol, drugs, prostitution and poverty.

Colombia had learnt its lesson when the Nukak-Maku, a hunter-gatherer tribe, which after official contact was established in 1988, had not only lost half of its population, primarily to disease, but also part of their territory to coca growers, ranchers and other settlers. Less than 250 lived in makeshift settlements near San Jose del Guaviare, and a similar number lived nomadically in the Nukak Reservation.

In the case of Brazil, the government introduced a no contact approach in 1988 by mapping indigenous lands and by excluding loggers, miners and other intruders, an example that became a reference for indigenous rights in neighbouring countries. This policy was however systematically opposed, not only by powerful mining, ranching and timber interests, but also small landless farmers who illegally settled on the indigenous peoples homeland.

Unfortunately the no contact policy left the way open to illegal groups who set up clandestine operations in protected lands and exposed the tribespeople to deadly pathogens—furtive genocide in the darkness of the forest.

THE ISLAND

EIGHT DAYS LATER THE TEAM was back in La Pedrera from where they flew south to Leticia where they would join the *Las Indias* on its voyage up the Amazon to Iquitos the capital of the Peruvian Amazon, the largest city in the world that could only reached by air or boat. The city and with its conurbation exceeded half a million people. It lay on the left bank of the world's greatest river, an inland port, 3,600 kilometres from the Atlantic, one that was accessible by ocean going ships of up to 9,000 tons.

Their flight carried them over a vast carpet of green, over 300 kilometres of uninterrupted rainforests to the Amazon. It was the home to three national parks, that of Rio Piure on the Colombian side of the border, then Yaguas and Ampiyacu of the Peruvian side.

The question of how to accommodate the production team and film crews, transport equipment, plus a helicopter, drones and boats, had been solved by sailing the *Las Indias* up the Amazon to the tri-cities of Leticia, Tabatinga and Santa Rosa, where Brazil, Peru and Colombia met in the heart of the world's largest forest region, known as Tres Fronteras.

It was said that Leticia was the name given to the then small jungle riverside settlement by an engineer named Manuel Charon in 1867, when the area was part of Peru, after his mistress Leticia Smith, a beauty from Iquitos. Today with population of 50,000 the small city of Leticia was the capital of Colombia's Amazonas Department.

It was mid-morning and the Malecon bustled with life, there were ticket sellers, hawkers, money exchangers and tuk-tuk drivers, all pushing their wares and services as passengers made their way to and from the boats. Following Alfonso they made their way to the jetty, where the tender, a rigid-hulled inflatable, was waiting to transfer them to the *Las Indias*.

Once installed the boatman gunned the powerful motor and they headed out onto the broad river, weaving their way past boats of every description, from cargo ships to fast comfortable passenger boats, local river buses, ferryboats, speedboats, river taxis, small motorboats, skiffs and dugout canoes.

Like all such border regions Tres Fronteras had been a bone of contention, fought over in an armed conflict known as the Colombia-Peru War, which was resolved in 1934 by the League of Nations.

It was now the gateway to the Amazon, from where they were set to leave for Iquitos, a 24 hour journey upriver, a city founded by Jesuit Missionaries in 1730, which went unnoticed by the world until the rubber boom when it became the focal point of attention as the source of rubber, where fortunes were made and lost between 1879 and 1912.

Amongst the city's more remarkable monumentswas the Casa de Fierro, which stands opposite the Cathedral San Juan Bautista. The large prefabricated iron building was imported from France by the rubber baron Anselmo del Aguila, who bought it at the International Exposition of Paris in 1889, shipped it aross the Atlantic and then up the Amazon to Iquitos.

Iquitos was also made famous by Nobel Prize winning author, Mario Vargas Llosa, in his novel published in 1973, entitled *Pantaleón y las visitadoras*, a comedy in which a Peruvian Army officer, Captain Pantaleon Pantoja, was sent on a mission to satisfy the sex drive of soldiers stationed in the Amazon.

Soon the team spotted *Las Indias* and anchored a few cables away was the *Sundaland II*, the second and relatively smaller of the expedition's two vessels, a 1,900 ton research and recovery vessel, 65 metres long, captained by Robert Guiglion, to provide logistics and back-up.

Sundaland II could accommodate up to 30 personnel, including Matt's film crews for *Indians*, archaeologists who would undertake a survey of the geoglyphs, ethnologists and environmentalists. The whole programme was planned to last six weeks at different navigable points along the Amazon.

She was a modified patrol boat, built in Singapore, under licence from a Dutch shipbuilder, Damen Shipyards Group, recently fitted now registered in Panama

The two ships had arrived from Manaus two days earlier after a stopover to take on those who had flown in from Europe and take on provisions. Henrique da Roza joined them to assist Sean and his film crew to shoot scenes in the city, which served to illustrate the explosive growth in the Amazon, its population growing from 300,000 to 2,500,000 in a couple of decades.

Once they were all aboard *Las Indias*, Captain Bogart gave the signal and Las India's weighed anchor and set sail in the direction of Iquitos. Camille and the girls set about refreshing themselves after their first taste of adventure and were soon looking civilised watching the scenery slip past, the endless rainforest, the occasional villages and even a pink dolphin or two.

Iquitos was to be their base over the next month after *Las Indias* and *Sundaland II* dropped anchors, a floating film studio and research station from where Matt and his team could undertake and pre-edit *Indians* with the help of numerous specialists from the three South American countries where most uncontacted populations were centred.

With their boats, helicopter, drones and a Cessna Turbo Stationair float plane they could rapidly reach across a vast region ferrying passengers and fragile material to distant sites over a radius of 500 kilometres, and in the case of serious illness or accident reach Manaus in a couple of hours.

* * *

It was the dry season, though that term was relative, and temperatures varied not more than ten degrees between day and night, with a maximum of 33°C,

and relatively clear skies. Their plans were to start filming the second sequence in Resguardo Predio Putumayo, an Indian territory along the Putumayo River, the nearest point of which was just 200 kilometres to the north in the Cessna, a 40 minute flight to the nearest riverside settlement where they could set up a temporary base camp.

Being a shade south of the equator there were 12 hours daylight time, which meant keeping a tight programme for filming and travelling. There were other considerations such as river levels which were lower in the dry season, making it more difficult for boats and especially the float plane.

Two semi-rigid boats equipped with 150hp outboards waited at the base camp for the expedition further up river to the Cahuinarí National Park. The boats had made their way up the Caqueta River from its junction with the Amazon near the Brazilian town Tefe—a long hard journey, after they had been launched onto the river from the *Sundaland II* with drums of fuel and other supplies.

Pat Kennedy was accompanied by Sean Cinnsealaigh who had led a Maynooth University programme focused on the way of life of huntergatherers in Caqueta.

Their plan was to meet with the surviving clans of the Muinane tribe and visit Matanzas, the Hill of the Wild Cacao Tree, the place where their ancestors were massacred by the agents of Arana the rubber baron who had enslaved, tortured and killed the ancestors of the Putumayo Indians.

The Cahuinarí National Park lay between the Caqueta and Putumayo rivers was the home to the Putumayo Indians to whom the Colombian government granted the legal property in 1980, a vast forest covering six million hectares, the Resguardo Predio Putumayo, the home of the descendants of the Witoto, Bora, Muinane, Miraña, Ocaina, Nonuya and Andoque Indians tribes. A region that had been ravaged by Julio Cesar Arana's rubber territories. his new Indian.

The Miraña, for example, were settled in the middle and lower Caqueta River and numbered approximately 200 people. They were linguistically

related to the Bora and the Muinane. They Miraña were the survivors of a group that had inhabited the basins of the Cahuinarí and Pama Rivers, who during the rubber boom with other groups from the area between the Caqueta and Putumayo Rivers, were left decimated after epidemics and exploitation by the infamous Peruvian Amazon Company of Casa Arana.

Today they were governed by the Muinane Council of Elders—formed by the chiefs of the four main clans—The People of the Centre, as they called themselves, who exercised political autonomy and continued to rebuild their way of life on the banks of the Caqueta River.

THE PRIVILEGED

HONGKONGERS LIKE PAT KENNEDY had mixed views on the ongoing demonstrations, which were obviously not good for business and relations with Beijing.

Pat, better known as Sir Patrick Kennedy in elevated circles, enjoyed the good life in Hong Kong, a member of the Hong Kong Jockey Club, one of the oldest institutions in the city, as a race horse owner he mixed with his wealthy peers, passing celebrities and members of British royalty.

He had been a guest at royal weddings, where other guests included the Duke and Duchess of Cambridge, and members of European royalty, which did not however mean he sought their company.

In fact it was the other way around, he could do more for them with his relations in China than they could do for him. As for the City of London and Europe he had more relations than he cared to count.

Pat's Hong Kong based banking empire straddled the globe, a fact that had undeniably contributed to his own knighthood.

He liked to explain to outsiders business in China was all about trust and his position as CEO of the INI Hong Kong Banking Corporation, a patron of the arts and a philanthropist, made Sir Patrick a very honourable man.

The same could not be said for certain royals, whose relations with Hong Hong businessmen had more to do with personal business than flying the flag. One of them was the Duchess of York, the ex-wife of the now banished Prince Andrew, whose link to Johnny Hon, a local businessman, was not a reference for British royalty.

Pat kept his distance from names, like Zara Tindall and her husband Mark Phillips, Zara was the daughter of Princess Anne and eldest granddaughter of Queen Elizabeth. Thanks to Pat's inside knowledge as a banker, he knew they pocketed substantial directors fees from Hon's companies via an offshore bank in St Vincent and the Grenadines.

The trouble with royalty was it attracted media attention, especially tabloids like the *Daily Mail* that thrived on scandal, something Pat tried to avoid, and did, thanks to his tee-totalling habit and his avoidance of other women, a vestige of his Irish upbringing.

Zara Tindall's brother, Peter Phillips, a former RBS banker in Hong Kong, was a horse racing enthusiast like his grandmother, the Queen. He had launched a horse-racing private members' club for investors in Hong Kong with Johnny Hon, a business which Pat had carefully side stepped.

Johnny Hon had been involved in a Supercar GB rally, reserved for high net worth individuals in the Pyrenees that summer, where the participants paid £10,000 for five days of fine dining and fantastic company.

That was not Pat's thing, business was business, he learnt to avoid fooling around with cheap stunts which he knew often backfired. He preferred art, history and archaeology, investing in museum projects and more recently in scientific research

That said, Pat was a little weary of business, pissed-off was perhaps a better description, for no matter how hard he tried, he had discovered there was not much he could do to influence the global economy, even from his position as a powerful international banker. It was perhaps why he had resigned himself to letting the bank run itself, and it did, thousand of small cogs turning in that huge machine, based on Hong Kong island, where banks were particularly profitable in spite of the recent volatility of its population.

He had learned to sit back, observe, from time to time nudging the great ship, of which he was captain, through the turbulence caused by Brexit, Trump, Xi Jinping, Kim Jong-un and the other Ayatollahs of the planet, whose combined efforts, according to the IMF, had slowed the growth of the global economy to its lowest rate since the global financial crisis.

At the core of that slowdown were US-China trade tensions, which together with other factors, such as low growth in productivity and ageing demographics in advanced economies, would cumulatively drag down global GDP by hundreds of trillions of dollars in 2020.

It explained why he was sitting in a somewhat rickety outboard chugging up one of the countless branches of the Amazon River in the southernmost province of Colombia aptly named Amazonas.

Watching over him was Florence Daguerre, one of the team dispatched by George Pyke to watch over the small expedition's safety. Not only was she an expert in weapons and martial arts, she, in addition to her native French, spoke Spanish, and was an organiser, good at giving orders. South Americans, who ogled the attractive forty something blond, soon, whilst admiring her shapely figure, learned to respect her thick skinned nononsense attitude.

A Glock at the ready in the holster on her right hip and a bush machete slung on the other, she reassured Pat, not that he needed reassuring, his somewhat disconcerting disdain for risk had been reinforced by the experience of adventures he preferred not to talk about.

Pat Kennedy seemed to be drawn by a natural curiosity to danger and George Pike knew only to well such brushes with danger did not always end well. It was why Florence had been assigned to the expedition, a decision that went down with the other women who felt more at ease in her presence than certain of George's more blunt men.

THE MALOCA OF THE JAGUAR

THE INDIANS SPOKE NO SPANISH making communication difficult as they inspected the newcomers like strange beasts.

Pat looked at Felix who issued instructions to the porters who placed one of the large bundles on the ground, which he proceeded to open. It contained machetes, axes, knives and metal cooking vessels which he distributed to the Indians

He felt a tinge of guilt as he thought of Cornelius Vanderbilt's men who had hacked his way through the Nicaraguan jungle to open his overland route to the West Coast in the 19th century, exchanging beads and trinkets with the Indians to ensure a safe passage for rafts and canoes down the San Carlos and San Juan rivers

But they were the only kinds of goods that interested the Indians, valuable additions to their possessions as metals tools were precious objects in their world.

The discussions lasted a long moment during which Pat and his friends understood nothing. Without Felix they would have been lost. But even he had difficulties moving amongst the different tribes, as in South America, forgetting Spanish and Portuguese, there were more than one hundred language families and half as much again were isolates, spoken by very few people. Apart from the isolates, many of the families were small, composed of six or fewer languages.

The other problem was that of perception. The indigenous languages contrasted with Indo-European languages—where verb tenses and numbers counted, whilst local languages focused on other grammatical markers which determined whether the speaker witnessed an event himself, heard about it from someone else, or considered it to be an unchanging truth. Which meant their vision of the world was very very different to that of say Spanish, Portuguese or English speakers.

That meant little to Pat and his team of adventurers who were more concerned about the jungle that had now totally enveloped them, starting with Camille

'What kind of animals live in this forest?' she asked.

'Peccaries—that's a kind of wild pig, tapirs, monkeys, snakes, caimans that's a kind of crocodile.'

'Oh, are they dangerous?'

'Yes, not as dangerous as anacondas, they're snakes, a kind of python.'

She said nothing.

'But they're not as dangerous as jaguars.'

'Jaguars?'

'Yes, jaguars.'

'Here?'

'Yes, in this region about 2,000 jaguars roam the jungle in this region of Ecuador, Colombia, Peru and the adjoining border area of Brazil.'

Camille looked around startled

'Unfortunately logging, coffee, cacao, palm oil and bananas are eating into their habitat, all around us.'

Camille looked relieved

'Don't worry, they eat rodents, sometimes dogs, though they'll even eat caimans if their hungry.

'The great tragedy is Jaguars are being poached for their teeth, skin and even bones which are used in Chinese traditional medicines.'

They all looked at Lili, who shrugged.

'For us,' said Felix translating the words of the headman, 'the original people, the jaguar represents wisdom and protects the spirits, to whom we owe all our knowledge. Our shamans, the keepers of our traditions and knowledge, are in communication with the spirits, who they invoke to keep poachers, gold prospectors, loggers and drug traffickers out of our ancestral home.'

Over the years the Indians had resisted the loggers, missionaries and bandits, but it was becoming difficult as armed gold miners appeared on the edge of their territory with their mining equipment polluting the rivers and poisoning the fish.

* * *

'It's called the doomsday plan,' said Pat Kennedy dramatically.

They were back on *Las Indias* eating diner after several days of filming the malocas in what was for them an inhospitable forest.

They all stopped eating and looked at him.

'It's 100 seconds to midnight, humanity is in danger...and I've decided to accelerate my plans....'

They sat staring at him, there was a long silence.

Maybe he's had too much sun, Camille thought.

'The Elders, have decided the world needs to wake up.'

She wondered who The Elders were

'The way I see it, it's too late. All this thing about climate change, nuclear weapons, epidemics, economic collapse and wars, I've seen it coming ... for a long time now. The next economic crisis will unleash forces we haven't even imagined.'

He explain with great seriousness.

'I've spoken to John about it.'

John lowered his head.

That morning, at a press conference, the Bulletin of the Atomic Scientists announced, the doomsday clock had moved forward to 100 seconds to midnight, the closest it had ever been to catastrophe

The doomsday clock was an idea born in 1947, two years after Hiroshima, when a group of scientists, the Chicago Atomic Scientists, who had participated in the Manhattan Project, came to the conclusion the world was on the verge of nuclear destruction. To alert politicians of the danger facing humanity, they invented a symbolic clock which was set at seven minutes before the midnight, the time we were on a 12 hour day from destruction.

'So what are you proposing Pat,' Liam asked slowly.

IMPACT

LIDAR HAD CREATED A REVOLUTION in pre-Columbian archaeology, as researchers like Ken Hisakawa applied the technique at sites across the Americas, using either satellite imagery, aircraft or drones to explore the terrain. Each had its own specific advantages. NASA's satellites had provided for example large scale surveys in Mexico, along the Usumacinta River that formed part of the border between Mexico and Guatemala, helping identify many ancient settlements. At the other end of the scale local drone-based Lidar surveys provided more detailed images of sites. Such methods transformed research, providing vast new quantities of information and new discoveries, upending many long held theories thanks to its highly detailed imagery of structures, roads, waterways and agricultural terraces, providing a broader picture of entire societies, their history and development.

* * *

The Xingu River wound its way north from the Xingu National Park to the Amazon, over a distance of 1,640 kilometres. Its source lay in the Mato Grosso, the home of the Xingu indigenous peoples, where the British explorer, Colonel Percy Fawcett, disappeared with his entire expedition in search of the Lost City of Z, in 1925, possibly killed by isolated tribesmen. That was the legend, savages with spears and poison darts. Today it was the turn of modern civilisation, slowly killing the tribespeople with the rejects of its society, in the form of plastic debris in all shapes and sizes carried through the watershed, washed into its countless rivers and streams.

A study of plastic consumed by freshwater fish in the Xingu River, concluded, after examining the stomachs contents of various species, plastic pollution in some of the most isolated regions on earth was already impacting 80% of aquatic fauna and entering the natural food chain.

Micro and nano particles of polyamide, polyester and polyethylene terephthalate, commonly used materials for the production of plastic bags, bottles, fibres and other products, were impacting the aquatic biota, a health hazard not only to the human population, but also the flora and fauna of the entire biosphere of the Amazon Basin

Scientific reports described how many different species of fish consumed plastics, and regardless of whether they were herbivorous, carnivorous or omnivorous, all fed, directly or indirectly, on the entire food chain—plants, fish and insects of the forests, confounding plastic with seeds, fruits and leaves.

Plastics were not the only hazards to life in the Amazon, where contact with isolated tribes was strictly controlled, as even accidental contact could lead to deaths through diseases, like flu and measles, to which they had no immunity, threatening the extinction of vulnerable forest peoples.

More than 100 isolated groups lived in the Amazon, certain with many related family groups, living in remote areas of Acre, or in protected territories like Vale do Javari, on the border with Peru. Others were the scattered survivors of tribes decimated during the rubber boom during the latter part of the 19th century and by encroaching agriculture.

Amongst these were nomadic groups like the Kawahiva, that numbered just a few families, who had fled deeper into the forest to escape invading loggers and ranchers, certain of whom did not hesitate to use violence to force the Indians off their lands, destroying their forests, source of their livelihoods, where they and their ancestors had hunted—birds, monkeys, peccaries and tapir, with blowpipes, fished in the many rivers, gathered fruit and plants in the forests, whilst certain more sedentary groups cultivated manioc, sweet potato, maize, bananas and maize in their secluded forest gardens.

HONG KONG BATTLE ZONE

IT HAD BEEN A MUGGY SATURDAY morning when Henrique da Roza, a young Forex trader at INI in Hong Kong, and his girl friend Wangshu finished their breakfast of instant noodles and vegetables. They then turned to the preparations for another long long day in the streets, packing yellow helmets, goggles, gas masks and eyewash into their rucksacks.

Henrique came from an old Portuguese family whose ancestors had arrived in Macau in the early 18th century. Macau had been a Portuguese Colony, established on the west bank of the Pearl River, for nearly 500 years before it was returned to China in 1999, two years after Hong Kong.

After completing his studies in Lisbon and London, Henrique had joined INI—thanks to an introduction by an uncle, a senior lawyer at the bank in Hong Kong.

Henrique had the advantage of speaking Portuguese, English, Cantonese and Mandarin. However, the Portuguese were part of a dwindling community and of those registered in Macau only 10% could speak the language.

By coincidence, Portuguese was back in vogue as China developed its business ties with Brazil, Angola and Mozambique, and Macau had become an asset, a key link through its cultural ties and history.

Even Xi Jinping deigned to visit Macau, participating in the celebrations for the 20th anniversary of its return to Beijing's control, which came against

the background of Hong Kong's political conflict and China's growing debt crisis, marked by a 100 billion yuan bailout of Shandong's Hengfeng Bank, which like other Chinese banks was experiencing increasing stress as the country's growth and economy slowed.

Beijing saw Macau as a model that a rebellious Hong Kong would be wise to follow, of course the former Portuguese colony was smaller and less, much less, important financially and economically speaking, in reality Macau was something of an anachronism better known for gambling and other vices.

Chinese state-owned companies had long been an economic burden and now this burden accentuated as the slowdown grew with more and more private sector businesses struggling under the weight of excessive debt, visible as the number of defaults increased. Just one of the tasks on Xi Jinping's agenda was to halt the rapidly worsening relations with US and find an answer to the hi-tech war.

The all time stock market highs in the US did nothing to alleviate Pat's fears of the possibility of a financial war between China and the US, with Xi firmly established as effective life president, the shadow of authoritarianism hung over the country, making China more brittle and vulnerable to the unforeseeable.

Henrique's girlfriend, Wangshu, hailed from Hankou, an ancient city that lay on the Yangtze River in the Province of Hubei. She too worked at INI where she was a financial analyst specialised in Mainland debt issues.

The couple had met in London at an LSE Forex seminar a year earlier, where Wangshu, quite by coincidence was attending a postgraduate course on the more arcane aspects of shadow banking. A brilliant student, she had already spent three years in London where she obtained an MSc in economics.

INI was concerned about the risks of shadow banking in China, much of which escaped the control of regulators, and like the Chinese Central Bank, feared it would inevitable lead to instability and another debt crisis.

That day in Hong Kong, the students' march was announced as peaceful, but Henrique was preparing for the worst. Like many other Hongkongers, he had been present at every major demonstration from the very start of the protest movement against the laws promulgated by Carrie Lam.

Henrique was one of those more privileged young men who enjoyed the comfort of an agreeable apartment in the North Point area, which he shared with Wangshu, who was afraid of what might happen that day. Firstly, the clashes between protesters and police had escalated dramatically with several injuries, secondly, hundreds of people had been arrested—many charged with rioting, a crime that carried a severe prison sentence; thirdly, they could both could lose their jobs; and fourthly, when it all ended, as it inevitably would, they could end up being catalogued as dissenters and trouble makers by the Mainland Chinese authorities, not a good thing for their future and respective careers.

It was almost midday when Henrique and Wangshu left for the assembly point at Victoria Park. They took the MTR at North Point station, where it already crowded with young people, many in black T-shirts and holding umbrellas, chanting their familiar slogan in Cantonese, others in Mandarin, 'Xianggang jiayou', meaning 'Come on Hong Kong'—'Vive Hong Kong'.

Wild rumours circulated, the most frightening was that of troops being readied across the border as Beijing prepared to put-down the revolt with force.

Strangely many quoted the words of Chris Patten, the last British Governor, who cited Jack London at the opening session of the Legislative Council on October 2, 1996

'Hong Kong, it seems to me, has always lived by the author, Jack London's credo:

I would rather be ashes than dust,
I would rather my spark should burn out in a brilliant blaze,
Than it should be stifled in dry rot.
I would rather be a superb meteor,

With every atom of me in magnificent grow, Than a sleepy and permanent planet.

'Whatever the challenges ahead, nothing should bring this meteor crashing to earth, nothing should snuff out its glow. I hope that Hong Kong will take tomorrow by storm. And when it does, History will stand and cheer.'

They were brave words, but would they bend the iron will of Beijing?

Like others, Henrique and Wangshu had been on the streets, demonstrating in the hope of forcing the government to give in. The more activist demonstrators had engaged in hand to hand fighting, throwing Molotov cocktails, bricks, stones and anything they could lay their hands on, they had even tried blocking the airport, the MTR, and government facilities. To no avail.

Henrique, though he was a child when Hong Kong and Macau were handed over, told Wangshu, 'When I think about Patten's words, 22 years ago, they tell me to keep faith.'

It was strange and exciting talk to Wangshu coming from the Mainland, where participating in demonstrations of any form was strictly reprimanded and those involved could quickly find themselves in a re-education centre or worse.

Victoria Park, was the largest park in Hong Kong, it could be seen from the Kennedy's residence high above in the Happy Valley district, it was an island of greenery surrounded by concrete—office towers, shopping centres and a tangle of roads.

The park was a couple of stops from Admiralty, the MTR station on the line that they took daily to and from their offices at the INI headquarters. As they exited from the mouth of Causeway Bay station they heard the chanting of the demonstrators: 'Five demands, not one less!'

The sky clouded over and heavy drops of ran started to fall, the crowd undeterred opened their umbrellas, some shouting their war cry 'Hongkongers! Go, go, go!'

Slowly the throng made its way to Admiralty, watched by riot-police in body armour, holding their shields, battons at the ready, waiting for the signal to charge.

Henrique and Wangshu were soaked through as the column of demonstrators slowly wound its way towards Central, a sea of umbrellas, undaunted by the humidity and rain. It was a route they and others had walked many times before—starting with the first Umbrella Movement in 2013, without much success, the government not budging one iota.

In 2019, more than two decades had passed since the British handed over the colony with an agreement that included a transition period of 50 years. Now, Beijing was tightening its grip on the former colony, striking fear into the hearts of many Hongkongers who enjoyed a degree of freedom unknown to their neighbours on the Mainland.

By early evening the protesters occupied Hennessey Road, which was in fact a broad avenue that led to the government headquarters in Admiralty. There, they were joined by Henrique's friends, some of whom donned goggles, face masks and hard hats, several of them unfurled a banner across a tramway footbridge with slogans demanding democracy

Many of the demonstrators pointed lasers at the government buildings and the Chinese People's Liberation Army Forces headquarters next door, a 28 storey tower situated in what was the former British naval base.

It was getting late when a number of demonstrators ignoring the organisers' advice to leave were caught up in violent clashes with heavily armed riot-police blocking the way to the government buildings. Henrique decided it was time for them to leave and head back towards Wanchai with their friends for a beer before calling it a day.

As they were about to cross Hennessey Road, a convoy of police reinforcements appeared, the doors flew open and squads of riot-police poured out onto the street wielding batons and riot guns. Getting caught meant they could end up in serious trouble, which was not part of their plan, surprised by the sudden arrival of fearsome looking police in Robo-Cop style gear, the crowd pulled back, packed densely together leaving no possibility of escape as the police waded in wielding their batons.

In the panic many fell over, including Henrique, who in a flash had his hands secured behind his back in tight plastic handcuffs and was bundled into one of the waiting police trucks.

Wangshu, separated from Henrique, narrowly escaped and made her way back to the apartment where she switched on the TV news covering the demonstrations and anxiously waited.

He was one of the unlucky ones in a rally that gathered an estimated 1.7 million demonstrators, including young, old and families, at Victoria Park on Causeway Bay, along the route to Central, Admiralty and finally at the Hong Kong Special Administrative Region's government complex.

Henrique was released later that evening, ordered to appear in court the next morning. It was late when he returned to the apartment where Wangshu fell into his arms, relieved he was unhurt and had not been detained.

Early next morning he called his uncle and a chain of events was set in motion, first, one of the bank's lawyers was alerted to assist Henrique in court. Then Lili, Pat's wife, a friend of the da Roza family, alerted Pat.

Henrique was lucky as later that night the government in a reconciliatory statement said it was 'most important' to restore social order and 'the government will begin sincere dialogue with the public, mend social rifts and rebuild social harmony when everything has calmed down'.

Henrique was released with a warning. Nevertheless, it was not good, before he had been an anonymous citizen, now he had come to the notice of the authorities as a dissident, not in a good thing in China.

Normally it was not the kind of business Pat dealt with, but besides not wanting his employees in trouble with authorities, he had noted Henrique's

otherwise good references and more especially the fact he spoke Portuguese, as was spoken in Brazil.

Tensions had reached a new level and more violent clashes with police could be expected. Pat's decision was made. A couple of days later Henrique told a tearful Wangshu at Hong Kong International Airport that they would be together again soon, then waved goodbye as the doors to immigration closed behind him. He was now en-route for Belem, Brazil, a journey of 17,000 kilometres, where he was to join the crew of *Las Indias*. If it worked out, Pat figured, Henrique would be a good addition to the team, he spoke Portuguese, was a banker, and somewhere he wasn't afraid of confronting danger.

BELEM

HENRIQUE LOOKED OUT OVER the wide mud coloured river as the taxi pulled into Porto Belem docks to the north of the city of Belem, the Gateway to the Amazon.

According to his map it was Baia do Guajara to the west side of the city centre where he had spent three nights waiting for the arrival of *Las Indias*.

That morning after receiving a message informing him the yacht would be docking about midday, he had checked out of his hotel and headed for the port. The weather was hot and humid, it was nothing unusual for him who had lived most of his life in Macau and Hong Kong. In fact the river facing him resembled the Pearl River and the skyline of Belem was not unlike those at home.

The Amazon Basin had been historically dominated by two cities—Belem and Manaus. Belem, one of the first Portuguese settlements on the Amazon River, founded in 1616, had prospered by exporting cacao, indigo extracted from brazilwood, and animal skins.

Then came the rubber boom between 1875 and 1900, which transformed Belem with the introduction of electricity, telephones, street cars and fine buildings—such as the Teatro da Paz, justifying its reputation as a tropical Paris.

The rubber boom came to a sudden end when Henry Alexander Wickham smuggled the seeds of rubber trees—taken from commercial *Hevea brasiliensis* groves in Brazil, to start plantations in Ceylon and Malaya, then parts of the British Empire. This brought about the collapse of the Brazilian

rubber industry, and Belem, like Manaus, declined, becoming tropical backwaters. In recent times with the export of timber, soy beans, aluminium and iron ore, fish, Brazil nuts and black pepper the city sprang back to life with spectacular economic and demographic growth.

Both Macau and Belem were cities that had been founded by the Portuguese almost a half a millennium earlier. There the similarities ended, as Henrique discovered, Belem was much more exotic, the people different from Macau, which today was an essentially Chinese city. The streets and market places of Belem bustled with an astonishing mixture of people, Europeans, Africans, Indians and even Japanese, the latter migrating to Brazil decades earlier, after WWII. What was even more surprising was the mixture of races—peoples of every colour and indefinable origins.

They all spoke Portuguese, different from that which he spoke, but perfectly understandable. The lusophone world was impregnated by Brazilian Portuguese, Brazilian music, cinema, television and culture in general.

Brazil was certainly the most mixed country on the entire American continents, which led its government to classifying the population into five categories—white, brown, black, yellow and indigenous, which was reflected in the country's social order and wealth. Brazilian scholars On the other hand divided the population into different categories, starting with Europeans—including Portuguese and Spanish, British, Italian and Germans; African; Amerindian; Asian—primarily Japanese; and mixed-races or *pardos*, which was divided into a number of subcategories, including *loura*, *branca*, *morena*, *mulata* and *preta*.

Then there is the question of class: wealthy, middle class and poor, where it was difficult to advance regardless of colour, mainly because of Brazil's education system that worked for those with money. The most privileged being the Whites and Asians.

The legend of Brazil as an example of racial harmony overlooks the fact that non-white Brazilians remain at a considerable disadvantage, where in practice preferential treatment tends to be given to whites, in areas such as the labour market, land distribution, housing and access to public services.

Statistics show that around 97% of executives and 83% of managers were white. And while the favelas were home to black and white Brazilians alike, in Rio's richer neighbourhoods just 7% of residents were black.

Brazil's six richest men possessed as much wealth as the poorest 50 % of the population; around 100 million people. The country's richest 5% as much income as the remaining 95%.

Henrique himself was of mixed descent, an old Portuguese family whose sons somewhere along the line had married locally. Looking at Henrique he was neither European or Chinese, a blend of the better parts of his ancestors, in short he was a good-looking somewhat serious thirty year old of medium build with a Mediterranean complexion who fitted easily into the Belem crowds

He was driven to the dock, indicated by the message on his iPhone, where he recognised the lines of *Las Indias*. She was the only ship in that area of the docks Which mostly handled bulk carriers for agricultural products. He took his bags and made his way to the gangway where there was little activity and presented himself to one of the officers.

He was expected and was shown to the bridge where the captain was going over a large map.

'Ah, I suppose you are Henrique,' he said holding out his hand.

'Yes Sir'

'Welcome on board, you've come at just the right moment, this is our pilot, Vasco Cintra, I understand you speak Portuguese.'

'Yes Sir.'

'Good, I'm your captain Steve Bogart, they call me Humph,' he said with a grin.

Henrique smiled, good thought Bogart, at least he's got a sense of humour.

'Right Henrique, let's get down to business, you can start by helping me with some questions, because Vasco here is going to be with us during all of our stay in Brazil.'

Steve Bogart, an Englishman from the West Country man had been captain of *Las Indias* since Pat Kennedy had acquired her two years earlier.

Their call at Belem was to take on Matt Halders' film crew and different supplies they would be needing for the two months they would be spending on the Amazon.

'We'll be out of here as soon as everybody in on-board and we've loaded our cargo, 48 hours at the latest.'

Henrique smiled, he knew nothing about boats and even less about the Amazon.

'I'll have someone take your bags and show you to your cabin. Sir Patrick has told me to look after you,' he concluded with a smile.

The cabin was small, but there was a porthole from which Henrique could saw a couple of people carriers pull on the dock. Four men got out and the drivers started to unload a ton of aluminium cases and other baggage.

There was a knock at the cabin door and Henrique was informed lunch was ready. He made his way to a huge stylish dining room where the captain was seated with the new arrivals.

The introductions were made and he was invited to take a seat opposite the captain and next to Dr Sean Cinnsealaigh who announced he was from the Department of Anthropology at Maynooth University in County Kildare, Ireland.

'So Henrique, Captain Bogart informs me you speak Portuguese,' said Cinnsealaigh.

He nodded.

'How would you like to join us for a trip to the Serra da Capivara National Park?'

Henrique didn't know what to say.

'Let me explain,' said Bogart. 'It seems like we'll be staying here for a couple of days longer. Sean here tells me the team here want to do some filming at a site not far from here and they'll need your help.'

He nodded. Things were happening fast.

'Brazil is a big country,' said Sean, 'and Iquitos is far to the west. So we've decided to shoot some film here at a place called the Toca da Bastiana shelter in the Serra da Capivara National Park, that's to the south-east of here. It'll avoid a lot of complications and according to Matt Halder, he's the producer of *Indians*, it will be an important sequence for the film, and I agree with him'

What could Henrique say, he'd barely had time to understand the brief Pat Kennedy had given him.

'We've a flight tomorrow to Petrolina,' announced Sean, 'there we'll pick up a car and a drive to São Raimundo Nonato where we'll meet a guide from the Museu da Natureza to visit the sites.'

* * *

The next morning they arrived at Petrolina on an early flight, hired a car and headed for São Raimundo about 250 kilometres distance where they made their way to the museum situated to the north of the town. Waiting for them was Nieda Guidon, an archaeologist, a stocky elderly woman, director of the recently built museum, a stylish modern helicoidal structure.

Sean who had set up the visit was informed they would spend the next couple of nights at a nearby pousada where they could leave their bags and freshen up before visiting the museum.

Nieda Guidon had excavated hundreds of prehistoric sites in Piaui State some of which she believed preceded those accepted dates for man's arrival in the Americas by many thousands of years, launching a controversy, after she suggested some of the early peoples may have arrived from Africa by boat, rather than over the land bridge, now the Bering Straits, between Asia and Alaska.

The park had yielded more than 800 prehistoric sites confirming the occupation of the Americas by men, including Pedra Furada, a rock art site, for more than 30,000 years based on thermoluminescence and EPR dating methods

It seemed impossible that man had lived in the forests of the Amazon so far back in time. Sean Cinnsealaigh had told Pat Kennedy the story who decided to fund the Irish university's research. Pat realised the value to his own project of understanding how man had survived so long ago in such a distant and seemingly hostile world, so far from the regions where man had evolved

The museum presented the site and the history of Nieda Guidon's work, where she had commenced her first excavations in 1970. There were graphic scenes complete with with stone tools and examples of rock art from the site—certainly one of the richest in the world. It told the story of the man's passage through the Serra da Capivara over many thousands of years.

The next day they set off early with a guide to the Toca do Boqueira de Pedra Furada site, known as Pedra Furada, where Nieda Guidon discovered a site that she believed dated back 48,700 years, which supported her theory that men had reached Brazil about 100,000 years ago by boat from Africa, carried by the Main Equatorial Current, a voyage of about four weeks from the Cape Verde Islands.

The Pedra Furada rock shelter lay under a 70 metre high sandstone overhang next to a couple of waterfalls in one of the many canyons formed by cuestas—ridges, in an undulating dry tropical landscape a dozen kilometres long and two or three wide.

Henrique soon found himself making a film debut at the wooden guard rail before the paintings, covering a vast area, 60 metres long by 15 metres wide and a depth of 8 metres, as he interviewed the guide who described the extraordinary rock paintings for the camera, which depicted armadillos, emus, monkeys, and lizards, as well as an abundance of human figures, something rarely seen in prehistoric paintings in Europe—hunting, playing, dancing, fighting, making love, and giving birth.

That evening as he listened to Sean and Nieda, he discovered a world he had known nothing of, far from his hectic, troubled, modern life in Hong Kong, which suddenly seemed unimportant viewed from the point of view of man's history.

The question that remained in his mind was the controversy over Nieda's theories and those who believed man had entered the American continent much later. It wasn't a question of being right or wrong, he wasn't qualified to answer, it was more the rejection of her evidence by mainstream archaeology which led to many more questions.

He asked Sean on the way back. The answer seemed to be more a question of disbelief in the face of new information on the one hand, and the possibility Niede's interpretation was simply an act of blind faith on the other.

Only time would tell.

Two days later he was woken up in his small cabin on *Las Indias* by a steward, he was wanted on the bridge. From the porthole he saw first glow of light on the horizon and the lights of Belem slipping by.

Las Indias had weighed anchor and they were on their way sooner than expected. As he searched for the passage up to the bridge the last ten days

flashed through his mind, his life had been turned upside down and he wondered what the next weeks would bring in the strange new world in which he now found himself.

A BOLTHOLE

PAT HAD QUIETLY SET TO WORK on his project, Salvator Mundi, commencing with a research centre not far from Lola's home, Barichara, a small colonial town in the Cordillera Oriental, a couple of hours drive to the south of Bogota.

To the local inhabitants the question of research into what was not very clear. The project was variously described as a centre for the study of new energy sources—solar, wind and hydrogen, but especially the development of new storage batteries given the abundance of naturally occurring sodium salts in the region.

It was concentrated around the site of an abandoned salt mine that lay in a narrow valley, cut into the flank of the mountains, 20 kilometres from Barichara, near Curiti—a somewhat smaller town. The access road was closed by a large gate and a panel marked:

Sociedad de Desarrollo Minerales Andinos

Construcción - Privado - Peligroso

The mine and the land that surrounded it had been in Lola Barton's family as long as could be remembered, exploited by a minerals company owned by her father, Don Pedro de Heredia, until no longer profitable. Without the attraction of the salt cathedral in the Zipaquira mine to the north, it was closed down and forgotten, apart from rare visits by local students and geologists.

Since the early part of the year, the mine had been the site of new activity as construction workers moved in to build a research pilot for sodium-ion batteries, a type of rechargeable battery, similar to the better known lithium-ion type, but using other minerals extracted from the salt deposits.

It was a very low profile affair, few announcements in the local press and media, the kind of short reports new investments usually attracted, and few questions were asked, the people of the surrounding region were tight lipped when it came to the affairs of Don Pedro.

To one side of the compound was a helicopter pad and a couple of hangers and further down the valley an already existing airstrip, one than was used frequently by Tom Barton and Don Pedro, who didn't need reminding of the dangers of road transport in the Cordillera Orientale—Lola's parents had died in a tragic road accident when she was a child on the treacherous mountain road to Bucaramanga.

What would have the raised eyebrows of an observant outsider were the vast iron doors situated at the main entry to the mine, much larger and solid than were needed to protect a salt mine or even an industrial research centre.

The new buildings that were springing up in the compound that led to the mine were squat concrete nondescript blocks with heavy metal shutters to protect the windows.

Another thing that would have surprised visitors were the mines galleries, in which, for the moment at least, there were no signs of any of the kind of activities associated with mineral extraction, transformation, workshops or research laboratories. However further into the mine many large galleries were being transformed into what would be storage spaces for materials and vehicles, maintenance workshops and more curiously, large cold storage areas.

A closer investigation would have revealed power generation sets connected to ventilation shafts and fuel storage cisterns, much larger than would have been needed for a normal research establishment.

The real purpose behind Sociedad de Desarrollo Minerales Andinos was the construction of the sanctuary, a shelter, or more prosaically a bolt hole for the Clan and their selected friends

To many the idea would have seemed absurd, far fetched, but Pat Kennedy's vision of the future was clouded by his knowledge of how fragile the world had become, from many points of view, and he reasoned if the Indians had survived by fleeing into the safety of the jungle, why shouldn't civilisation seek survival in the shelter of distant mountains.

'Why not on a Caribbean island?' he had asked John Francis.

'Well,' John explained, 'most islands would have difficulties in fending off intruders, unless they were extremely isolated, whereas the Cordillera Orientale,' as Tom Barton had suggested, 'was far from the sea, and at an altitude of 1,800 metres, where it could be fortified like a medieval castle with access to the surrounding land where food could be grown. Then once the danger passed, it would be easier to recommence life.'

It seemed logical, besides, it was not as if Colombia would be the target of a nuclear power or any other power, with perhaps the exception of Venezuela, *un perro sin dientes*, according to Don Pedro.

In any case threats came from many other sources, economic, political or environmental collapse, pandemic or natural disaster.

Pat wasn't the only one, the world elite was looking to survive, the megarich, royals, politicians, bankers, hedge fund managers, showbiz and sporting personalities along with their families, personnel and medical teams.

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The *Centro de Desarrollo* would require food and medical reserves, capable of providing for the needs of each individual for a minimum of one year, stored underground in refrigerated store rooms.

In addition to those essential needs were generators, vehicles, telecommunications systems, spare parts, enough of everything to survive an apocalyptic event and restart life.

The plans covered fresh and waste water systems, a hospital and an operating theatre, a well equipped medical laboratory, a library, a bakers, a dairy farm and even an ark with essential domestic animals—cows, sheep, pigs chickens, plants and seeds.

There was of course a paramilitary security force—former army personnel selected and trained by George Pyke, the Clan's security specialist, with state of the art weapons capable of defending the city from marauders and the desperate fleeing Bogota or other nearby cities when the need came.

Deep in the ground would be reserves of fuel, oil and gas, diesel generators, radios, IT equipment, vehicles, drones, helicopters, light aircraft, boats, solar panels, wind generators, pumps, tools, tractors, fertilizers, medical and pharmaceutical supplies, a library of books and maps, workshops and spare parts, in short everything needed to ensure survival, at least 12 months, during which time they would have to become autonomous, autarchic.

Daily activities would be conducted in the research centre, the base around which the sanctuary would be built, linked by an underground railway to the mine and its galleries, where last resort shelters would be cut deep into the bedrock, providing temporary living quarters and the storage of reserves, sufficient for the survival of up to 2,000 individuals.

Columbia, like its neighbours, was blessed with some of the most favourable conditions on Earth for renewable energy in the form of wind, solar and geothermal power. Already nearby Costa Rica was a model, the only country supplied with 100% renewable electricity.

It was a vital factor in Pat Kennedy's investment plan, cheap and abundant energy. Colombia, with its 1.14 million square kilometres, four times great than the British Isles, was unburdened by an ageing population like the UK with its long litany of social problems. Colombia was still a new world,

one of vast opportunities and resources, even five centuries after Alonso de Ojeda, a companion of Columbus, had set his eyes on its coast. Cartagena was its first city, founded in 1533 by Pedro de Heredia, an ancestor of Lola Barton's, a city that became Spain's most powerful military base for the exploration and conquest of the New World.

Pat Kennedy's Clan now included three Spanish speaking families, first there was that of Lola Barton's, whose grandfather, Don Pedro, was a Colombian grandee and a wealthy well-connected figure. Then came Liam and Camille Clancy, followed by Dee O'Connelly and his partner Anna Basurko, they together with Pat would be the founding fathers of Ciudad Salvator Mundi

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Pat was not alone in his plans, in fact it was a growing business with similar such bunkers being built in New Zealand, in the US and Europe, often in Cold War bunkers, fallout shelters, rocket silos, in the Swiss Alps, in the Rockies and in former Soviet East Block countries, wherever adequate protection was possible.

Survivalists planned to build compact fully autonomous, defensible shelters, part of which were deep in abandoned mines and bunkers, which would act as last resort citadels, inner baileys, keeps, as in European medieval castles. And as in such a castle there were spaces for services, defence, communication, utilities, accommodation, dining halls, shops, schools and meeting halls.

Unknown to all but a few, the Centro de Desarrollo had a twin, situated in Ireland, not far from Dublin, in the Wicklow Mountains, built on the same model, around an old lead and silver mine.

Pat, as any careful planner, had no intention of putting all his eggs in one basket, or in one mine. Colombia had the advantage of being far from war zones and was almost an inconsequential player in big power geopolitics, of little strategic value, though at the same time distance could be a disadvantage. It was why Pat chose Ireland as a second site, it was an island,

a fairly big one, nearer to Europe, but separated by two seas, and was an equally inconsequential geopolitical player of little strategic value.

In a moment of danger with his intercontinental jet, he and his friends could cross continents and oceans, from Hong Kong to Dublin, or from London to Bogota, where they could ride out the storm or in a worse case scenario start again.

* * *

Across the planet survivalist movements were taking form, the phenomena was nothing new, during the course of the Cold War, the adversaries had aligned their silos loaded with missiles of mass destruction, ready to annihilate civilisation at the press of a button. At the same time governments had built bunkers, shelters, not only to survive, but to pursue their folly.

Somehow the planet had avoided nuclear destruction, the unexpected collapse of the Soviet Union had distanced the doomsday spectre. The deterrent seemed to have worked, the end of the world was too frightening to imagine, even for authoritarian tyrants.

More than three decades passed before the world woke up to a new danger. The rich had been too busy making more money, the superpowers too busy arming their surrogates to fight proxy wars, the masses too busy consuming to worry about tomorrow, and the poor for the first time worrying about other problems than hunger as food became more abundant thanks to advances in science and agriculture.

Suddenly, towards the end of the second decade of the third millennium, the world was shaken out of its torpor by forest fires, hurricanes, melting glaciers, coastal erosion, the destruction of natural habitats and the massive pollution of every biosphere.

Scientists alerted the world to climate change and the urgent need to act, intellectuals, journalists, media personalities, joined them, in a flash everybody was clambering onto the bandwagon. Voices cried out, words flowed, but little happened. The inertia of the Anthropocene was too great.

Just one last straw was needed and the tipping point would be passed.

Two or three years earlier, men like Pat Kennedy, who reigned as masters of their universes, had rarely paused to think about such questions. They had spent their lives building and defending their empires. Dangers came from competitors, politics, legislation and consumer groups, not forgetting economic crises. Never had they thought their very existence could be threatened.

The awakening was rude.

As the doomsday clock ticked on, the realisation that they could end up like the Romanovs galvanised the more farseeing into action. Their extravagant homes in London or New York would be no protection against the mob, their easily reached luxury islands in blue waters offered no safe haven.

They would be like the wealth classes of St Petersbourg who woke up to find themselves dispossessed of their wealth by Lenin, relegated to the role of caretakers of their palaces and mansions, like Sergei Shchukin and Ivan Morozov, rich art collectors, in 1918.

The first time Pat Kennedy visited Tom Barton at his home on the Altiplano in Cordillera Orientale, the widest of the three branches of the Colombian Andes, he'd marvelled at the eternal spring, the mountain landscapes, the old Spanish colonial cities, the quiet and peace, it was totally unlike the other Colombia he had once known, one of war, when the government was locked in a deadly battle against the Farc and the drug cartels.

The government had won part of that war, life in Colombia had improved, though not for all. Those fortunate enough to live in the Cordillera Orientale were the lucky ones, they had escaped many of the tribulations of that battle, thanks to a natural environment that offered less cover than the jungles of the south, those controlled by the Farc, where coca was cultivated to finance the long-drawn-out war in association with criminal cartels, successors to the infamous drug baron Pablo Escobar.

During their archaeological expedition off the coast of the Alta Guajira Peninsula, the previous year, Tom had spoken of building a new city, one that was ecologically viable, in the mild and friendly environment of the Altiplano. They had spent many evening on Pat's yacht talking and dreaming of a better world, a society the existed in harmony with nature.

Nearly a year later, their ideas took form as the news of forest fires in Colombia's Amazon, Brazil, California and Australia, brought the realisation that climate change had arrived and politicians were either helpless to do anything about it, or worse still continued to dismiss it as fake news.

A special planning unit was quietly set up at the Dublin branch of the Fitzwilliams Foundation to monitor the variables of what they called 'imminence', their role was to measure the time left before society entered into irreversible systemic breakdown. The principal was built around a mathematical equation that had proved its value by forecasting the growth of world population, formulated in the 1960s by scientists and mathematicians. The equation was like a doomsday clock, fed daily with a matrix of information based on real-time events and statistics.

Some years earlier, John Francis had been charged with setting up a think-tank by Pat Kennedy's predecessor, the late Michael Fitzwilliams, to monitor and interpret international developments so as to enable the bank to anticipate major international events and pre-empt their consequences, enhance profits and avoid damaging fallout that often hit unprepared fund managers and traders.

When Michael Fitzwilliams was tragically killed in the mysterious explosion of his yacht in the Irish Sea, the think-tank was transformed into the Fitzwilliams Foundation, established at Queen Anne's Gate in London, and its role expanded to geopolitical analysis.

Soon after scientists predicted the tipping point—the point of no return—would be reached in 2026, when a systemic breakdown would provoke an irreversible decline in the functioning of society, when the gains that had been made over the last three centuries would be reversed, with the return of hunger, disease and war. How quickly chaos took hold was not predicted, but

what seemed certain was once the process commenced there would be no stopping it.

At first Pat Kennedy brushed it off as alarmist, now all he needed to be convinced was to look at the evening news on any TV channel, read any newspaper, watch any talk show, or listen to any debate, which he did with increasing concern.

The news was increasingly pessimistic, endless wars, political crises, forest fires in Brazil, Australia, California and Borneo, mass extinctions, climate change, refugee crises, nuclear proliferation, the next financial crisis, political and electoral manipulation, all that was missing was a good old fashioned biblical plague.

Anyone politician who didn't believe it, had only to talk to any serious scientist or geopolitical analyst and they'd convince them otherwise. The man in the street could be forgiven for not have one of those experts in his circle of friends and acquaintances. Pat did, and that was why he'd set his doomsday plan in motion.

MANAUS

LAS INDIAS DROPPED ANCHOR IN MIDSTREAM near where the Amazon and the Rio Negro met at Manaus. Bogart announced Dee O'Connelly, John Ennis, and two of Pat Kennedy's security team George Pyke and Florence Daguerre would join them. There they would wait for the production team, and the Sundaland which was still a day down river.

Dee and John had flown in from Bogota and took a taxi directly to the port where they were picked up by the yacht's cutter and arrived on *Las Indias* for lunchtime. Their plan was to visit National Institute of Amazonian Research—INPA as well as visit the city, taking advantage of Henrique presence to help them with the language, and discover a city that had grown to opulence at the time of the rubber boom with its magnificent opera house and grand avenues.

Reputed for being at the meeting of the waters where the dark waters of the Rio Negro converged with the brown, muddy, Solimões—as the upper Amazon was known in Brazil, Manaus was located in the centre of the world's largest rainforest, and was naturally home to the National Institute of Amazonian Research—INPA, the most important centre for scientific studies in the Amazon region.

INPA was situated in a large scientific research centre next to the UFAM the University of the Amazon and other institutes. They were given a tour of the centre with its gardens, tree walks and exhibitions by Carlos Flausino who would accompany them up river to the indigenous Vale do Javari region where the largest concentration of uncontacted indigenous peoples in the world lived

Isolation according to Carlos was often a survival strategy, since many groups during the rubber boom had suffered the theft of their women, rape, child abduction, enslavement, which led to certain groups deciding to isolate themselves deep in the rainforest.

'A century before Manaus was known as the Heart of the Amazon,' Carlos told them, 'today it's a different world with industrial parks, a free port and an international airport.'

He was proud to tell them about the new industries: electronics, chemicals and ship building industries.

They spent the day visiting the zoological and botanical gardens, ecoparks and native peoples museums, before finishing up at the cathedral and magnificent opera house.

* * *

That evening as they sat watching the sun go down from the upper afterdeck of *Las Indias*, John Ennis recounted the story of the Jari River project in Amazonia, a story of how men destroy nature without the slightest consideration for future generations.

'I think I've heard of Jari,' Dee said vaguely. 'It wasn't Ludwig was it?'

'No, it wasn't really Ludwig who started it all, sure it had been his baby, but above all Jari was backed by General Golbery.'

'Golbery?'

'A general who controlled the Extraordinary Ministry for Regional Agencies in Brazil. Later he became the Chief of State security. It was unusual because he had some very strange ideas about geopolitics.'

'What do you mean by strange?' asked Dee.

'Well, he controlled and influenced Brazil's development of its natural resources for several decades. He was a man who stuck to his policies...even when it should have been obvious that he was on the wrong track.

'How exactly was he involved with Jari?'

'Jari was what I suppose you could call a joint-venture between government and capitalism. One of the most well known because of the publicity of Daniel K.Ludwig's involvement.

'I see,' Dee nodded.

'It was seen at the start as a frontier project, you know the kind that the media likes to talk about, that is before the ecologist movement even existed,' he chuckled.

'When did it start?'

'On the Jari River! You know where that is?' he said glancing at Dee and vaguely pointing eastwards. 'South from the Tuma-Humac Mountains that separate French Guiana from Brazil, the plantations were started in 1967.'

Dee was none the wiser, and furrowed his brow as if trying to visualise the geography northern Brazil. Anna had talked about it many times, but geographically it remained vague.

As for Henrique It was history, long before he was born.

'Who was Ludwig anyway?' he asked.

'An American billionaire, enormously rich, his fortune was made in shipping.'

'Yeah, I seem to remember that, but what was he doing in the Amazon anyway?'

'I'm not really sure, but you know his idea to make plantations there wasn't the first.'

'Oh'

'The first, in modern times, was none other than Henry Ford. He tried to set-up rubber plantations, at a place he called Fordlandia, where he bought two and a half million acres, much further into the interior than Jari.'

'Fordlandia! I've read about that, goes back quite a way?'

'Yes. It wasn't such a big project as Ludwig's, about seven thousand acres of rubber trees were planted, they should have been ready for tapping in 1936, but one disaster followed another. In the end, after spending over ten million dollars, Ford sold out to the Brazilian government, for a twentieth of that sum in 1945. I guess he wanted to control the source of rubber for his car tyres.

'Anyway it was a fiasco, just as Ludwig's was to end up forty years later. The only difference was that Ludwig's project was on a very much bigger scale and surprisingly looking back most of mistakes were the same!'

Dee looked at Ennis, he had stopped talking, looking at the river boat passing on the swell of a large passenger boat heading for the terminal at Manaus

'The weather's changing?'

'No, it's just the swell.'

'So what happened with Ludwig?'

'Well Ludwig bought three million acres in northern Para, on the north side of the Amazon, about 200 kilometres from the island of Marajo. He planned plantations of a fast growing Indian tree known as *Gemilina arborea*. They'd calculated that there would be a shortage of wood fibre for the paper pulp industry.'

'Was he wrong?' said Dee smiling.

'You know he was! There's no shortage now or in the near future, but then Brazil imported all of its paper pulp from the USA, illogical when you think of the vast forests resources in Amazonia. wasn't it?'

'What about Borneo?'

'You don't need to cut down all the forest, that's what I tell them. A couple of hundred thousand hectares can supply all the wood you want. They don't need to need to push the Dayaks into slum towns and run down villages where's there's no work. Anyway it wasn't only pulp wood plantations that Ludwig planned, he also envisaged vast rice paddies, the biggest in the world, mining and livestock operations and workers townships, as well as 2,500 miles of roads and about fifty miles of railroad track.'

'Sounds a bit like big agribusiness,' said Dee frowning.

Well Ludwig wanted to avoid the mistakes Ford made. But everything that could go wrong went wrong from the start, Murphy's Law. I'm not making excuses, even if I had been there, it wouldn't have made any difference!' he laughed. 'You know those god dammed bulldozers, even scrapped off the top soil, and practically all of Gemilina seedlings failed,' he said shaking his head. 'The rest were attacked by disease.'

'Disease?'

'Not only that, anyway, less than a quarter of the planned plantations had been actually planted, and the success rate of those was fifty percent below what they had calculated.'

'How was that?' asked Ennis, accepting a beer from the steward.

'I suppose the real reasons were a lack of botanists and experienced silviculturists in tropical forestry.'

'What happened then?'

'Ludwig ploughed ahead with his plans and a paper pulp mill was built in Japan.'

'Yeah, I more or less remember that when I was with the New York, they ran several stories on it'

'Well, as you know, the mill was built on a couple of barges. They towed all the way from Japan, across the Indian Ocean, around the Cape of Good Hope, then across the Atlantic and finally down the Amazon to the Jari River'

'Yes, quite a pharoahonic achievement.'

'You're right, the barges were beached at the final destination, a ready prepared site on the banks of the river. The mill was started up on time, but the plantations had fallen way behind schedule, so the mill lacked raw material. Because the plantations could not provide all the wood needed, so they started cutting down the natural forest to fuel the power generating plant that fuelled the mills boilers for steam to run the power generating turbines.'

'What about the rest of the project.'

'Well then they hired some Japanese agronomists, but they also ran into trouble.'

'Are you saying there was some kind of sabotage?'

'That's really difficult to say, but my opinion there were too many coincidences. The whole thing was a complete economic disaster after Ludwig had poured in hundreds of million of dollars. They were hiring and firing project directors one after the other, in total over a period of fourteen years, there were about thirty of them.'

'And you were one of them?'

'Yes and no, I wasn't one of the project directors, I was hired as a consultant to put order into the forestry projects and plantations. I visited it several times.'

'And after that?'

'Well the whole thing practically came to a standstill. Ludwig could not obtain any more money from the Brazilian government to extend his

operations for a second stage of the pulp mill. Finally he threw in the towel and sold out to a consortium of companies.'

'What about the plantations then?'

'Well they didn't exactly give up, but the Gemilina plantations were abandoned in 1982, too expensive. It wasn't what could be called an outstanding success story!' Ennis said slapping his knee and laughing.

JULY

1

COAL

IT WAS AS IF THE MINUTE HAND of the doomsday clock hand ticked several seconds closer to midnight. Pat re-read the report in South China Post to convince himself it was real, a report on the growing number of new coal-fired power plants being built in China. It seemed incomprehensible, but the numbers surpassed the totality of all old coal-fired plants being decommissioned by the rest of the world, and this in spite of China's pledge to limit the use of coal power.

China's programme was so out of alignment with the Paris agreement it had signed that it cancelled all the benefits that could be gained if every other country in the world decided to abandon coal.

To make matters worse, China had at the same time embarked on the planning, financing and construction of more than 300 new coal-fired power stations overseas, most in developing countries, including Turkey, Vietnam, Indonesia, Pakistan, Bangladesh, Egypt and the Philippines, and in flagrant disregard for the declared objects set by the Paris agreement.

The expected life of such power stations was half-a-century.

It was confusing and difficult to understand, but the underlying reason only went to confirming John's explanation. The choice was eat or starve, live or die. It was not a difficult choice to make, eating and living was now, starving and dying some time in the future, and in the interval perhaps a miraculous solution could be found.

Without energy, China, India, Pakistan and Bangladesh, would collapse into anarchy, a chaos even greater than that caused by China's Communist Revolution and its aftershocks—the Great Leap Forward and the Cultural Revolution, which altogether cost according to some estimates one hundred million lives—the price to pay for problems past leaders had been unable to solve.

The untold truth was the world's nations were well on track to produce vast quantities of coal, oil and gas, quantities way beyond the reductions pledged to limit the rise in global temperature.

In fact, the estimated fossil fuel production for 2030, would be 50% above the level set by scientists to prevent a temperature rise of more than the 2°C fixed by the Paris climate agreement, which if not met would expose hundreds of millions of people to the dangers of extreme heat, drought, floods and poverty.

It was a lose-lose situation, either way the poor would suffer. Without energy to pump water, supply electricity, to drive transport, they would die. With fossil generated energy and the hazards that came with it, those who lived in countries like Bangladesh would die of heat or in floods as the climate changed and the sea rose.

To think of the poor having access to clean renewable energy sources was an illusion

Many experts had expressed their concern that even if the cuts foreseen in Paris agreement were respected, the planet was heading for a catastrophic 3-4°C rise.

The trouble was after more than two decades of climate policy awareness, fossil fuel production levels continued to rise at an alarming rate. The reasons were clear, fossil fuels played a vital economic role in almost all countries.

Build sustainable green energy producing power plants was easily said, especially when it rolled off the glib lips of those who had no idea of scale. China had invested more than 244 billion dollars in energy projects abroad since 2000, who else could muster such vast sums, who could provide the technology to build clean energy alternatives?

John knew the answer and it cost Pat's new friend, Kyril, not a brass penny to protest.

ECOCIDE

'The trouble with getting into a rat race,' the American comedian Jackie Gleason once said, 'is that even if you win you're still a rat.'

AS THE IMAGES OF THE FIRES RAGING in the Amazon were flashed across the world and Jair Bolsonaro transformed into an ecocide, the forests of neighbouring Colombia were burnt to make space for cattle ranches and coca plantations.

The region of Colombia between the Andes and the Orinoco River was threatened by rampant deforestation, as each year its natural parks lost vast tracts of primary forest to land grabbing ranchers and loggers in the absence of government presence and action.

The international media concentrated its reports on Brazil, but ignored the growing crisis in neighbouring Colombia's Amazonian forests, the home to many indigenous communities.

Colombia had lost nearly 200,000 hectares of forest in 2018, much of it in national parks and protected regions, less than in the two previous years when nearly 300,000 hectares of secondary and primary forest were sacrificed to the chainsaw. Then, in 2019, in spite of protestation, a further 100,000 hectares were lost in the Tinigua, Serranía de Chiribiquete and Sierra de la Macarena National Parks and in the Nukak National Natural Reserve.

Following the peace agreement, signed in 2016, between the Revolutionary Armed Forces of Colombia—the Farc and the government,

the guerrillas left the Amazon, creating a vacuum in their wake. Then taking advantage of the newly found peace process, large cattle ranchers and loggers moved in, forcefully preventing indigenous peoples from occupying their own ancestral lands, backed by gunmen and private militias hired to do their dirty work.

* * *

Bleeding heart luvvies and their fellow travellers in pursuit of causes, rarely gave thought to the consequences of their actions, including organisations like Greenpeace, which was almost certainly the best known non-governmental environmental activist with bases in some 40 odd countries, whose objective was to 'ensure the ability of the Earth to nurture life in all its diversity', a very laudable cause.

At times it seemed as if their goal was to perpetuate their own existence. As with many such organisations, they needed easily identifiable enemies, targets, to whip up the enthusiasm of their supporters and above all donors.

As with certain other NGOs, Greenpeace did not accept funding from governments, corporations, or political parties, but financed its amorphous organisation through funds raised by millions of individual supporters and foundation grants.

With nearly 200 permanent salaried staff, most of whose day-to-day existence depended on their end of the month stipends, the operating costs of Greenpeace, that is to say remunerations and charges, absorbed more the half of the funds raised. Many critics accused it of being motivated by politics rather than science, which was certainly true, in a time when any personality, political or otherwise, could get a boost from associating themselves with any green or politically correct cause.

Patrick Moore, an early but now former member of Greenpeace, criticised its stance on GMOs, notably a new strain of rice, claiming it had 'waged a campaign of misinformation, trashed the scientists who were working to bring Golden Rice to the people who need it, supporting the violent destruction of Golden Rice field trials.'

Kyril confessed it had lost its way and had become a 'sad, dogmatic, reactionary phalanx of anti-science zealots who care not for evidence, but for publicity'.

Golden Rice, a form of normal white rice genetically modified to provide vitamin A, conceived to counter blindness and other diseases in children, struggled to gain approval, an essential food that would have saved millions of lives lost to malnutrition, and protected countless other children in countries like Bangladesh, India and China.

Kyril put the blame for the obstacles blocking genetically modified strain of rice at the door of certain ecological action groups, and more especially with Greenpeace and their action against genetically modified crops.

The Greens said, not only was Golden rice an ineffective tool to combat Vitamin A deficiency, it was also environmentally irresponsible, posing risks to human health, and compromising food security. Its development was criticised for diverting resources from the fight against global poverty.

Kyril pointed to the Cartagena Protocol on Biosafety, an agreement designed to ensure the safe handling, transport and use of living modified organisms, which was instrumentalised to forestall the introduction of the new strains. He attributed the delay and obstacles to the development of Golden Rice to overcautious regulation, with the cost borne by the poor in suffering, starvation and blindness.

Finally, after millions of dollars and years of effort, the US, Canada, Australia, and New Zealand approved Golden rice as safe for consumption and it would soon be approved by regulators in the Philippines and in Bangladesh.

In the same way Jair Bolsonaro was pilloried by Green movements and the rest of the eco-warriors.

To understand why Jair Bolsonaro became president of Brazil in January 2019, it was necessary to look at the previous military regime, and its successors—namely Luiz Inácio Lula da Silva, better known as Lula, and Dilma Rouseff, Brazil's first female president who succeeded Lula in 2010.

Lula succeeded Fernando Collor de Melo, the first President democratically elected after the end of the Brazilian military government, which ruled Brazil from 1964 to 1985. Collor resigned in 1992, following charges of corruption and Brazil welcomed a new era.

Luiz Inácio Lula da Silva, a socialist, head of the Workers Party, the antithesis of corrupt politics, arrived as a knight in shining armour with the promise to rid Brazil of its endemic disease, corruption, a scourge that had eaten at its political base for generations, for as long as anyone could remember, and more.

Since colonial times, Brazil had been dominated by a small class of very wealthy elites, oligarchs who could do whatever suited them, especially when it came to helping themselves to the country's assets, and they usually did, an example was Petrobras, Brazil's largest state-owned company, which was plundered on a vast scale, even by the country's unenviable standards, by political leaders and private businesses.

The fight against corruption was one of Lula's main strengths in the 1990s, but soon after he took office in 2003, corruption started to eat into the Workers Party government.

The deception of the poorer classes was profound when first, Lula was found guilty of clientelism and corruption, and second Dilma Roussef was impeached, ostensibly for mishandling of the economy linked to a vast scandal involving Petrobras.

Between about 2004 and 2014, the state-run energy firm Petrobras, Brazil's largest company, and one of the largest corporations in the world, was caught up in one of the country's most astonishing corruption schemes ever, and whilst Rousseff was the chairwoman of the company's board. It seemed that no matter which party was in power the rot continued. But with the socialists it was worse, because in addition they they were accused of economic collapse the result of their reckless spending, which had nevertheless improved the lot of the poorer classes.

The arrival to power of the former army captain, Jair Bolsonaro, raised the question—why did the Brazilians elect corrupt politicians to power? The answer was clientelism—and clientelism went hand in hand with corruption, not only that but corruption could be overlooked if elected leaders achieved goals seen as a more important objective, with voters backing politicians who 'steal but get things done', those who enjoy a reputation as efficient public managers while accumulating private wealth through corruption, with some voters choosing candidates based on identity, and others on the basis of religious or kinship preferences.

Jair Bolsonaro professed conservative values, including the use of strong arm methods to contain the rampant crime that damaged his country and hurt its image. Head of the Social Liberal Party, he presented himself as an untainted anti-establishment politician, a politician free from corruption, loyal to past conservative traditions, one who would restore law and order.

In short he represented the white middle classes who had seen their position decline under Lula and Delma.

Brazil's place in the world had regressed under the Workers Party, which explained Bolsonaro's victory with many middle-class voters turning their backs on Lula's party as the economic crisis that gripped their country hit them hard and living standards fell.

Bolsonaro promised to remedy the economic situation by allowing mining and agricultural companies to expand their activities into previously protected areas of the country, such as the Amazon Forest, and by reducing aid to indigenous people's land protection agencies.

The frontiers of Brazil were another problem, especially those with Venezuela, where the military were deployed to control the hundreds of thousands of refugees fleeing Maduro's bankrupt socialist system, causing numerous problems for border towns.

South America was not the US, and even less Europe, where refugees could be cared for. Refugees were not wanted, employment was already scarce and sharing was not to be reckoned with.

European and US champagne socialists, ecologists and well intentioned good-doers with their politically correct convictions, could not get their heads around the realities of Brazil, a continent sized country, geographically nearly three times the size of India, twice that of the EU, practically the same size as the US, and 30 times bigger than the UK.

With a diverse and volatile population of 200 million spread across its vast and often hostile territory, it was not an easy country to manage politically or economically, despite its vast wealth.

LESSONS OF THE PAST

PAT KENNEDY WAS NOT ALONE in believing lessons of the past were vital to understanding the survival of human civilisation.

Studies had shown that deforestation in Central America was nothing new, all past civilisations had cut down large swathes of original forest to provide for the needs of their populations. In the case of the Maya, they clearcut the forest to plant maize, for firewood, and for construction materials to build their monumental temples and buildings.

But when cyclic climatic change brought drought around AD900, it coincided with soil erosion and the depletion of forestry resources, bringing war, collapse and the abandonment of cities.

Today, some 1,000 years later, the forest had repossessed its domain, but in spite of its apparent density and wealth, the impact of resource depletion could still be felt as could the underlying soil's ability to store carbon.

The analysis of sediment cores from lakes in the Mayan lowlands of Mexico and Guatemala, showed the existence of deforestation and soil erosion even in pre-Maya times, when the primary tropical forest was cut to provide farming land.

Inevitably, as the centuries passed, erosion intensified with the densification of population centres and the intensification of agriculture, witnessed by palaeoenvironmental records, this not only affected forest cover, but also exposed the humus to tropical rains which increased soil losses but run off.

Today, visitors to the land of the Maya often saw the dense forest cover as primary forest, which was not the case. In cutting down the primary forest the Maya fundamentally modified the ecosystem and hundreds of years after the disappearance of their civilisation and the abandonment of depleted agricultural lands, nature repossessed its domain, but the forest never refound its pristine primeval state.

A further complication unexpectedly upset the hopes of reforestation. Secondary forests, even after hundreds of years growth, could no longer sequester the same quantity of carbon as primary forests, a finding that had implications for those who imagined replanting forests would solve carbon storage problems. In any case tree planting projects, if the UK was anything to by, were not promising, as it had missed its targets every year since they were set in 2013, a message that underlined the urgent need to preserve primary forests.

RAINFORESTS

A LOT WAS WRITTEN IN THE PRESS and talked about on the media about the destruction of tropical rainforests, though little was said about the precise role those forests played in the functioning of local and global weather—thanks to their absorption and creation of rainfall and exchange of atmospheric gases.

Indians would open with a presentation of the Amazon forest and how it created between 50% and 80% of its own rainfall. Matt's idea was a simple introduction for viewers of what scientists called a biotic pump, where the evaporation or transpiration caused a reduction in atmospheric pressure as clouds form, causing moist air to be drawn to regions where evaporation is at its highest.

With the loss of forest cover a rise in temperatures followed with the result biotopes in Equatorial regions were transformed into drier forests and expanded savannas.

In this way viewers could see how tropical rainforests played a vital role in climate regulation, through the surface albedo—a measure of energy and surface reflectance, by absorbing more heat than bare soil. So when moisture from trees and vegetation rose into the atmosphere it condensed as rain and created a local cooling effect. Therefore loss of forest cover meant less heat absorption and less moisture rising into the atmosphere.

Any change impacted local climate and effected weather patterns that in turn influenced adjacent regions. Consequently, the continued destruction of the rainforests would inevitably affect the global climate leading to greater instability and extreme weather conditions.

Civilisations in tropical regions like those of the Maya and Khmers depended on large scale agriculture and deforestation, not only for food production, but also wood for construction, firing bricks and pottery, and kindling. The same was valid for the Amazon basin where pre-Columbian societies developed, where their success led to local climate change, less rainfall and as a result less food, all of which was compounded by global climatic cycles, like El Niño, which went a long way to the decline of those societies.

* * *

'To put things into perspective,' Kyril explained, 'that is in terms of geological time, we are living in an interglacial period, between two ice ages. People forget the ice sheets that cover the poles have expanded and retreated many times in the past, as have our glaciers.

'The last glacial period,' he reminded them, 'when the ice expanded, occurred between about 120,000 and 11,500 years ago, and since that time we have been living in a period scientists call the Holocene.'

He went on to explain how geological records, in terms of ice cores drilled in polar regions, demonstrated glacial periods were colder, dustier, and generally drier, whilst interglacial periods were wetter and warmer. Evidence of which appeared through the changes observed in marine and terrestrial life in fossil records around the world.

The reasons for these cycles were many and included variations in the Earth's orbit around the sun which changed the amount of solar radiation received.

Other variations were caused by the ice-albedo effect, that is the reflection of solar radiation. Another was atmospheric CO₂, which is what was commonly called the greenhouse effect.

'Emissions of CO_2 created by the burning of fossil fuels and the destruction of CO_2 absorbing forests,' said Kyril continuing his lesson, 'has caused the temperature to rise and sets in motion climate change and rising sea levels as ice sheets and glaciers melt.

VALE DO JAVARI

AFTER A LONG TREK PAST towering tornillo trees and mashonastes erect on their huge splayed buttresses, their trunks disappearing high into the canopy, beneath a lattice work of branches decorated by epiphytes and orchids, they wearily shuffled into a clearing close to a river.

The location was set in a region to the south of Leticia, situated in the Brazilian State of Acre, called the Vale do Javari, where the Rio Itui joined the Rio Itaquai, one of the most remote and uncharted places left on the planet, where the mysterious Flecheiros Indians lived, whose poisoned arrows targeted at all those who entered their territory.

Vale do Javari was the home to an estimated 1,350 uncontacted people, including the Flecheiros who painted their faces and bodies red and cut their hair in the familiar bowl cut of the Indians. They lived by hunting monkeys, tapir, peccaries and turtles as well as fishing in the many torrents, rivers and streams, gathering manioc and plants, and cultivating small gardens in forest clearings.

The production team's objective was to film another group, known as the Caceteiros, clubbers, who contrary to the Flecheiros used clubs as their weapon of predilection for hunting and defence, they numbered about 150 individuals and lived in malocas, changing campments from time to time. Most lived in total isolation further upriver, however, the maloca they hoped to film with the help of the FUNAI, had more recently opened up to contact with the outside world.

From their starting point in Leticia, they set off along the sinuous Rio Javari that separated Peru from Brazil. The maloca they were informed lay about 100 kilometres upstream, about four hours by boat and a trek of a few more hours in the jungle.

By now they had learnt the distances in the Amazon were vast, they had started 1,000 kilometres to the north in the Colombian Chiribiquete park, and now in Brazil they were surrounded by tens of thousand of square kilometres of jungle, endless rivers—all greater than any European river, where there were to all intents no roads or anything that resembled a town or a village.

Fortunately for them a base camp had been set up in advance by an entreprising local Indian family group that had emerged from the forest and set up a permanent home on the river bank to the north. They now acted as guides, boatmen and porters for forest officials, ethnologists and the occasional hardy reporter from scientific revues—lucky enough to get a permit to visit the reserve.

There was nothing to complain about, apart from the heat and the fatigue it was like a well organised tour, however, Dan Briscoe warned them, the easiest part was over.

The next day they set out over a barely visible trail for their first contact with the Indians, a semi-nomadic group, who until a couple of years before had had no contact with the world outside

HG was familiar with the sight, one she had seen so often in the jungles of Sabah in the north of Borneo. It was as if a meteorite had fallen on the jungle, the burnt remains of trees, twisted in agony, their blackened branches pointing to the sky, the low lying vegetation burnt off, but amongst the ashes green the shoots of yuka, sweet potatoes and bananas were appearing.

The small family hunter-gatherer group of three dozen or so people had cleared about a hectare of forest to plant their food. This was slash and burn farming to supplement hunting, fishing and foraging, an age old lifestyle, where the group moved on once the game consumed and the soil depleted, which was often the case in tropical forests where nutrients were stored in

the biomass and not in the thin layer of humus formed by the decomposition of leaves and other plant material by microorganisms, forcing the community to move on from season to season, clearing another site where they could repeat the process and where there was more game, in the same way as had their ancestors over countless generations.

The Indians, in their protected areas with basic medical care, prospered, and the same scene was repeated everywhere, as huge dominant trees went under the axe, crashing down, bringing the canopy and smaller trees with them. As a consequence their numbers grew, as did their garden clearings, dotting the forest, as could be seen from satellite images.

Soon the Flecheiros and Caceteiros would disappear, on the one hand were the threats from intrusion, illegal loggers and miners, and on the other the lack of sustainable farming techniques as the indigenous peoples' numbers grew threatening their own habitat.

Ever since the arrival of European colonists at the beginning of the 16th century, the peoples of the Amazon had been victims of brutality, slavery, violence, disease and genocide. It has been estimated that between 10 and 20 million Indians had once lived in thousands of tribes across the vast region that now englobes much of Colombia, Ecuador, Peru and Brazil.

The first Europeans colonists brought multiple diseases to the Americas—measles, smallpox, influenza and bubonic plague, which devastated the local population and caused the collapse of farming.

The total population of North, Central and South America at the time Christopher Columbus arrived has been estimated at around 60 million, and confirmed by extensive archaeological evidence, found not only in population centres, but also in the vestiges of slash-and-burn agriculture, terraced fields, large earthen mounds and vegetable gardens spread over vast territories.

The consequences for the Indigenous populations were catastrophic, according to some estimates disease caused the death of 56 million, over 90% of the total population of the Americas—peoples who had evolved in

isolation from Eurasian and African populations for many thousand years, shielded from the diseases that stalked those then distant populations.

As a consequence of this apocalyptic calamity millions of hectares of lands won from forests and jungles by the pre-Columbian Americans were swallowed by encroaching reforestation as nature retook possession of it lost territories.

In the centuries that followed, death by diseases was transformed into genocide, hundreds of thousands more Indians killed, hunted and enslaved in mines and plantations, their lands emptied to make space for European settlers. By the middle of the 20th century the indigenous populations of Amazonia were disappearing at the rate of one tribe a year.

Today, there still remains an endemic racism towards Indians in Brazil, who in law were still considered minors and still fighting to gain control over their ancestral lands, a difficult task as Brazil is one of the two South American countries which does not recognise the ownership of tribal lands.

* * *

When Francisco de Orellana, a Spanish conquistador, sailed up the Amazon in 1541, he did not find Eldorado, but he did report the existence of an unknown civilization composed of large villages and farms lining rivers banks and described seeing the outlines of large cities in the distance.

However, Orellanas's successors found nothing to confirm that report, that is until Eduardo Neves, a Brazilian archaeologist made a surprising discovery, something he described as *terra preta de indio*, 'dark Indian earth', a mixture of charcoal and nutrient-rich earth, a contrast to the usual poor yellowish-orange soil of the Amazon.

Archaeologists believed this dark earth was the result of slash and burn methods to open space in the forest for agriculture and homes. By adding smouldering organic waste, like animal bones, excrement and straw, the soil was enriched with higher crop yields supporting larger populations in an otherwise not very fertile environment.

This *terra preta* was often found associated with archaeological remains, like potsherds, proof that ancient civilizations had existed in pre-Columbian times, the vast majority of which were wiped out by diseases brought by the Conquistadors.

Ken Hisakawa also described how newly developed methods were employed to determine variations in the vegetation relative to different types of soil. By studying light spectrum data collected by satellites, it was possible to detect subtle differences in how light was reflected off trees, enabling scientists to analyse photosynthetic activity in the biomass relative to small variations in leaves specific to *terra preta* sites.

The process helped identify *terra preta* sites across the Amazon, proof that the land had once occupied and farmed by unknown civilisations, clear evidence that the Amazon basin was much more densely populated in pre-Hispanic times than previously thought.

The idea that unknown archaeological mysteries lay hidden in the depth of the vast Amazon rainforest not only excited Pat, but carried a warning that disease and strife could destroy a civilisation.

ANOTHER WORLD

THAT EVENING, HG, TOLD HER FRIENDS of the struggle of the indigenous peoples in her homeland, those who lived in the rainforests of Borneo and Peninsula Malaysia.

She saw Malaysia as a construct of the colonial power that had ruled different parts of it, together and individually, for different periods over more than two centuries.

The story began when the British set up a trading post on the island of Penang in 1771, then fighting the Dutch, Portuguese, Spanish and French, for control and possession of different parts of the region. Once in control the British installed their own system of rule, dividing and redefining its different parts to suit its own ambitions, until the Wind of Change brought independence to its colonies, with London finally quitting its last regional foothold, Brunei, in 1984.

Malaysia's indigenous peoples formed a mosaic of ethnic groups—nomadic forest dwellers, shifting cultivators, fishermen, sea peoples, immigrants and invaders, all mixed together between Peninsula Malaysia and Borneo, the latter shared with Indonesia and Brunei.

On the peninsula were the Orang Asli, the original people of Malaysia ... well those before its present day inhabitants. They were progressively joined by Malays from the north and other peoples who migrated there from north Asia, many, many, centuries ago, and finally Chinese, Indians from the Subcontinent, and a scattering of Brits—a few of whom put down permanent roots.

The problem was some were more equal than others, the Malays called themselves Bumiputra, 'sons of the soil', that is to say Malay, different, 'purer' than the other components of the population, such as Chinese or Indians. The Bumiputra also included the Orang Asli, indigenous peoples, who, in spite of that supposed privilege, suffered from multiple discriminations

Those discriminations and impositions, included forced relocation from their ancestral lands, and 'integration', including conversion to Islam. The Islamic Council of one of the Malaysian states, Kelantan, publicly declared its goal of converting all Orang Asli to Islam.

Until recently many Orang Asli had led their nomadic way of life in their forest home as they had for countless generations. That changed when they became victims of miners and the palm oil producers, when loggers moved in with chainsaws and bulldozers, to clearcut the forest and make way for industry..

Thousands of hectares of forest disappeared with all its rich diversity—gone in an instant, trees, plants, animals, birds, insects, fish—forever.

'What happened to the people?' Camille asked.

'Some were settled in a few prefabricated concrete buildings, on plots of land designated by officials, far from anywhere,' HG replied.

She told of how the Orang Asli were uprooted, torn from a way of life, one that outsiders had difficulty to understand.

'The government talks about schools, electricity and home comforts,' she said describing their drama. 'The forest was their home, their school, their source of food, now they are forced to live off handouts. They are lost in a world that is alien to them, unable to read or write.

'Perhaps the young ones want to change, but schools are too far away, as for their old folk they are faced with neglect, living in misery, in jungle slums, despised by villagers and with little or no hope of integration or finding a job.

'Many fall ill, suffer from depression and malnutrition, loss of immunity, poisoned by insecticides from the plantations, without care, doctors or clinics, forced to watch their old people and children die.'

The mines—bauxite, clay, coal, copper, feldspar, gold, gravel, ilmenite, iron ore, kaolin, limestone, mica and tin, brought contamination in their wake, from tailings, chemicals and other discharges from mineral processing, polluting the rivers and streams, with the surrounding vegetation poisoned by toxic rain runoff.

There was a headlong scramble to exploit the country's soil without any thought to the future, as manganese was the latest addition to a long lists of mineral exports—with more than a million tonnes a year going to feed China's voracious appetite.

The price paid by the indigenous peoples was high, their rights trampled on, a way of life gone, their ancestral identity obliterated, forgotten, all in the name of the consumer society, the needs of Europeans, Chinese and Americans, most of whom have never heard of Malaysia, not to mind its original people, the Orang Asli.

In HG's own state, Sabah, the forest cover fell from 50% to 15% as 1.4 million hectares of forest were clearcut to make way for oil palm plantations, a terrible disaster for the unique wild life of North Borneo, devastating the already reduced habitats of orangutans and even rarer rhinos and pygmy elephants.

* * *

HG told them of the bright red haze that invaded the skies of towns and villages in Borneo and Sumatra every year. Scenes that reminded her of a Hollywood movie, a world invaded by Martians, but this was no movie, it was terrifyingly real, as the toxic red haze from the fires that raged across ancient rainforests, turning entire regions into a living hell.

Each year when the dry season arrived, smoke, laden with carbonised particles of burnt vegetation, filled the sky, soot settled on the roofs of houses and on the streets as people wearing scarves and surgical masks tried to go about their daily lives.

Fires spewed a toxic haze over Indonesia's islands for weeks on end in one of the country's worst wave of pollution ever. Amongst the culprits were pulpwood and palm oil producers responsible for the fires on their concessions, once virgin rainforest.

For decades Jambi, in Sumatra, a region known for its paper pulp mills and oil palm plantations, was the centre of vast fires caused by deforestation, a process that accentuated the age old slash and burn techniques used by local farmers, wreaking havoc on the biosphere as the vast island's population exploded and industrialists invaded the forest.

The annual phenomena coupled with drought, caused by creeping climatic change, made life unbearable for humans and animals, spelling doom for Sumatra's unique wild life as pollution made the air unbreathable. The economic effect was immediate, cancelled flights, closed schools, hospitals overburdened as far away as Singapore where thousands of vulnerable people suffered from acute respiratory infections aggravated by the haze that spread to Malaysia and Borneo.

HG was too young to remember the origins of the catastrophe, which could be traced back to the 1970s, when logging became a vast industrial enterprise, followed by the arrival of pulpmills, then oil palm plantations, as Indonesia, in order to feed and provide jobs for its population, started to mine its primary forests.

John Ennis remembered his first visit to Jakarta, Indonesia's capital, in the mid-seventies, when the population of the vast archipelago approached 110 million. In the intervening years it had grown to 270 million and by 2050 the country would have to provide for 366 million, compared to some 40 million in 1900.

To his mind one didn't have to look far to understand the problems of climatic change, it wasn't plastic, air pollution or CO₂, it was the human population of the planet, which would soon have multiplied not far off ten fold in a couple of centuries, a raging disease that was destroying the natural biosphere of the planet.

If we consider, from the appearance of modern early man to the invention of agriculture, about 12,000 years ago, from the start of the Pleistocene to the end of the Holocene, it is estimated that the total world population never exceeded one million, a very small number compared to other species, like for example herbivores that swarmed over the savannas in countless millions.

Historical speaking the human population grew very slowly from this critical point in human history until 1800, passing from one million to one billion. From then, the start of the Industrial Revolution, it took a sudden and dramatic upswing.

What caused this sudden explosion? It was not a lack of food, the absence of which had never been an important factor in human history, if ever it lacked it was mostly for political reasons—war and conflict.

If we stopped to think that around 100 billion people in total lived on the planet throughout all human existence, it meant that today's population that is at this instant, is equivalent to 8% of the total number of people ever born—eating, consuming, polluting, mining and generally plundering the planet's resources at a never before seen rate.

As the plague of human locusts spread, it was no wonder the natural planet was facing an extinction crisis.

WAR FOR SURVIVAL

AS THEY STRUGGLED THROUGH the rainforest, the silence was suddenly broken by piercing whine of a chainsaw. Their guide stopped, lifted his hand as a sign of warning.

'Illegal loggers,' Dan whispered.

It was difficult to say how far away they were.

Illegal logging was everywhere, even in protected zones, where small gangs of loggers, equipped with a few chain saws, winches to haul the logs to the nearest navigable stream, and a boat capable of towing the timber rafts, operated with near impunity. The gangs targeted exotic hardwoods like the Ipê, *Handroanthus spp.*, one of the Amazon's most valuable tree species, exported at up to 2,500 dollars a cubic meter.

As loggers moved into virgin territories—complex biotopes that took hundreds of millions of years to evolve, they started by selective cutting, which encouraged and facilitated clearcutting, transforming the forest into farmland—after the remaining plants, tree stumps and roots were burnt, opening the way to extensive monoculture.

* * *

Dan Briscoe detested armchair ecologists, who in the television studios of their big cities—London, Paris, Rome, Berlin or Madrid, dispensed lessons to the general public, brainwashing the collective conscience with their politically correct ideas, with visions of the world seen through rose coloured

glasses, whose knowledge and experience of ethnological diversity was near to zero. Well-doers, who confused ethnic diversity with what they saw on their visits to popular market places in London's East End, or for the better-off amongst them, brief vacations to Rajasthan, ballooning in the Serengeti, or luxury cruises on the Nile.

Their knowledge of the rainforests went about as far as that of their nearby parklands, swooning over the beauty of nature, the trees and fields they admired, epitomised by the bucolic scenes painted by 19th century artists, Vincent van Gogh or Jean-François Millet & company, fields of golden wheat, harvests and the sun-kissed faces of happy peasants.

Natural! Nothing could be further from the truth. Not only were cities like London, Paris, Rome, Berlin or Madrid surrounded by profoundly altered landscapes, but so were the entire landscapes of the countries they represented. The primary forests of oak, ash, maple, birch, beech, poplar, elm and pine that once surrounded them, fell under the axe, one, two or three thousand years ago, and the wildlife that lived within them exterminated. Even humble foxes and badgers were still being exterminated as vermin. Not only that, coal mines, slag heaps, centuries of waste to land fill, damaged waterways and coast lines, endless towns and cities, railway lines, road, airports, the list was long, indelibly marking the land.

Much of Europe and its western isles were once covered in dense primary rainforests, where trees were decked with moss and lichen, their trunks surrounded by ferns and temperate plants, where elk, bears, wolves, wild boar and deer roamed, where countless species of small animals and birds lived in their branches. The hills and moors—where we walk and recite verse eulogising our 'fair land', had been devastated by our ancestors, transformed into barren hills, dotted with their dark satanic mills, by our industries, and even by royalty's Highlands homes, where they shot grouse and hunted stag in the deeply altered biospheres of their estates.

The answer was not fragile mono-species plantations, but the regeneration of the natural habitat with all its variety and riches, something that would take generations, without being driven by industrial nurseries and forestry businesses.

Activists never ceased to call for more homes to house growing populations, building on the green belts that surround large cities. It was a vicious circle, more people meant less unconstructed land, and less space for ancient endemic species of animals and plants, little wonder insects and birds were disappearing.

It was time for activists to focus on the real cause, mankind and its teeming millions, swarming like proverbial locusts, eating everything that lay in their path, on the land, under the land, in the seas and in the air, now crouched ready to spring into space and the Earth's celestial neighbours.

* * *

Alfonso's main fear came from the mercenaries, those hired by the agribusiness companies, who arrived in boats and vehicles, cutting trails into the forest in the direction of small semi-nomadic groups of forest dwellers, like the Yuri and Passe who alerted by the animals and birds, fled deeper into the forest abandoning their malocas.

They and their film crews could not flee into the jungle leaving their material behind, besides they wouldn't get far, they knew nothing of the hostile world surrounding them.

The target of mercenaries was primarily the Indians, but they did not hesitate to attack those who helped or protected them, setting fire to homes and laying forest gardens to waste, a warning to quit the zone the loggers had targeted, to crush and discourage all resistance.

Small tribes like the Bocas Pretas, a relatively recently contacted group of just 150 souls, whose name came from their black tattoos made with the juice of the genipap tree, were forced to flee their camp when illegal loggers, gold miners and poachers, empowered by the arrival of Jair Bolsonaro, surged unhindered into their territory.

This situation was compounded as lobbyists clamoured for legislation that would allow commercial mining in indigenous territories, where, Bolsonaro had declared to the UN General Assembly, reserves of gold, diamonds,

uranium, niobium and rare earths could be exploited and bring development and prosperity to indigenous communities.

'Indians want to grow and to develop, just like any human being,' he declared. 'Most other countries have decimated their Indians. We want them to walk alongside us—because they are Brazilians, just like us.'

Not all Brazilians were against Bolsonaro, on the contrary many saw him as on being on the side of progress, theirs was a vast and almost empty country, of humans that is, but what kind of progress—and for which humans, in a country once declared, 'a land without men for men without land'.

Brazil's 1988 constitution gave indigenous communities the exclusive right to vast areas, and protected reservations, such as the 1.9m hectare Uru-Eu-Wau-Wau territory in Rondonia State.

Progressively, under Lula and his successor Dilma, the situation of the indigenous populations improved, but then, with the arrival of Bolsonaro, it looked like big agriculture would take priority as Brazil was projected to become the biggest soya bean and beef producer on the planet.

ON THE BRINK

PAT WATCHED HELPLESSLY, after months of protests Hong Kong had reached the brink of a total breakdown, vehicles were torched, Molotov cocktails were thrown at police cars, an MTR station was sackaged, shopping malls were broken into and police fired teargas at the crowds of demonstrating students gathered in the streets.

The intensification of the violence came after police shot a protester at close range, a scene caught on camera. The police later told the media rioters had doused a man with petrol and set him on fire, a story that was unverified.

Pat feared it was all going to end badly when roadblocks and barricades were set-up on main roads and protesters rampaged through Central District, the main business area—home to some of the world's most expensive real estate and luxury stores, across Kowloon and the New Territories. Riotpolice fought with drawn batons, clubbing demonstrators to the ground near the Hong Kong Stock Exchange, as banks and shops shut their doors and even the venerable Jockey Club was forced to cancel its evening programme of races, a rare happening in the city.

Schools and universities were closed as students wearing banned face masks armed themselves with rudimentary weapons, slings and catapults, stock piling bricks and stones, ready for street warfare as chaos descended on the city with explosions echoing through the streets and smoke plumes rising above the crowds whilst the sound of screams and gunfire reverberated off the glass towers.

In three days over 80 people were admitted to hospitals for injuries sustained in the confrontations with the authorities.

To add to Pat Kennedy's worries was the attempt by Hong Kong exchange to take over the London Stock Exchange, with a bid of 37 billion dollars.

London and Hong Kong were two of the most important financial centres in the world and both were wracked by political turmoil.

The importance of the LSE was reflected in the fact that it together with the Bank of England and Lloyds made it one of the three pillars of the City of London which dated back to the 16th century.

Already the much smaller London Metal Exchange had been bought by the Hong Kong group in 2012, a deal approved by regulators. However, times had changed and Britain would need to control such important assets after Brexit. The iconic Square Mile generated some 60 billion pounds a year, which made it the most important single sector of the UK's economy, and that in the hands of Beijing that would not make for a good post-Brexit start, though it comforted the ineffable Johnson's vision of building a 'buccaneering' Britain, after revealing his plan to create a Singapore-like state on the doorstep of the EU, offering low-taxes and regulation, an idea that would not ingratiate Berlin or Paris.

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As news filtered through from the Mainland that a disturbing number of Chinese billionaires were disappearing or committing suicide, Pat couldn't help thinking he could end up like them. One of them, a certain Guo Wengui, a billionaire property developer, sought asylum in the US, after claiming to be the victim of corrupt high level Communist Party government officials, who countered his accusations by accusing him of acting against the state.

In the background were worries about Chinese corporate debt which had climbed to an estimated 19 trillion dollars, difficult to imagine, the 12 zeros nearer astronomers units for measuring distances across the solar system than

earthly matters. What was less difficult to imagine was the disaster another financial crisis would create, a huge recession with highly indebted Chinese companies taking a beating, though the US, Japan, Germany, Britain, France, Italy and Spain were not far behind.

This time around they would be impossible to rescue as central banks had few if any silver bullets remaining in their arsenal.

Low or negative interests rates had fragilised institutions and a sudden event, a terrorist attack, war, epidemic, revolution, could provoke a meltdown of already overvalued markets where risk taking had risen in an effort to boost yields. At the same time government and high quality corporate bonds with negative yields continued to grow as investors such as pension funds, insurers, and financial institutions sought safe places to store their wealth.

It was a warning, a flashing light, investors were supposed to get paid interest on their investments, the kind of a deal where you invested 100 dollars and got 90 back in ten years wasn't how it was supposed to work. Something was clearly wrong and Pat, who compared to his London and New York fellow bankers could see the clouds of teargas rising above the streets below from his office or even his Victoria Heights apartment window, quietly instructed his managers to offset risks by hedging options.

The problem lay in the fact that low and negative interest rates encouraged more borrowing, as politicians like Boris Johnson started off with wild spending promises, anything to get elected, Which gullible voters would have to pay for one way or another at some future date.

It was not difficult to imagine a sudden detonator, the Middle East was more than ever a powder keg with a very short fuse as Turkey, Iran and Saudi Arabia faced each other off in an eternal struggle for domination. There was the treaty for the non-proliferation of nuclear weapons, currently pointing at Iran's programme to develop, the ultimate form of dissuasion, eyed by Saudi Arabia, possessed by Israel and Pakistan.

Little known to the public, the bomb was already present in the Middle East, more precisely at the Incirlik Air Base in south-east Turkey, in fact there were some 50 tactical nuclear weapons on the base, leaving Washington vulnerable to blackmail by Erdogan as the Turkish forces pushed into Syria thanks to Donald Trump's disastrous decisions, overturning decades of Washington's often maladroit efforts to keep to keep the lid on an explosive situation, decisions that now undermined US interests, giving Moscow's a free hand and giving new life to the criminal Assad and his regime.

As the UK procrastinated in its waltz, Brexit or not to Brexit, its financial sector continued its vocation of being the world's laundromat as the illgotten gains of crime, corruption and blatant theft continued to swill through the City of London.

The National Crime Agency estimated that more than 100 billion dollars of dirty money flowed through the UK every year.

The Russian Central Bank and the IMF, estimated that much of that money came from Russia, and over 80% of it had passed through British Overseas Territories, notably the British Virgin Islands over the course of the previous decade, through which a total of 80 billion laundered dollars were invested in above board overseas businesses and assets

UNREST

VETERAN BRITISH NATURALIST David Attenborough, took on the role of whistleblower, warning that failure to tackle climate change would lead to massive social unrest. Which, perhaps encouraged politicians, in a headline grabbing a communication, to announce Britain would be the first G7 country to set a goal of zero carbon emissions by 2050.

It was hallucinating to watch as countries vied to out do each other in their one-upmanship rhetoric. Transient politicians with short term goals, who rolled out their glib tongued platitudes and policies, revealed how totally out of step with reality they were.

Thirty years was an eternity in politics, the blink of an eye in human history, a millisecond when it came to geoclimatic events.

Meanwhile Prince Harry set off for the Google summer camp, after Prince Charles had added his grain of salt at Davos, Johnson declared the UK would clean up its act with the promise of zero emissions.

What would happen in reality was quite another thing.

By 2050, Charles would certainly be dead or dribbling at the mouth, like Johnson, and what Harry would be doing was anybody's guess, if he was still around he would going on 70, and his brother King William an old man.

In human history 30 years was not a long time, but in the 20th and 21st centuries there has been an acceleration of events, starting with the transformation of China

One had only to look back 35 years when at the end of 1984 Margaret Thatcher signed a pact with Beijing, when Deng Xiaoping—the architect of modern China, was paramount leader, agreeing to hand back Hong Kong in 1997.

Until 1984, the subject of market economy in China was taboo. Then in October of that year, for the first time, policymakers introduced the idea, paving the way for and market-oriented reforms and the development of a socialist consumer economy.

Shortly after that date John Francis revisited Hong Kong and travelled for the first time to Mainland China, Canton and Beijing, where he discovered the first signs of a market economy, when most of that vast country was a backwater, still entrenched in Maoist ideas.

The history of Britain's presence in Hong Kong commenced with gunboat diplomacy, when in 1839 it forced China to hand over Hong Kong island. The Second Opium War ended in 1860 when China was forced to hand over Kowloon. Followed by the New Territories which were ceded to Britain in 1898.

It was only in the 1980s when Britain finally realised it could not defend its vestiges of empire that London finally introduce a degree of home rule with an early form of legislative assembly, though Zhou En-Lai, Beijing's foreign minister, threatened invasion if UK gave Hong Kong self-governing status and democratic institutions

Though LegCo was democratically elected, with a degree of autonomy as a Special Administrative Region of China, it was crystal clear that Beijing had no intention letting Hong Kong go any further. In fact at the end of the 50 years agreed with London, the SAR would be fully integrated into China.

The new LegCo law at the root of the unrest in 2019, foresaw powers enabling China to extradite any person from Hong Kong, charged with an

offence carrying a penalty of seven or more years imprisonment. In addition, China could demand the individual's assets in Hong Kong be frozen.

A bad deal considering the manner in which Beijing handled the case involving the Hong Kong bookseller Gui Minhai, who in a closed-door trial had been sentenced to 10 years imprisonment for espionage and providing intelligence overseas.

Something that did not surprise Pat Kennedy, and even less John Francis and Pat O'Connelly. For John it was the action of an oppressive authoritarian regime, for Pat O'Connelly another affront to intellectual freedom. Pat Kennedy, who had no illusions about Beijing, saw it as another bad business sign on the horizon.

Gui Minhai was the second of five Hong Kong-based publishers linked to the independent book store Causeway Bay Books who went missing in late 2015. Gui's publishing company, Mighty Current, was known for provocative titles and had been discussing the publication of a book entitled Xi Jinping and His Mistresses.

Not a good thing.

Gui was kidnapped by Chinese agents in Thailand and transferred to China, where the other four booksellers reappeared, and confessed to illegally selling books, in a trial broadcast on state television.

Despite all the talk about democracy and human rights, what mattered more to London or Washington was their assets in Hong Kong.

John had explained to Pat Kennedy how the West had erred in the development of relations with post-Mao China, imagining with trade it would become more open, more progressive and more democratic. The West had not foreseen the fusion of Communism with Confucianism and Western capitalism, a mutation that produced a new political-economic model—authoritarian capitalism. A model that combined the worst of tradition with communism and capitalism, one that demanded total obedience to the state, a system that had recreated the personality cult, around the figure of Xi Jinping, a system that would inevitably swallow Hong Kong whole.

GUETHARY

PAT 'DEE' O'CONNELLY WAS PLEASED with his latest acquisition, a vast Belle Époque villa set in a splendid six hectare park with a spectacular view of the Pyrenean valley landscape. It lay on the edge of Guethary, a small picturesque seaside town situated between St Jean de Luz and Biarritz, fifteen minutes from the airport, an exclusive spot favoured French fashionistas, showbiz and other personalities. It was quiet, sedate, far from the bling of the Côte d'Azur and its tourist masses.

His decision was of course to do with Anna, who had warned him she had no intention of quitting her family and San Sebastian for Paris. The property, fit for a lady, was part of his plan to convince her theirs was not just a passing affair.

Guethary, just half an hour from San Sebastian by the autoroute, was well served with several flights a day from Biarritz Airport to Paris and London, with nearby San Sebastian Airport serving Madrid and Barcelona.

Camille who had just arrived for a few days in the Basque Country felt at ease in the large house, though it seemed a bit big for Dee and Anna, a contrast to her parents who were downsizing—their château in Sommières was being converted into a museum and hotel complex.

That evening Liam arrived from Paris together with John and Ekaterina who joined them for a concert at Saint-Nicolas de Guethary, a 16th century church. It was part of the small town's classical music festival with a programme that evening of Beethoven, Mendelssohn and Rachmaninov,

under the direction of Bertrand Latour, to be followed by a late diner at Les Frères Ibarboure.

Eating before the concert wouldn't have been a good idea.

The church was typically Basque with three longitudinal wooden balconies, which in past centuries had been reserved for the menfolk—those who hadn't left to conquer new worlds for the glory of Spain's kings.

Glory wasn't perhaps the word, plunder may have been better, but John reminded then of the words of Polybius as they made their way to the restaurant on foot:

'If earlier historians had failed to eulogize history itself, it would, I suppose, be up to me to begin by encouraging everyone to occupy himself in an open-minded way with works like this one (*The Histories*), on the grounds that there is no better corrective of human behaviour than knowledge of past events.'

They could only concur.

It was eighteen months since Camille and Liam were married in the village of Sommières—the home of her parents, in Provence. Theirs was no ordinary home, but a vast château. She was part of what they call the privileged classes, even though her family had been hard put to maintain their ancestral home. Had been that is, because their situation changed dramatically with the fortuitous discovery of her great uncle's collection of paintings, forgotten in the cellars of the 40 room demeure.

Liam was a very successful self-made Irish banker cum businessman, whose family did not have an aristocratic background like Camille's, but she was not a snob.

His success was equally fortuitous, thanks to Pat Kennedy who had spotted his talents as the bank expanded following the financial crisis of 2008 and had taken him under his wing. Camille on the other hand like many girls of her class had attended a private girls' school in Switzerland and then studied in Paris at Science-Po, an elitist establishment, where she had kept a low

profile as to her background, for several reasons, one of which was she did not want to be stuck with the label of being a penniless aristocrat, which was far from the case, and two being labelled as an aristo in Paris was not a good thing in the politically correct 21st century where everything was examined under a microscope.

Her father, the current Comte de Sommières, had experienced increasing difficulties in maintaining the upkeep of their château and its large estate, and with Camille being the only child, her parent's had hoped she would marry a rich prince, which was not part of her plan, though by chance that's exactly what happened, when she met her future husband, thanks to an extraordinary stroke of fortune—the discovery of Édouard Sommières' collection of early 20th century collection of Modern Art, which brought Liam to Provence.

Ireland was no strange place for Camille, her mother, a friend of Alice Fitzwilliams, had sent her on many a vacation to the Fitzwilliams' fine home in Wicklow, where she spent the summers riding.

That was what probably attracted her to Liam, she spoke excellent English and both were Catholics, though not in exactly the same way, being Catholic in Camille's family had little in common with what that meant to Liam's parents and grandparents in Ireland. Fortunately Liam and his generation had shrugged off that burden, like most Irish people today.

It was John Francis—a long-time friend of the Fitzwilliams, who brought Liam to Sommières, after Alice Fitzwilliams suggested Camille's father talk with John's wife, Ekaterina, an art expert, about her Uncle Édouard's collection. But that's another story, in any case everything happened very quickly and in a way Camille was still trying to catch up.

* * *

The next day they all set off for San Sebastian. It was hot, very hot. In Spanish they called it an *ola de calor*—a heat wave. It was seven in the evening and after a few drinks and *pintxos* in the *Parte Vieja*, they strolled along Askatasunaren Hiribidea, or Avenida de la Libertad in Spanish,

making their way back over the ornate bridge crossing the Urumea River towards the Zuriolla beach.

The temperature was still a sweltering 33°C and the crowds were out to take advantage of the light breeze drifting in from the sea.

The occasion that evening was the first concert of the Jazzaldia, Jazz-time, the city's annual jazz festival, starring Joan Baez, one of the last surviving icons of the 60s anti-war movements in the US. It was part of the singer's farewell tour and Anna wanted to see her perform in person, a living legend, one of the most remarkable figures of the feminist movement in her generation .

Anna with Camille and Liam were of course much too young to even come closely to remembering Joan Baez's moment of glory, who it seemed to John, would, for many young people, probably figure alongside King Tut. She was a living fossil from a bygone age of counter-culture, after all 50 years had passed since she sang *It Ain't Me Babe* when the first men landed on the moon.

She was still protesting, at the outset against the war in Vietnam, now after more than half a century later against the plight of illegal Mexicans and other immigrants sent home by the Trump administration. Her disk was as worn as the memories of Lyndon Banes Johnson and his war against Communist expansionism.

But protest movements were still fashionable, eminently fashionable, especially those led by a woman and Joan Baez was there from the first hour, marking her time with the songs that made her famous, like *Blowin'* in the *Wind*

Thousands of spectators were gathered on the beach for the evening concert, for a great many it was a souvenir of their youth, when certain Basque's resorted to terror under a cloak of independence. Times had changed, witnessed by the name of the avenue, Askatasunaren Hiribidea, unpronounceable by the majority of Spaniards.

It wasn't only politics that changed, it also seemed as if the weather was a taste of things to come. Climate change had been forecast for so long, it was like shouting wolf, and now for the first time it seemed the wolf was really at the door.

Even if Joan Baez was but a fading memory, protest wasn't dead, less than half an hour's drive to the north of San Sebastian things were heating up as the anti-G7 conference got underway. Thousands had gathered for a contraconference and the French authorities were bracing themselves for street battles when the contras and their allies, the Gilets Jaune an anti-Macronist movement, would be out in force.

That was far from Anna's thoughts as they talked about music and film festivals, and she spoke to her friends about Woody Allen's latest film, which had been shot in San Sebastian. It was entitled *Rifkin's Festival*, a romantic comedy, the story of an American couple who arrive in San Sebastian for its Film Festival and were enchanted by the magic of the city, the beauty and charm of Spain, with each finding a new love, she a French movie director, and he a Spanish beauty.

Woody Allen's links with San Seb went back to the time when he premièred *Melinda & Melinda* at the city's film festival. He remarked at an official reception in the city hall: 'I'd like to convey to the world my view of San Sebastian the way I conveyed my view of Paris or New York to people.'

Poor Woody was now in trouble, like San Sebastian, but for different reasons. The city, like many other European cities, was beginning to feel the effects of mass tourism, a victim of its own success. For Anna it was a sign of its growing prosperity, however, tourism was transforming certain of its neighbourhoods and historical sites into attractions to be exploited by investors, to the detriment of their traditional inhabitants, like Venice, Florence and Barcelona, the souls of which were sucked out, leaving empty though beautiful shells. She was not against gentrification and there was no reason why the citizens of her hometown should not benefit from the inflow of money, but she did not want to see the city transformed into a zoo.

SUMMER CAMP

LIAM TOGETHER WITH CAMILLE arrived at the camp, invitation only of course. A little more that 18 months or so before, they would have never made that exclusive list, now as if by magic they were part of that elite. Liam had always thought he would refuse an invitation, but now they had become, in a manner of speaking, celebrities, and Camille jumped at the idea. Why? Out of curiosity, she told Anna and Ekaterina.

They arrived on Sergei Tarasov's yacht the *Cleopatra* together with the Clan—Pat, Lili, John, Ekaterina and the others, to join some of the world's wealthiest personalities and their celebrity friends who were gathered together at the Verdura Golf & Spa Resort on south-west coast of Sicily.

Many guests arrived by helicopter, leaving their jets parked at Palermo airport, then a 100 kilometres hop south, flying over Corleone—home to many mafia capos, real and fictional. Others sailed in on their own yachts, anchoring offshore, a short ride in their cutters to the resort's jetty.

The occasion was the annual Google Camp, a three-day bash, just 20 kilometres from the ancient Greek temple of Agrigento.

The event, which some called Davos on Sea, was launched by Google's co-founders Larry Page and Sergey Brin in 2012, a gathering of the rich and famous, certain made the front pages of tabloids and people magazines, like Camille, who had made the cover of Paris Match, daughter of Count Olivier de Sommières, whose art collection had made world headlines a couple of years earlier, and Liam, a high flying investor close to Sir Patrick Kennedy.

The theme of the summer camp was climate change, and the guests included top tier names like Prince Harry, Barack Obama, Mark Zuckerberg, Leonardo DiCaprio and Katy Perry, who rubbed shoulders with fashion designer Diane Von Furstenberg, former Google chairman Eric Schmidt, Elon Musk founder of Tesla and SpaceX, New Zealand's richest man Graeme Hart, DreamWorks Pictures founder David Geffen, German pharmaceutical mogul Udo J. Vetter and the silver screen's hero Tom Cruise.

The camp was the brainchild of Larry Page and Sergey Brin, a summer break from the humdrum existence of some of the world's wealthiest personalities—stressed-out stars, political and business leaders and tech gurus, a quiet place where mornings they could meditate on the coming end-of-the-world climate crisis, then cocktails and lunch, followed by an afternoon of relaxation at the poolside, or for the more sporting guests tennis on one of the resort's six clay courts, and why not a round of golf under the generous Mediterranean sun.

The secretive camp was in fact an open secret, though social media was banned, which didn't stop the paparazzis' speedboats from circling the yachts anchored offshore, like sharks, in the hope of catching a celebrity, preferably female, young and better still topless, sipping champagne on the after deck, on the arm of a star like DiCaprio, or better still Prince Andrew.

The Cleopatra was anchored off the resort's private beach and seafront, not far from the *Andromeda* owned by billionaire Kiwi, Graeme Hart, further away was Barry Diller's *Eos*, whilst David Geffen's *Rising Sun* stopped by to drop off Perry and Bloom.

The contemporary resort, designed by Sir Rocco Forte and his sister Olga Polizzi, lodged the pampered guests in luxury villas, complete with their own private pools, they could of course also enjoy the beach adorned with fine white imported sand, its jetty leading out over the translucent waters of the Mediterranean.

Their mornings were filled with conferences and discussions on climate change and cities of the future with lectures from renowned specialists, whilst afternoons were free, which gave Pat, always curious, the opportunity to visit the ancient Greek ruins of Selinunte, the vineyards of Sambuca and the picturesque fishing town of Sciacca.

* * *

Although Pat Kennedy and his Clan saw themselves as standing apart from that media-seeking band of global nomad celebrities, Pat revelled not only in the easy going spirit of the event, but especially its setting, where past civilisations converged, Greeks, Romans and Carthaginians, where great battles were fought, where the transformation from the ancient world took place, when its pantheon of Greek and Roman gods ceded its place to Christianity. Sicily had witnessed the Crusaders, the Renaissance, the Holy Roman Empire under Charles V, and the conquest of the New World.

What happened next was the question that dogged Pat. Where did the future world hold for the world?

He forgot that question as he joined the closing gala evening held before the magnificent 2,500 year old Temple of Concordia which provided a magic setting for the diner and concert starring Elton John and Lenny Kravit.

Pat was happy to be surrounded by his friends, his Clan, their Clan, built around friendship and loyalty, roots and family. Preening each other on their yachts or on their islands was not their thing, though on occasions they were drawn into events like Davos or the Summer Camp. They were of course part of that exclusive fraternity of mega-rich, but avoided publicly trying to outdo others in their philanthropic exploits, preferring discretion rather than headline grabbing art sales, outbidding their peers for yet another trophy to decorate one of their multiple outsize homes.

A NEW PRIME MINISTER

LOOKING AT THE UK AND BREXIT from Hong Kong, it seemed as if it would need more than a prophet to save its citizens from their collective folly. To many Britons, especially the older generation, the question of Brexit boiled down to 'What did we have two World Wars for?'

After a series of wimpish uncharismatic leaders, the time was ripe for a Churchillian figure, or an Iron Lady, but with no candidate of that stature on the horizon, Boris Johnson stepped up to take on the role. He was to many a providential leader who would save them from the tyranny of Brussels, from the conspiracy against England, to carry the flag of Saint George and the Union Jack into battle against their country's heredity enemies, namely, France, Germany, Italy and Spain, collectively reincarnated in the European Union.

Alexander Boris de Pfeffel Johnson was born in New York to British parents a chance that gave him dual British-American nationality, which following a rocambolesque tax dispute with the American IRS services he abandoned after being elected Mayor of London.

He was born in Upper East Side Manhattan, where his parents lived in a bohemian loft opposite the Chelsea Hotel, in the district of the same name, one of the haunts of Bob Dylan, Iggy Pop, and Jimi Hendrix.

Johnson's family included English, Turkish, German and French ancestors and amongst them were Christians, Jews and Muslims, some of them aristocrats, which explained how he once described himself as 'a one man

melting pot', a vision probably more suited to New York a émigré than a member of the British ruling class, which no doubt left its mark.

He was born with a natural bombast which appealed to many less privileged Brits, who saw him as a saviour who would lead them from the dystopian world, in which they believed they lived, to a new dawn, escaping from a destiny worst than that of Mad Max and the Hunger Games.

It was probably his promise of a better world outside the EU that attracted many working class Brexiteers who didn't want a 'deal', they wanted out, freedom from the 'dictatorship' of Brussels.

Most of them lived in the past, still fighting the *Bosch*, the *Jerries* and *Ities*, though there were precious few people alive who could remember the war, not to mind having fought it.

It was a paradox, Bojo to his friends and voters, wanted to exchange Europe for the Subcontinent, China and Africa, forgetting what they, the colonised, had not forgotten, domination and oppression, bound only by tenuous self-interest, and often bitter links to England.

BORIS AND BOMBAST

THE LITHUANIAN EUROPEAN COMMISSIONER, Vytenis Andriukaitis, compared Boris Johnson to Boris Yeltsin—the same kind of political bombast, their unrealistic promises, and their sidestepping of economic rationales and rational decisions.

Yeltsin's decisions led to a new autocratic constitution and finally paved the way to Vladimir Putin and a Russia led by a clique of oligarchs, a pseudo-market economy, governed in a pseudo-democracy.

Boris Yeltsin's promises coined a catch phrase after he was told by Yegor Ligachyov, a Soviet politician, 'Boris, you are wrong.'

Hopefully, it would not be the case for Boris Johnson.

Johnson gained leadership in an arcane contest in which just over onetenth of one per cent of the British population voted. It was nothing less than a romanesque coup d'état that Frederick Foresyth would have had difficulty in inventing.

Boris 'fuck business' Johnson was elected by 92,153 Conservative Party members, those who had done nothing more than pay a 25 pound membership fee and vote for their chosen candidate. Thanks to this arcane, almost cabalistic procedure, Bojo became prime minster, effectively Britain's leader, at the head of a nation of 66 million, amongst the world's leading democracies and most economically powerful states

In many countries changing an entire government without an election would have been described be as a coup, especially if it had been led by a leader proposing a radical change of policy, ditching his country's closest trading partners, political friends and allies with whom, over the course of half a century, London had worked as an equal partner, in a freely elected parliament in Strasbourg and participating in the European Commission in Brussels

'Pifflepafflewifflewaffle,' said Bojo in his comments on Northern Ireland according to John Crace, a *Guardian* columnist, who put the remark down to 'off the cuff bollocks'.

As one Member of Parliament put it 'the circus has come to town' with Boris Johnson arriving at 10 Downing Street after plotting his first 100 days in office in a 10 million pound Westminster town-house, owned by Andrew Griffith, a former Rothschild investment banker, who quit Sky—Europe's largest media company, owned by Comcast, a US telecommunications conglomerate—where he had been chief finance and operating officer, and now appointed Johnson's chief business advisor.

A PROPHET

TEN DAYS LATER AT A DIFFERENT, perhaps more down to earth money grubbing world, night was falling, as Camille led Liam through a crowd of bubbling celebrities gathered at the Domaine Saint Raphaël, somewhere in the Mediterranean hills to the north of Saint-Tropez. They were there at the invitation of the Leonardo DiCaprio Foundation for a star studded fund raising diner.

One of the evening's notable guests, standing timidly besides Kyril Kyristoforos, surrounded by stars clad in tuxedos and evening gowns, was a small nut brown man, he was dressed in a simple open neck shirt, the coarse denim trousers of a French peasant and worn leather sandals.

He seem very small, very wrinkled and frail, compared to the sleek well fed crowd of celebrities preening themselves.

Liam wondered if it was the same guru they had met in India, to him they were all the same—Mahatma Gandhi look-alikes. The small man had a somewhat bewildered air, like a lost child, in the middle of the extravagant star-studded bash thrown by DiCaprio, as extravagant as Jordan Belfort, the real life investor the actor had played in Wolf of Wall Street, a movie produced by the now infamous Malaysian-Chinese financier, Jho Low.

Amongst the celebrities were Prince Albert of Monaco, Sylvester Stallone, Elton John, Naomi Campbell and Marion Cotillard.

The actor's foundation was, according to its blurb, dedicated to the long-term health and well-being of all Earth's inhabitants. Through collaborative

partnerships, supporting projects that protected vulnerable wildlife from extinction, while restoring the balance to threatened ecosystems and communities. The foundation vaunted work in four fields—protecting biodiversity, oceans conservation, wildlands conservation and climate change.

Liam wondered if 'Gandhi' knew the event was sponsored by Swiss jewellers and banks, paying anything between 7,500 and 150,000 euros a throw.

To raise funds for his favourite wildlife programmes,, indigenous rights movements and to finance the combat against climate change, DiCaprio auctioned his Rolex, the diamond cufflinks he wore the night he won his Oscar, and a seven-night stay at his Palm Springs property.

Camille whispered to Liam the Gandhi-like figure was the jetset's favourite guru. It didn't surprise him when he saw Marion Cotillard fawning over the old man.

If he wasn't Gandhi who was he then, a holyman, a sadhu, or a mystic. In any case it seemed to Liam, if the crowd around him was anything to go by, he was well connected to the world of showbiz and the media.

Kyril appeared and pointed them in the direction of the guru, who beckoned Kyril. Liam wondered if it was 'get me out of here' sign.

The celebrities moved aside to make space for the newcomers. 'Lazarus, let me introduce you to Camille de la Salle and her husband Liam Clancy,' he said.

Liam now knew Gandhi's name

They shook hands.

'Please, join us,' invited Lazarus, who then turned to his audience to continued his homily on the state of the planet.

'Is it,' he asked, 'that we have not become aware of the value of our planet, the only oasis of life in a sidereal desert? How is it that we keep plundering it, polluting it, blindly destroying it?'

The stars looked at him in awe, as if he had made a startling Christ-like revelation.

Liam soon discovered that the 77 year old guru had amongst his followers, rich, powerful and media personalities.

Lesser mortals waited three or more months to make the pilgrimage, pay homage, at the court of the guru in Montchamp, Ardeche, near Montelimar, where a winding road ran through sleepy villages, past the sun-dried Mediterranean landscape before arriving at the bottom of the hill. There a stony path bordered by tall oaks led to a large stone farmhouse.

Lazarus was waiting to meet them with outstretched hands. 'Thank you for your interest in my modest person,' he said pointing them in the direction of the farmhouse.

They followed him and once inside he invited them to be seated, offering drinks, then inviting them to watch a video on a large TV screen. The subject was centred around a system of organic farming developed by the guru.

Marion Cotillard made no secret of her admiration for the guru, Gerges Lazarus, born in 1938 in Egypt, now a French essayist, organic farmer, novelist and poet, the founder of Gaia, a foundation dedicated to the creation of an ecological and humane society.

If fact, on her own admission, she fell had in love with him at first sight, at the famous restaurant Le Train Bleu at the Gare de Lyon in Paris.

Since that day, Lazarus had been the mentor of Dior's muse, who donated money to his movement, promoted his farm, and projected him into the glitzy world of media and showbiz.

Camille remembered the guru had accompanied a friend of her mother's to their château in Sommières four or five years earlier with an agroecological project. Camille's mother the countess, had complained, 'Money, money, money, that's all Gerges is interested in today.' Her father had called it a scam, but the friend was mesmerised by the charismatic guru and had invested a considerable sum of money to transform part of her domain to sustainable farming, unfortunately the money went up in smoke, 'but at least it was organic smoke,' she joked philosophically.

* * *

The next day Pat announced there were going to Saint-Tropez for lunch. Why? Dee suspected it was something to do with one of his boyhood fantasies, linked to Brigitte Bardot and her iconic film *And God Created Woman*.

It was past midday when their three car convoy arrived at Ramatuelle, on the Saint-Tropez Peninsula, where they pulled up outside Club 55, an open air restaurant, situated amongst the gnarled tamarisk trees that bordered the Pampelonne beach, a spot made famous by Bardot.

To their great surprise Pat was greeted like an old friend by Patrice de Colmont, the smiling patron of the restaurant, impeccably dressed in white open collared shirt that accentuated his deeply tanned complexion, at the same moment a couple of valets stepped forward to take the keys of their cars.

They were guided by de Colmont over a board walk past affluent looking diners already seated amongst the tamarisks. Their table lay discreetly to one side, protected under a white canvas awning, screened by flowering oleanders, to the south was an unbroken view of the sparkling Mediterranean beyond the impeccably raked white sand of the exclusive beach.

Colmont was a friend of the stars, the rich and royals, who patronised his restaurant, including Marion Cotillard and her guru—where they discussed agroecology and climate change, watching their wealthy friends at play, their yachts anchored offshore, outboards ferrying their guests to the jetty for lunch at the famous restaurant.

The star graced Pat and his friends with her presence in the company of the guru, reciting the oft told the story of Club 55, one that could have been invented by a Hollywood script writer, which according to popular legend began in 1947, when Colmont's father, an ethnologist and filmmaker, was shooting a documentary in the Mediterranean, when a sudden Mistral forced him to take shelter at Pampelonne. To his surprise he discovered an unspoilt paradise and decided to buy a fisherman's cottage on the edge of the then deserted beach.

In 1955, when Roger Vadim arrived with his film crew to shoot And God Created Woman with Brigitte Bardot, they mistook the cottage for a restaurant. Colmont's mother stepped and took up the challenge, setting up a makeshift canteen to supply the crew of 80 people with meals during the shoot

Club 55 was born, and soon chic Parisian vacationers were queuing at the door. The Colmonts never looked back and nearly three quarters of a century later they had added their own vineyard and olive grove, and in addition fresh organic vegetables were supplied daily from the gurus' sustainable agroecological farm.

It was a flourishing business that counted a staff of one hundred during the summer months, the smartest watering hole along the coast, the place to see and be seen, for royals, rock stars, actors, and jet-setters, a definite must for celebrities like Leonardo DiCaprio who after disembarking on the jetty, his yacht anchored offshore, passed between the parasols, his latest girlfriend tagging along, whilst he waved to his friends and admirers just like Gatsby.

Camille wondered if he knew its famous tamarisks were considered an invasive species and not especially eco-friendly.

Strangely enough Pat had already met the guru in Udaipur, at the unbelievably extravagant festivities for the marriage of Isha Ambani, the daughter of India's richest man. Pat had been confused, confounding the small frail man with Mahatma Gandhi, dressed in a white dhoti and wearing leather sandals, his kind, very wrinkled brown face, radiated benevolence and beatitude. It was some moments before Pat realised he wasn't a

reincarnation of India's iconic leader, but something else, something between a sadhu, a holyman and a celebrity.

'Namaste,' he said taking Pat Kennedy's hand in his, placing the other over it, holding it for a long moment, looking into his eyes, and softly speaking, 'Ekhrestos Anesti.'

Pat replied, '*Namaste*.' It took him a moment to figure out the meaning of the other words, then his face light up, Ekhrestos, of course, Christ.

Gerges Lazarus, a Coptic Egyptian, was the spiritual leader of Gaia, a foundation created by Kyril Kyristoforos, built on the principles and theories preached by early conservationists, survivalists—Henry Fairfield Osborn Jnr and William Vogt.

Lazarus's parents, teachers, had fled Egypt, first to Greece, then France, when he was a child, after their local church in outlying Alexandria was burnt down in a wave of anti-Christian violence following Gamal Abdul Nasser's seizure of power in 1952.

Lazarus had his home in Provence, that almost legendary region of France, the home of painters, writers, cinema stars and celebrities. It was a bastide—a fortified collection of buildings, which dated from the 14th century, situated on a limestone ridge, overlooking some 50 hectares of organic olive groves, vineyards and orchards. La Crète-des-Maures lay to the east of Draguignan, which formed a triangle with Nice and Cannes, about an hour from St Tropez, a pleasant drive for billionaires and Hollywood stars, a refuge where they could ease their conscience, breathing the perfume of Provence whilst showing the world, how, in the company of the guru, they cared for the planet, and photographed for their Facebook page with the great man by Gaia's communications manager.

The picturesque bastide was dotted with Mediterranean pines and cedars, and a narrow cobbled street wound its way past fountains, small houses, a keep, stables and storehouses, built in the local white limestone and roofed with ochre Roman tiles. There was also a small chapel and what must have been a school, all of which had been left to ruin in the seventies as young

people abandoned a life of eking out an existence on the hard sun-dried slopes for an easier world in the cities of Nice and Toulon on the coast, their old folk staying put until they died away.

Lazarus and a couple of friends had initially squatted the bastide, setting up their workshop for local traditional artisanal products, bowls and tableware from olive wood, which were sold at farmer's markets in St Tropez and St Raphael. With not much money Lazarus started to grow his own vegetables and care for the neglected olive and fruit trees.

He built a reputation for the quality of his organic products and attracted like-thinkers, preaching a clean back to nature vision of life, then as his reputation grew so did the cash from sales and contributions provided by his city dwelling customers and like-thinkers.

He then met Kyril, an experienced manager, who set up an association, Gaia, which he later transformed into a foundation, and bought up the ruins of the bastide, where the price of an ancient stone house was less that that of a parking spot in Nice, then its outlying land, restoring the homes for back-to-basics ecologists, who worked the land to supply food for Lazarus and his followers and as a market garden.

The organisation under Kyril's impulsion was transformed into a going ecobusiness, offering weekends and workshops in the picturesque bastide with organic food from its gardens. As time passed he organised seminars oriented towards ecoagriculture, based on sustainable and natural production methods in the larger restored buildings, training those who saw a future in organic food production, this led to conferences and little-by-little Gaia extended its scope to questions of ecology and environment, then to the protection of wildlife and endangered species.

Kyril was a good businessman and progressively the foundation was expanded adding multiple services related to publishing, books, monthly magazines, promotional brochures followed by the production of short documentary films. Kyril Kyristoforos personally managed communications and the organisation of media events, and much more importantly fund raising.

Gerges Lazarus was in a sense the foundations image, it's icon, the combination of a peasant farmer and a saintly leader uninterested in money or fame.

The main building was an 18th century house with its living rooms, bedrooms, kitchen and wine cellar, part of which was reserved for Lazarus and special guests.

The style was rustic bordering on the spartan, though behind the no frills appearance was a well run system of management and housekeeping, as good as that of any modern hotel establishment with all food prepared from organically grown ingredients according to the techniques developed and preached by the foundation.

Kyril developed political, philanthropical, business relations and links with clean celebrities and stars with the ambition of building the foundation into an influential organisation, capable of lobbying international institutions and governments, and this passed by mediatic success vehicled by mainstream cinema and television productions on themes linked to the natural world, ecology and environment.

* * *

Sergei Tarasov's yacht, the *Cleopatra*, was anchored off La Plage de Pampelonne, a short ride on the yacht's cutter to the beach where that evening Pat Kennedy hosted a promotional event for *Indians* at Club55.

Like Sergei and Pat, many guests arrived at the jetty from their yachts, small compared to 85 metres and 2,500 tons of the *Cleopatre*.

The beautiful people gathered for the event included a collection of stars and celebrities from the world of showbiz and of course Lazarus together with Kyril, Mat, Olivier de la Salle with his wife and other members of the Clan. The high point of the evening was the screening of *Indians*, a 20 minute promotional preview of the still to be completed film, followed by the signing of a special edition of Pat O'Connelly's latest book, *The Tragedy*

of the Amazon, with an introduction by Lazarus, at 2,000 euros a copy, a drop in the ocean for those present.

Lazarus, as usual seemed lost before the elegant crowd, it was part of his charm, who rose to applaud him when he finally appeared. Scarlet Johansson took his hand and guided him to his place at the main table as the band struck up an Elton John number.

He seemed smaller and even more Ghandi-like than when Pat had last seen him. He raised his arms embarrassed at the attention accorded him. The music stopped and George Clooney appeared on the small stage to ask the guests to rise again for another round of applause as he asked the old man to join him.

John remarked Lazarus was no Mahesh Yogi, the Indian maharishi made famous, outside of India that is, by The Beatles in 1967. Pat was just old enough to vaguely remember Flower Power, when the Liverpool lads became mesmerised by transcendental meditation, what he didn't know was the story of how they joined the Maharishi's spiritual training camp in Rishikesh in 1968.

Mahesh Prasad Varma had developed a transcendental meditation technique and a worldwide following. It consisted of chanting silent mantras that induced total awareness, when perception was unlimited. His honorary titles Maharishi and Yogi were self-attributed, as was the case for Hindu or Vedic gurus said to possess great mystical knowledge.

Mahesh Yogi was a disciple of one of those Indian spiritual leaders, of which there were many, each preaching a different form of meditation in the Hindu tradition, which sought to explain human existence in a harsh and unjust world. As a maharishi, a spiritual teacher, he transformed his teachings into an international movement with worldwide tours and ended up by attracting the attention of Hollywood stars and celebrities in search of spirituality.

In the sixties India became a fashionable destination and George Harrison's wife Pattie developed an interest in Oriental philosophy and religion following a holiday in Bombay. Then, when Mahesh Yogi arrived in London, she persuaded George and then the others to listen to the Maharishi speak at the Hilton.

They were hypnotised and left with the Maharishi for Bangor in Wales to become followers of the guru. The rest was history, the Maharishi soon realised the Beatles would form catalyst and through them attracted Mick Jagger, Marianne Faithfull and Donovan. A movement was born, Flower Power, along with its gear, long hair and mantras, justly epitomised by the musical *Hair*.

LSD was replaced by transcendental meditation after the Beatles' manager Brian Epstein, who should have joined them in Bangor, died tragically from an overdose of barbiturates mixed with alcohol.

John was at the London School of Economics and Political Science—LSE, at the time, and as a result of the Flower Power craze, he followed the trail to India and Sri Lanka where he ended up buying his place near Galle, the Plantation.

Which went a long way to explaining John's offish approach to Lazarus and Gaia, but he was not about to discourage Pat, any criticism would have appeared mean.

Lazurus was helped onto the small stage and Clooney raised his hands again in a call for silence. Lazurus placed his hands together and bowed to Clooney and then the guests.

He approached the microphone and started to speak, softly, barely audibly, slowly at first, then urgently to the hushed crowd. 'The more sand has escaped from the hourglass of our world,' he said, paraphrasing the words of Machiavelli, 'the clearer we should see the future we are making for our children. Time is running out and unless we take action, now, they will inherit nothing but a barren desert.'

Lazarus's words made a visible impression on Pat Kennedy seated at the head table between Amal Clooney and Camille de la Salle.

Pat had just arrived from Hong Kong via Egypt where he had visited the Grand Egyptian Museum, scheduled to open in 2020, in the company of his archaeologist friend Ken Hisakawa.

The one billion dollar museum, designed by the Dublin-based Heneghan Peng Architects, planned to display the 5,400 treasures from the tomb of King Tutankhamun, along with 50,000 other objects from the old museum in downtown Cairo. Its official inauguration was planned for 2022, the centenary of Howard Carter's discovery of Tutankhamen's tomb.

The vast museum was situated at Giza so that visitors could contemplate the marvels of Egypt together after arriving at the new airport just 30 minutes from the site. Visitors would commence with a chronological tour starting from prehistory to the Greco-Roman period, with a presentation of recent discoveries plus monumental pieces too large to be housed in the old museum at Tahrir Square.

It would also present objects used in the daily life of the pharaohs, immersing visitors in the royal court, and not only how they dressed and what they ate, but also the embalming and funeral in preparation for the afterlife.

The object of their visit, in addition to the museum, was to learn more about space archaeology and satellites imagery, which had been used in Egypt to uncover ancient ruins, and how it could be employed in Central and South America.

Ken had been following the work developed by Sarah Parcak, an Egyptologist, who was based in Alabama in the US. Using satellite imagery and other remote sensing tools, including hyperspectral camera data, she had identified a huge number of undiscovered sites belonging to hitherto unknown Egyptian cultures.

He saw it as a way to accelerate his work in Central and South America and had persuaded Pat, without too much difficult, to fly to Egypt to meet Parcak.

The Egyptologist had identified countless ancient settlements, many pyramids, and more than one thousand undiscovered tombs, including Tanis, the Lost City, excavated in 1939 by the French archaeologist Pierre Montet, who unearthed a royal tomb complex containing three intact and undisturbed burial chambers containing silver coffins, sarcophagi, golden masks and jewellery including bracelets, necklaces, pendants, tableware and amulets.

There were multiple possibilities for satellite exploration as the technique had been used for the mapping of an amphitheatre at the Roman harbour of Portus, in what is now Romania; the search for prehistoric hominid fossils in Kenyan lake beds; Viking sites in Newfoundland; and more interesting to Hisakawa, Sarah Parcak's latest work—the satellite-mapping of the whole of Peru, which had already identified some 20,000 previously unrecorded sites, with an estimated 700 of potentially significant archaeological importance. Information that could help trace the expansion of ancient unknown civilisations.

It was a completely new field compared to the traditional dig, carried out by archaeologists on their knees, scrapping away at the dirt with a trowel and brush in their hands.

* * *

The idea of using orbital satellites to discover what was concealed beneath the canopy of the Amazon rainforest seemed to Ken Hisakawa the only realistic approach to discovering the history of the unknown civilisations that had flourished in certain regions of the Amazon Basin and had disappeared for unexplained reasons.

Satellites, backed by airborne Lidar systems, could point archaeologists to the vestiges of ancient cities and roads. Many unknown Maya sites had been found in the Guatemalan jungle using Lidar imaging, man-made features hidden beneath the canopy of the forest. In Egypt, one of the most revealing discoveries to Ken's mind came by a study into the causes that brought the Old Kingdom to an end, the period during which the great pyramids of Giza were built.

Satellite imagery of the Egyptian delta followed by on-the-ground survey work showed how the number of settlements fell at the end of the Old Kingdom, caused it appeared by climatic change accompanied by long periods of drought, a revelation that could provide answers for present day societies threatened by multiple environmental problems.

Technological progress was such that archaeologists now had access to satellite images having a resolution of 0.3 metres, with the promise that advances would soon make it possible to zoom into a single shard of pottery.

INSOMNIA

PAT 'DEE' O'CONNELLY WAS finding it difficult to work as the distractions piled up, he had taken on the task of writing the documentary script for the expedition and was distracted by the constant flow of bad news, Pat Kennedy and Hong Kong, John Francis and Brexit, riots in the streets of Paris, wildfires in Australia, and Syria—a powder keg as Russia and Turkey faced off. He was beginning to feel like Franz Kafka who wrote at night, the author of Metamorphosis was an insomniac, disturbed by noisy neighbours in his Prague apartment he wrote until three in the morning. Unfortunately that was not a solution for Pat, first he was not an insomniac and second Anna would not have been very happy, and third the crisis building up was infinitely graver than noisy neighbours.

He had his commitments, the narration for *Indians*, a book to complete— *The Tragedy of the Amazon*, followed by another centred on Russia—a story of crookery, corruption and money laundering in the City of London.

The Fitzwilliams Foundation had observed and monitored the Russian oligarchy against a background of Vladimir Putin's challenge to the Western democracies through a series of extraterritorial ventures reminiscent of the Cold War. With this in mind John Francis had persuaded Pat to co-author a book on how Moscow had instrumentalised the City of London's banking system and British politicians to advance his pawns.

The Foundation had every reason to watch Moscow closely, as Part Kennedy—successor to the late Michael Fitzwilliams, stood the head of the INI Banking Corporation, a multinational triumvirate, with its three main pillars situated respectively in Hong Kong, London ... and Moscow. The

latter was headed by Sergei Tarasov, who after a dangerous brush with the Kremlin had mended his bridges and was again seated at the head of INI Moscow, thanks to the largely pragmatic concerns of the Kremlin and its occupier.

Russia had returned to the forefront of world affairs over the course of the decade, thanks to the hesitations of Barrack Obama and then the bungling unilateral decisions of Donald Trump, encouraged by Europe's weakness—undermined by Brexit.

Moscow had finally re-emerged, a Phoenix from the ashes of the Soviet Union, regaining its primacy as one of the world's most powerful nations, thanks to its nuclear arsenal, its military prowess and its vast territory spanning the Eurasian continent, from the Baltic to the Sea of Japan, facing the US across the Bering Sea.

In spite of the Western sanctions imposed over its actions in Ukraine, Moscow had seen the West off, had dominated the military and geopolitical confrontation in the Syrian conflict, had won two unlikely allies, Turkey and Iran, eclipsing all the efforts made by Washington since Suez, regaining a paramount place in Middle East politics, a new power broker, even finding common interests with Saudi Arabia as an oil producer, whilst maintaining good relations with Israel, where one million Russian Jews lived.

At the same time Russian money flooded into the UK financial system and its tentacular emanations, more precisely British Overseas Territories, where the flow of loose money dwarfed even that of the City of London, which nevertheless pulled the strings.

How did that concern INI, well Pat Kennedy's bank had wittingly or unwittingly been instrumental in the flow of that money, like many other large banks, but perhaps more so, because of its unique geographical structure and distribution in different legal and administrative systems, jurisdictions and polities, from Hong Kong to Moscow, and the City of London to the Caribbean including Panama, Dominica and Belize to mention a few.

Russia was not a superpower in the conventional sense, and although it was strictly speaking a second division player in economic terms, with its oil and gas reserves, its mineral resources, it geographical reach, its military-industrial complex, and its nuclear arsenal, it set its own rules as an independent player that few could afford to ignore.

The world woke up to a new reality when Vladimir Putin launched his unexpected gambit, seizing the Crimea and backing Donbass separatists in 2014, a warning to NATO, which had taken advantage of Moscow's weakness to prise former Soviet republics from its sphere of influence.

Moscow's ambitions were underlined when Putin invited 43 leaders to Sochi for the first summit held by the Russian Federation for the nations of Africa, a continent that Moscow saw as a market for the arms and know-how of its military-industrial complex.

The same went for Putin's unfailing support of Cuba and Venezuela, countries which had long seen Moscow as an alternative to Washington, underpinning revolutionary socialist regimes, though Russia's ideological ambitions had long since faded.

Therein lay the key to the Kremlin's motivations, with neither the economic power, a population comparable with those of the US, China or the EU, nor ideological ambitions beyond its own business and security needs, there was the interest of its oligarchy—wealth, a softer kind of power, and the stability to ensure its own continuity, in other words, a good old banana republic dictatorship backed by a terrifying nuclear arsenal, which was maybe a good thing, getting richer was better for world peace than ideological confrontation.

THE LOST CITY

KEN HISAKAWA HAD INTRODUCED Pat Kennedy to the Moskitia region of Nicaragua, one of the few places on earth where nature's ecological and evolutionary processes still remained intact.

Two years earlier the two men had explored the dense jungle region in the search for the vestiges of the Lost City of the Monkey God. It was a region of great interest to archaeologists and scientists, where, if they hadn't found significant vestiges of a lost civilisation, they had discovered an amazing nature reserve, 246 species of butterflies and moths, 30 species of bats, and 57 species of amphibians and reptiles, creatures living in the forests surrounding the supposed site of what was also known as the White City, where nature for the moment still reigned, untouched by man.

Some thought it had been the home to an ancient civilisation, others like the French archaeologist, Rene Viel, adamantly rejected the idea.

In any case the region was a treasure house of nature, a pristine world of the past, to be preserved from the predatory human species that had spread across the face of the planet like a disease devouring all in its path.

As the two friends pursued their search for lost civilisations, another one was in the making. Robots were already casting their furtive shadow across the landscape of the developed world. Each day the evidence mounted in an endless stream of reports that landed on the large antique desk of John Francis, in his office at the Fitzwilliams Foundation, on Queen Anne's Gate in the heart of London.

It was inevitable, he had foreseen it—the age of Cornucopia, when work as it had been known since the Industrial Revolution would be an individual choice, when the wealth of the nation would be redistributed in the form of a universal calculated on the basis of an individual's contribution to the well-being of society.

It was a nice idea, but the transition risked being complicated, very complicated. In the meantime, the use of robots caused job losses across the board, for both skilled and unskilled jobs, in all geographical regions.

It was estimated up to 20 million manufacturing job could be lost in the coming decade, ten short years, in all countries. Already many had gone in the UK, where technological change was impacting all work places.

Were politicians capable of managing the transition when they themselves were ephemeral shadows, coming and going, unanswerable to those who had elected them, exposing their electors to capitalism's steamroller, unable to change the way work and employment evolved and how wealth was distributed in modern society.

Over the course of three or four decades, privatisation, deregulation and taxation had favoured finance and big business, benefiting shareholders and directors, whilst the employees had been left vulnerable to technological change, be it in the office, on the factory floor or in distribution.

Capitalism had long been presented as the only workable model—in spite of all its faults, compared to Communism, the much vaunted alternative, which had been shown to be unworkable in the USSR and in a whole swath of Soviet-like socialist countries.

Even so the flaws of capitalism were there and had been exposed and accentuated by the financial crisis of 2008, wage stagnation, increasing poverty, inequality and the emergence of a new kind of populism compounded by the threat of climate change.

At the same time there was a growing opposition in the developing world to the use of natural resources by big business, especially foreign business. The question was who owned those resources? Minerals, oil and gas, water, agriculture, fisheries and land. Who should benefit from their use? Who were the deciders?

It would need enlightened men and women, those not distracted by useless political squabbles, fighting over power, short-term leaders with short-term electoral interests. The task of finding those men and women would require nothing short of a miracle for West democracies, as they were pitted against behemoths like China and authoritarian leaders like Vladimir Putin in a new battle for survival.

That left one overriding question unanswered—was man capable of regulating his world, one that was becoming more and more complex, beyond the capacity of any one individual, committee or even state.

AUGUST

1

AN OLD FRIEND

SCOTT HAD BEEN BUSY WATCHING over the changes at his new gallery, when Pat 'Dee' O'Connelly and Anna Basurko appeared. The summer vacation hadn't yet ended and Paris was still quiet when they set off along the banks of the Seine under the Plane trees, enjoying the fine weather and watching the tourists, as they walked from their place on quai des Célestins to rue des Beaux-Arts, just a fifteen minute distance across the Seine.

The Left Bank gallery was Scott's third in Paris, recently acquired to take advantage of the thriving market in primitive arts.

On seeing his friends, Scott dropped was he was doing, impatient to announce the news just received from Indonesia—the discovery that *Homo erectus*, popularly known as Java man, was thought to have lived at Ngandong much more recently than previously believed.

Anna was nonplussed, perhaps she had misunderstood the name, she was Spanish, and though her English was excellent, there were always problems with accents and pronunciation, especially when the two men, long-time residents in Paris, flipped from English to French.

They both laughed and Pat reminded her of Scott's extraordinary, but controversial discovery, made a few years earlier, a calvarium, identified as that of an ancient human ancestor, *Homo erectus*, evidence that a small

population of modern man's predecessors had survived into historical times on the island of Borneo

Anthropologists had thought that the Ngandong erectus, who had lived on the island of Java, had become extinct 400,000 years ago, but new scientific methods now revised that to just 100,000 years.

This went in Scott's direction, as the recent discovery of *Homo floresiensis*, a small primitive human, named by the media as 'the Hobbit', found on the island of Flores, near Bali, was 12,000 years old, like the fossils of *Homo luzoniensis* found in the Philippines, both of which were considered to have been offshoots of erectus. Scientist's believed that the new date, thanks to improved technology, was proof that a small group of human ancestors had made their last stand at Ngandong on the Solo River, where they had been wiped out by a climate change event, one that transformed their sayannah-like habitat into a hostile rainforest.

Scott suggested they continue over lunch, at L'entrecôte a couple of streets away, Anna nodded in approval and they set off towards boulevard Saint Germain

The two men chatted enthusiastically about erectus, first discovered by Rene Dubois, a Dutch military doctor, in the late 19th century, fossils that were later shown to be 1.9 million years old.

The skull caps and shinbones used to establish the new date of the Ngandong erectus were in fact not new discoveries, but had been found by a Dutch expedition in 1930.

The new dating of the Javanese erectus fossils comforted the knowledge that other survivors had continued to live on neighbouring islands, where perhaps further fossils remained to be discovered.

Between about 120,000 and 110,000 years ago, an Ice Age came to an end. Sea levels rose as glaciers melted, and the climate became warmer and wetter, transforming the biosphere of Java, one in which erectus was unable to adapt, as borne out by evidence that the bones of erectus had been swept,

together with those of many other animals, into the Solo River by catastrophic flooding.

* * *

Man, an unremarkable creature during two million years, suddenly, ten or twelve thousand years ago, burst out of his modest niche, and in a flash in terms of history, emerged from being just another creature living in equilibrium with the natural environment to become the dominant species.

After leaving Africa 70,000 years ago, *Homo sapiens* succeeded in reaching every corner of the earth in the space of about 50,000 years, occupying and transforming almost every niche of the natural environment for its own benefit and to the detriment of its fellow creatures.

As the number of humans continued to grow on man's rapid march towards ten billion, they succeeded in transforming the environment and climate in a way that no other living organism had succeeded in doing so since the formation of the oceans and continents.

There were many well argued commentaries on immigration, starting with definitions of what immigration was—humanitarian and political issues, causes and responsibilities with the later linked to colonisation and imperial history, which inevitably involved an euro-centric gnashing of teeth and tearing of hair, as if European nations had been the only expansionists in human history, even if they—starting with Alexander of Macedonia and Julius Caesar, had made a significant contribution to European expansionism in history.

They were only copying the examples set by the Hittites and their near neighbours, or for that matter all of those *Homo sapiens* who had preceded them, and their ancestors including erectus.

The fact is all human history has been punctuated by movement and most certainly atrocities with our distant ancestors going as far as eating each other. The riposte that men were civilised and capable of rational thinking was nonsense and had been proven so throughout human history, which mostly recorded man's achievements in terms of war, conquest and colonisation. Even civilisation's artistic and literary achievements often glorified success in war and the domination of the other, not forgetting their respective gods with whom certain had covenants.

Dee recalled a discussion on a Parisian street with a Good Samaritan militating in favour of the Rohingya people, Dee asked him why Burma, a country the activist had never visited, and why not the homeless on the streets of his own neighbourhood. He looked at Padraig as if he was another of those right-wing racist fascists.

Of course the Rohingya were more exotic, needed less explanation than the reasons why poor immigrants, or hapless French men and women, slept in shop doorways near to the Good Samaritan's home.

El Ahram reported Egypt imported 10 million tonnes of wheat in 2018, from nine different countries to fed its population. That figure was forecast to increase to 12.6 million tonnes for the year 2019/20 when Egypt's population would top the 100 million mark.

At the same time the 16 year-old Swedish climate change flag carrier, Greta Thunberg, set off for New York to address the UN Assembly on a sailing boat, an example of how the world should change its gas-guzzling habits

Dee wondered if she had given any thoughts as how those millions of tonnes of wheat could be transported to Egypt on sailing boats, or how a country could allow its population to grow beyond its capacity to feed them, and what would happen if Egypt's main suppliers, Russia and Ukraine, suffered crop failures.

Once again the problem returned to population, and not specifically that of Egypt, which simply served Dee as an example to illustrate a point.

Speaking of climate, Anna changed the subject to Pat Kennedy and his research project in Colombia. There was nothing new, except confirmation Pat would be arriving the following week and until then they'd have to wait.

THE MEDITERRANEAN

'THE LUVVIES ARE AT IT AGAIN,' John moaned, as he read Ekaterina a story of Richard Gere praising migrants in Lampedusa as extraordinary people. It was true they had endured extraordinary hardships to make it to the Mediterranean. But things were not as easy as the 69 year old Hollywood actor imagined.

'Once his summer break is over, he'll be back to the comfort of his New York pad with his new 36 year old wife,' John casually remarked.

Ekaterina shot him a black look, their own age difference was even greater than that of the Gere pair.

John studiously re-concentrated his attention on the article in *Hello Magazine*.

Ekaterina knew about hardship, John had never experienced the kind of life she had remembered during the twilight days of the USSR and the chaos of Boris Yeltsin's Russia. Not that she was in favour of uncontrolled immigration.

Gere had taken a break from his holiday in Tuscany to meet migrants at sea on their ship, drifting at sea, without a home port to dock, to drop anchor. The actor delivered essential supplies of food and water, showed the unfortunates pictures of his newborn son.

'As if they cared a damn about an ageing American actor they'd never heard of,' said Ekaterina, 'and his sprog!'

John looked up surprised, Ekaterina's English vocabulary was making considerable progress, even if it wasn't exactly in the right direction. He wondered where she'd picked the word up.

Perhaps the decline of the language was a symptom of what was wrong with Britain, like Brexit, not a solution to its ills. A trip to the poorer districts of London told a different story to that of his own, around Royal Hospital Road in Chelsea, where he and his small family lived in splendid isolation, shielded from the common folk and violence of districts like Croydon and Southwark, where knife crime was rampant.

Social centres and public parks were disappearing almost overnight in the poorest districts and suburbs, as were pubs, shops and banks, even churches were being abandoned, left derelict as communities lost faith.

Health and social services were underfunded whilst politicians focused on austerity and budget cuts ignoring the pain it cost to the more needy.

When the high street shops closed people hunkered down at home, tele and takeaways, pub life disappeared, a way of life where men and women entered another world, one in which they were actors, rather than spectators. As for the young, many turned to solitude, lost in their own lonely worlds of video games and Netflix.

CRISIS

FAR FROM THE AMAZON JUNGLES the situation was deteriorating quickly in Hong Kong, caught up in a crisis that seemed to have no issue but a bad one. The Global Times, a tabloid published by The People's Daily—the Chinese Communist Party news organ, showed a video filmed in Shenzhen, of thousands of soldiers in helmets and shields in an exercise battling with mock demonstrators disguised as students.

The world was concerned by what was happening in Hong Kong, which to all intents was a city state, and one of the most important financial hubs in Asia. It looked like David against Goliath, a nice biblical parable with a happy ending, in reality the denouement risked looking more like Tiananmen or Sebastopol, with the rebellion crushed in blood.

The situation had got out of control and Pat Kennedy had set up a crisis room with his closest associates and advisors, including the Wu family and heads from London and Moscow.

From the banks headquarters in Central on Hong Kong Island things looked normal, that is apart from the banner waving demonstrators on the forecourt of the bank's skyscraper home. But from the Peninsula in Kowloon, where they were gathered for their crisis meeting, away from the distractions of the offices, the bankers had a ringside view on what was really happening on the street as the demonstrators swarmed past the luxury boutiques with their window displays decorated with the kind of goods that few of them could afford—Vuitton handbags, designer watches, jewellery fit for oligarchs and Red Royalty, and shoes that cost a worker's annual wage. The expensive cars that normally dropped the wealthy shoppers off were

nowhere to be seen, safely parked in deep underground garages. The usual flocks of well-heeled tourists were hunkered down in their hotels or had flown on to more peaceful destinations.

* * *

In Moscow, yet another world, whilst Ekaterina waited for John to return from a visit to Sergei at the Moscow headquarters of INI, she half watched the evening television news. In their large apartment off Tverskaya, where they were to catch up on the Russian art scene, she felt only vaguely concerned by the state of ebullition in the world that summer.

Alena ignored her mothers complaints and continued to type away on her mobile phone as the nanny grabbed her brother Will to pack him off to bed.

Ekaterina zapped news channels and paused at an image she recognised, the terrace of a recently renovated market hall overlooking Trubnaya Square, where a well well-dressed crowd sat drinking, the men from bottles of craft beer and their wives and girlfriends sipping at what she supposed was Aperol spritz.

Below the terrace, on the esplanade, as the sun slowly went down over the Moscow skyline, the scene was quite different, riot-police harassed a crowd of predominantly young demonstrators, chasing one group across the square into the adjoining streets, those who weren't fast enough were grabbed and manhandled into waiting police vans, whilst loudspeakers threatened those remaining with arrest, a sure guarantee of detention for the most hardy opposition activists.

The crowd was demonstrating in protest against the exclusion of opposition candidates in the Moscow local elections.

The clampdown ended in one of the biggest protest movements in recent recent times, a sure sign of growing discontent as the Kremlin veered towards even greater authoritarian rule as Vladimir Putin's popularity dropped.

Leading the protests were those close to Alexei Navalny who campaigned against rampant corruption at all levels of power, witnessed by irrefutable evidence in videos circulating in Moscow.

Navalny, who was banned from state television, had been arrested and jailed on numerous occasions and barred from standing as an independent candidate in the 2018 presidential election. His bank accounts were frozen and masked police raided his offices where they seized documents and computers.

One of Navanly's associates, Lyubov Sobol, an Anti-Corruption Foundation lawyer and member of the Russian Opposition Coordination Council, had planned to stand as an independent in the Moscow elections, only to be told the voter signatures required were fakes and that her candidature was void.

She riposted with a hunger strike and was arrested in spite of her protestations, 'Who are you frightened of? Your own citizens, a woman on the 20th day of her hunger strike?'

The euphoria of the Crimea annexation was over and fewer Russians were willing to make the kind of sacrifices that sanctions entailed. Real incomes had fallen and that coupled with pension reforms hit Putin's popularity ratings. The younger generation of Muscovites had grown up in a different world to that their parents and grandparents. Putin, called the 'dwarf' by antigovernment media, was a pure product of the USSR and the Cold War, that predated the young generation who wanted a different more open and easygoing world, where they could enjoy the benefits of their likes in Western Europe and the US, one where they didn't have to make useless sacrifices and fight mindless wars.

The same old tired anti-western rhetoric no longer went down with them and they feared falling foul of the arbitrary rules of their authoritarian Kafkaesque state that dragged its screaming victims into police vans with vicious blows to discourage resistance—as had their Soviet predecessors.

JAKARTA

PAT KENNEDY WAS WHAT they called a 'Taipan' in Hong Kong, one of the legendary few who had built a colossal fortune by force of character and daring. From his Hong Kong base he had spread his business across South East Asia, building on the base of the network developed by INI's Amsterdam based bank, the Nederlandsche Nassau Bank, and the Smeaton family's Anglo-Dutch Commercial Bank founded a century earlier in Jakarta.

Since those days, Indonesia had gone from being part of the *Het Nederlandse Koloniale Rijk*—the Dutch colonial empire, to a vast and fiercely independent nation. At the same time its population had grown from around 50 million to 270 million and was projected to grow to 330 million. Its capital Jakarta, called the 'Big Durian' by its inhabitants, together with its sprawling suburban area, was the home to 30 million.

To most Indonesians, and many other people in the region, HG amongst them, the news that Jakarta was sinking into the Java Sea was nothing new, for decades it had been sinking into the mud, silt and polluted slime, a reality visible to anyone who visited the city's port, Tanjung Priok, and especially the city's hapless population.

The news that Indonesia was to create a new capital in the sparsely-populated region of Kutai Kartanegara and Penajam Paser Utara, on the island of Borneo, came as forest fires swept through vast regions of the archipelago, added one disaster to another, after decades of destruction by logging, mining, sugar cane and oil palm plantations.

The idea of two million immigrants arriving from Jakarta was apocalyptic, the death knell for what remained of the natural environment in East Kalimantan, targeted as the site for the new capital.

The announcement came as a thick haze hung over large parts of Peninsula Malaysia, Sarawak and Sabah, setting off a war of words between Kula Lumpur and Jakarta with accusations and counter-accusations as Malaysian authorities pointed to data released by Indonesia's Disaster Mitigation Agency with satellite data showing more than 3,600 fires on Sumatra and Borneo.

That was contradicted by data from the ASEAN Specialised Meteorological Centre, which clearly showed the total number of hotspots in Kalimantan and Sumatra were dwarfed by those recorded in Malaysian territory.

A lot of chest thumping and little action.

The blame game did nothing to help those affected when schools were shut as the air became unbreathable and face masks were issued to the population of Sarawak.

At the origin of the crisis was a cycle of dry weather that caused a steep increase in the number of forest fires across the region, which according to data published by the Copernicus Atmosphere Monitoring Service, produced over 14 megatonnes of CO₂, three times greater than that produced over the previous 15 years.

Many of the fires became uncontrollable after being deliberately started by farmers to clear their land when the underlying soil of large areas of Sumatra and Borneo was made up of deep peat deposits—vegetable matter accumulated over thousands of years, which once set on fire continued to burn for weeks.

As distant corners of the planet were affected by rising temperatures and more frequent blazes, forest fires that sent gigatonnes of CO₂ into the atmosphere, from Indonesian to Brazil, Bolivia, Colombia, the Congos, Siberia, Alaska, Greenland and Australia.

President Joko Widodo's announcement came on the heels of dire predictions for the future of Jakarta and its population, choked in permanent gridlock as more than three million commuters struggled to get into and out of the city each day. Not only was the city sinking into the sea, its drainage and sewerage systems overflowing, it was also overshadowed by the threat of natural disaster. The island of Java was the home to some of the world's most active volcanoes, situated on the ring of fire. Jakarta and other cities lived in the permanent shadow of calamity—the constant threat of volcanic eruptions, shifting tectonic plates, earthquakes and tsunamis, as John Ennis and Scott Fitznorman had witnessed three years earlier when they fled the eruption of Krakatoa.

The new administrative capital would attract millions of migrants to Kalimantan, whilst Jakarta would continue as a commercial and financial centre, the majority of its 30 million residents certainly opting to stay put, in spite of the impending disaster, as city's population inexorably spread out in all directions

HG was shocked when she learnt hundreds of square kilometres of land would be bulldozed to build the new capital, as the state institutionalised the destruction of the Borneo's natural environment. It was nothing less than former president Suharto's transmigration programme that was introduced in the 1970s

Suharto's government, in an effort to reduce the demographic pressure on the densely populated islands of Java and Madura, forcibly relocated thousands of villages and countless families to less crowded islands of the vast archipelago, notably to Borneo, transporting them to isolated regions where rough airstrips were built for the huge versatile C5 air force cargo planes, providing each family with a few sacks rice and other basic necessities, plus a parcel of summarily cleared forest land to be cultivated for their future needs.

The arrival of vast numbers of migrants created an often deadly conflict with the indigenous peoples. Today the Paser Balik tribe that had already suffered from the incursion and destruction of its lands by logging and mining companies over the years, feared that the new capital would raze their homeland forests, drain its waterways, exterminate its remaining wildlife, and transform its world into an urban desert.

Much of the land in the region destined for the new capital was already exploited by mine operators, palm oil producers and logging companies, some of whom would certainly profit by selling the land back to the government for the building of the new capital.

HG told her friends the people of Borneo did not fear the forces of nature, but ran in fear of civilisation and its concrete jungle.

Neighbouring Malaysia, HG's home, was faced by many other problems after it had undergone a series of deep political changes, returning 92 year old veteran politician Mohammed Mahatir to power following the MBD1 scandal, which amongst other things had indirectly involved Pat Kennedy's bank. Mahatir had marked Malaysia's modern history as the country's long-time prime minister, between 1981 and 2003, when he been the advocate of hard-line Bumiputra and Muslim tendencies in a multiracial, multi-religious, country with a diverse geography—its two largest states which lay on the Island of Borneo, isolated from Peninsula Malaysia, a structure created by the British at the moment of their colony's independence, as a bulwark against Sukarno's Indonesia, then threatened by communism.

After years of economic progress, an example in Southeast Asia, it was threatened by instability as the Muslim majority practised discriminatory policies against large Chinese, Hindu and indigenous communities, fomenting violence and forcing Islam on the indigenous peoples, threatening religious pluralism with ultra-conservative policies, wielding religion and race in favour of ethno-nationalistic-economic domination by the Bumiputra majority, widening the cultural divide between the country's diverse ethnic groups.

A LIGHTHOUSE DINER

WHO WOULD HAVE BELIEVED ten years ago that America and the West would lose the Middle East and that Bashir El Assad would emerge victorious in a conflict against an American led coalition, in a geometrically variable battle against the Caliphate, the Kurds and a variety of anti-Assad groups.

Under Donald Trump e Middle East had lost its importance for a number of complex reasons, amongst them was his trade war with China and his vision 'Make America Great Again'.

It was this in mind he headed for the G7 conference in Biarritz where he was to meet the leaders of Canada, France, Germany, Italy, Japan and the United Kingdom. It would be complicated as he was to a great or lesser degree in discord with them all. As for Vladimir Putin he was absent, expelled, justifiably following sanctions for his annexation of the Crimea.

Macron had become Western Europe's most active leader on international issues by default—Germany's Merkel was in difficulty, and the UK's new premier was embroiled in the Brexit battle.

Putin, however, hoped to reinforced his position, but in truth Russia was a giant with feet of clay. Although he had performed an almost impossible task, considering Russia's catastrophic post-communist legacy and the chaos bequeathed by Boris Yeltsin, his country's weaknesses had persisted, commencing with chronic underinvestment compounded by its over dependence on energy export revenues, poor infrastructure, corruption, rising

social stress and discontent, set against the background of an oppressive authoritarian state.

In spite of its vast territory, energy and raw material resources, Russia's population was small, its economy no better than a middling European power, it was no match for the other world powers, especially its neighbours—China to the east, the EU to the West. The former, a populous industrial giant, flexing its muscles, the latter an economic powerhouse which was still undecided as to its future role in the world.

Though Vladimir Putin was solidly ensconced in power, apart from a vague vision of a Greater Russia, he had no solid constructive vision for his country or successor should he stumble.

* * *

As the leaders met, anti-globalisation and climate activists converged at two points, each situated on the opposite side of the border that divided the Basque Country between France and Spain. Their goal was to confront the rich-poor divide that was widening at an alarming rate caused by the indifference of political leaders and the speed of technological change.

Inevitably the jamboree attracted eco-warriors of all ilks, it coincided nicely with a midsummer trip to the clean and green Basque Country with its gastronomic traditions, offering side trips to St Jean de Luz and the 16th century fortified town of Fuentarabbia as well as Hendaye's beach, four kilometres of golden sand, flanked by the foothills of Pyrenees.

Their leaders included national media personalities on the forefront of green parties and activist movements, all of whom saw the event as an opportunity to broadcast their narratives, reiterating their crusade slogans, out of fear they—themselves that is, be forgotten.

It was a mediatic business and having ones image flashed on TV screens, blogs, and the front pages of the press was all part of the vote getting, fund raising, battle. It didn't take much communications savvy to know it was better being photographed rubbing shoulders with the troops at an eco-conference in northern Spain, than spotted, like an idiot royal prince, teeing off at the Real Club Valderrama, an exclusive golf club in Sotogrande, Andalusia, at the opposite end of the Iberian Peninsula.

A SUMMIT

MORE THAN 13,000 SECURITY AND LAW enforcement troops were gathered in and around the historic town of Biarritz. They were there to ensure the safety of the heads of states and their delegations gathered for the G7 summit in the French Basque Country and prepare for the arrival of leaders of the world's rich nations. They included Donald Trump, Boris Johnson, and their host Emanuel Macron, present for three days of talks on global issues from the climate emergency to trade wars.

The forces of law and order present, included 44 CRS companies and 48 mobile gendarmerie squads, plus specialised units, amongst with was the RAID—the National Gendarmerie Intervention Group and the Republican Guard

Facing them was a ragtag army of anti-G7 demonstrators that mounted desultory skirmishes near the camp where they were installed outside the small picturesque Basque town of Urrugne, a dozen kilometres to the south of Biarittz.

The chic seaside resort of Biarritz was in lock-down with traffic restricted to residents and officials, all requiring badges. Railway stations and the local airport was shutdown for the duration of the summit, sailing boats banned from approaching the coast, and surfers from the beach. It was no-go zone, bang in the middle of the tourist season.

Demonstrators' feeble attempts to enter the town at a roundabout exit from the motorway that linked Biarritz to the Spanish border were quickly repelled at road checks set-up at the border and major crossroads. The ragtag mob then attempted to block access to their camp by setting up makeshift barricades and bombarding the police with anything that came to hand. Their makeshift projectiles were of little use as the police surged into the camp firing tear gas canisters and flashballs in front of the astonished eyes of vacationers at a nearby holiday residence.

* * *

It was going to be a hot day in Biarritz with the temperature expected to reach the mid-thirties. The splendid resort was an armed fortress as the summit was set to kick-off. Emanuel Macron arrived onboard his presidential jet at Biarritz Pays Basque Airport, about six kilometres from the town centre, Trump arrived at Bordeaux Airport on Air force One, a Boeing 747, where he transferred to a smaller C32—a military version of the commercial 757 airliner in the colours of the US presidential fleet—for the 200 kilometre hop south to Biarittz.

Waiting for them was the army of 13,000 gendarmes and other security forces with their vehicles to ensure they and the other world leaders were not troubled by the plebeian mob.

A few kilometres to the south in Hendaye the temperature had already reached 30C and a light mist hung over the beach obscuring the the twin rocks, Les Jumeaux, and the 19th century Château d'Abbadie that looked out over the sea from a high point in the distance.

Between the old mauresque casino and the place du Palmier, the normally busy beach centre with its cafes and shops, was almost deserted, just a scattering of tourists and a handful of locals out for their baguette and morning newspaper. Many of the cafes were however closed, the bank and its ATM boarded-up, as were the real estate agencies and the ladies swimwear boutique, Pretty Woman.

Preparations that reminded Pat O'Connelly of a Caribbean beach resort before a hurricane, if it hadn't been for the fact he'd seen three suspected agitators in handcuffs and five others seated on a bench surrounded by heavily armed police the previous evening.

That morning Hendaye had started to empty and by midday it was deserted. Where had the 10,000 demonstrators gone? Bayonne, according to the rumour that was making the rounds. Pat grabbed his car and took off for the autoroute just outside the town. Bayonne lay a little under 40 kilometres to the north. Some 30 minutes later he crossed the Garonne took the exit Bayonne Nord and swung back into the city where he parked nearby the railway station. There he headed into the historical centre on foot crossing back over the river where he joined the crowd that was starting to build up, one that was different from the anti-G7 crowd in Hendaye, uglier and looking for trouble.

At the same time Donald and Melania Trump arrived in Biarritz where they were greeted by the French president and his wife Brigitte. First was an impromptu lunch, then a tête-à-tête between the two men on the terrace of the Hotel du Palais, where Trump seemed tense, but let Macron have his moment announcing, '... every once in a while, we go at it just a little bit, not very much, but we get along very well. We have a very good relationship ... we couldn't have asked for better weather or a more beautiful location.'

The meeting was essentially one of the US and its allies, and Trump would needed them as he ratcheted up his war of words and tariffs against China whilst leaving Russia to sulk in its corner.

In any case there would be no joint communique, which would avoid the heads of state leaving under a cloud, as they had at their last meeting in Canada, when Trump refused to sign the document and consensus was consigned to the bin, a result that Macron wanted to avoid. It would be a loss of face before African leaders from five nations, the Australian prime minister, India's prime minister, Brazil's president and the Chilean president, congregated in the fashionable resort town, a haven for Russian oligarchs, celebrities and well-heeled tourists.

Boris Johnson arrived, seemingly as confused as ever as he jumped out of his car and headed in the wrong direction. He counted on Trump to bail him out of his self-made Brexit predicament and desperately needed a pat on the back and the promise of a trade deal. Incongruously, the Hotel du Palais overlooked a large Russian Orthodox church, built more than a century earlier for Czar Nicolas II, a reminder of Vladimir Putin's absence, an absence Trump regretted, it would have been '...much more appropriate to have Russia in, particularly the G8, because a lot of things we talk about have to do with Russia.'

Beyond the vast ornate gates of the Palais, Biarritz was tense, a special magistrates court had been set up to handle demonstrators as control points were set up at crossroads where armed police were posted to prevent trouble makers invading the red zone—declared off limits to the public.

DIVISIONS

EMMANUEL MACRON PUT CLIMATE change at the centre of the event. However, the subject was not on Donald Trump's agenda, in fact it was far from his multiple preoccupations; a trade war with China; a simmering dispute with the EU over tariffs; and a slanging match with the other half of the planet.

The solidarity the Western world had enjoyed since WWII was in tatters in spite of the greats grandstanding in Biarritz. It was divided not only over trade, but just about everything else, from climate change to dealings with China, Iran and Russia, and of course there was Brexit with Trump pouring oil on the fire by the promise of a fantastic deal for Johnson.

* * *

In spite of the perfect setting under clear summer skies, the summit got off to an embarrassing start when against a background of raging forest fires in the Amazon, Emmanuel Macron and Jair Bolsonaro commenced by trading insults.

Macron accused Bolsonaro of lying on Brazil's position on climate change and threatened to block the free trade agreement negotiated the previous month between the EU and the South American trade bloc Mercosur, which included Brazil.

Bolsonaro riposted by accusing Macron of having a colonialist mentality and treating Brazil like colony.

Matters were made worse after Bolsonaro posted photos on Facebook comparing pictures of his and Macron's wife, with the comment: 'Now do you understand why Macron is persecuting Bolsonaro?' twisting the knife by adding, 'Don't humiliate the guy. Hahaha.'

Bolsonaro was accused of favouring an agricultural policy for his country, one which would have a catastrophic effect on the Amazon's environment, rather than defending the rainforest, where according to his critics the rate of deforestation had surged to the point new agribusiness was consuming an area the size of Manhattan every day.

Not only that Bolsonaro had opened public lands to agribusiness, lands settled by *ribeirinhos* and the *quilombolas*, the former lived by fishing, rubber tapping and the traditional harvesting of Brazil nuts and other forest products, the latter were the descendants of rebel slaves who had won their right to territories occupied by their ancestors.

After five centuries of European colonisation, the indigenous peoples, who had already suffered under their Portuguese masters, were now faced with the threats of deforestation on a vast scale and the destruction all all plants and creatures that lived in their homelands.

Pat O'Connelly often wondered why no one ever pointed to the intensive agriculture policies of the US or the EU, where in the latter case the natural biotope had been degraded over two millennium to feed Europe's population which had grown more than six-fold since Roman times.

* * *

As demonstrators prepared to bang their drums for the last day of the conference and delegates packed their bags, the result was summed up by the general reaction of financial markets. Friday Trump announced an additional duty of 5% on Chinese goods, then over the weekend, he announced he may have second thoughts, then followed by saying he wished he had raised tariffs on Chinese goods even higher whilst adding he did not plan to follow through with a demand that US firms find ways to close operations in China.

Monday Asian markets slid sharply with the Nikkei opening down by over 3% as the business world was shaken by the generally confusion created by Donald Trump. As one analyst wrote there was an uneasy feeling that the very fragile negotiations were spiralling out of control.

Gold rose and oil dived with the prolonged uncertainty following rumours linked to the possible presence of Iran in Biarittz—the thought of easing sanctions threatened a flood of Iranian oil onto the already weakening market.

ANOTHER VERSION

THE VAST MAJORITY OF THOSE supporting environmental movements were well intentioned, but amongst the activists was a hard core of extremists. Certain of those bore a religious fanaticism in their actions, bordering on hysteria, which at times was exploited by individuals whose interests lay in their own gain, influence or profit.

Environmentalist groups were prone, like in every associative movement, to individual ambition, power and glory. Where leadership cults flourished behind a façade on green sanctitude.

The hysteria over the rainforest fires in Brazil was the occasion to focus well-fed, privileged Westerners, on an easy target, especially since Bolsonaro had replaced leaders favoured by champagne socialists, even if they had been imprisoned or ousted for corruption.

Bolsonaro was targeted for having the temerity to use his country's resources as his government saw fit. He was white, wealthy, Christian, conservative and even worse had an army background.

Luvvies, like Leonardo DiCaprio, friends of crooks such as Jho Low, claimed the fires in the Amazon were the worse since records began, perhaps, but put into perspective those records began a decade ago. Though slash and burn agriculture had existed since the dawn of agriculture.

Tracking by NASA reported that the annual variations were within what would be normally expected over the vast and varied territory of the Amazon which englobed a number of different biospheres.

The general dialogue often turned around the idea that the developing world was incapable of managing its own affairs and only developed countries held the solution to their problems, which in the case of the New World was laughable considering the damage conquistadors like Cortes and Pizarro had inflicted on their civilisations, not forgetting American heroes like Buffalo Bill and Custer, who together contributed to the destruction of wildlife and the decline of indigenous peoples.

It was easy to point to the misery of India, the pollution of China's industries, from a comfortable home in London or Paris where people in developed nations enjoyed the kinds of privileges the poor and less well-off aspired to.

The gloating schadenfreude of well-heeled tourists snapping the slums of Manilla or the favelas of Rio with their smartphones, congratulating themselves on their intelligence and their environmentally friendly home countries. Images they would paste on their Facebook pages with temples and smiling street urchins.

In 1989, Dean Edwin Abrahamson wrote in his book, The Challenge of Global Warming:

A world with a doubled or tripled human population, with a several fold increase in consumption, and with greenhouse gases, industrial pollutants, and other assaults on the environment proportional to those of today is not only virtually unimaginable, but impossible. If societies attempt a several fold increase in economic activity described in the Brundtland Report (published in 1987), using the present means of production, increasing emissions of greenhouse gases will have consequences similar to those of nuclear war.

Today, more than 30 years later, the world is well along that path, since over those three decades next to nothing had been done to counter the effect of emissions and the world population has jumped from 5 billion to 7.5 billion and would reach 10 billion within a generation.

Brazil needed to develop its economy and its natural resources were the key: agriculture, forestry industries, mining and urban development, whilst striving to maintain an acceptable level of sustainability.

If the international community wanted something greater at the expense of Brazilian growth, then they would have to contribute to safeguard its biosphere.

From humanity's point of view, protecting the Amazon was vital, but to keep the rainforest as a pristine reserve at the cost of 200 million Brazilians was unacceptable to its government.

The multiplication of foreign NGOs agitating against industrial development of the rainforest and other biospheres in Brazil had become a serious bone of contention between the greens and the country's leaders, who looked at the policies of Ecuador and Peru, both of which had taken measures to expel foreign-funded NGOs that acted against their interests on questions of environment.

As a sovereign nation, Brazil had every right to pursue its economic development as it saw fit, including the management of its forest resources which after all belong to them.

The claim that the Amazon rainforest was the lungs of the planet was on every politicians lips, claims it recycled 20% of the planet's oxygen were bandied about, though according to climate expert Michael Mann, it was nearer to 6%, a nevertheless very significant figure.

A SAVIOUR?

JOHN FRANCIS HAD HOPED a new Margaret Thatcher—in the form of Theresa May—would cut the Gordon's knot, but she failed. Now it was the turn of a Churchillian figure, Boris Johnson, who after more than 1,000 days of political infighting, sensational headlines, with plots and counter-plots, public insults by the different partisans, against a background of catastrophic predictions, wavering financial markets and the near collapse of sterling, the final Brexit battle was about to start as parliament returned from its summer recess.

The summer had seen the first truly visible signs of climate change, blistering heat, storms and flooding, as the weather ran its topsy-turvy course. At the same time the economy was paying the price for political turmoil and a trickle of bad news was building up into a steady stream as businesses and consumers started to cutback on investments and spending as the festering crisis came to an ugly head.

After the summer break, Britain's parliament was about to open the new session with an historic showdown between Boris Johnson—who had vowed to leave the European Union on October 31 and the anti-Brexiteers who viewed themselves as the last bulwark against impending disaster as the UK staggered towards its historic destiny. Finding a majority in a very divided parliament to prevent Britain withdrawing from the bloc without an exit deal seemed an almost impossible task.

Whatever the outcome, the Brexit battle would go down in the history books, the referendum had cleaved the country in two, from the government down to the common folk, with little chance of reconciliation.

The trouble was Johnson's Conservative government had a majority of just one seat in the 650 seat house, thanks to the support of the DUP, a small, almost inconsequential, Northern Irish Party.

It was with deep regret that John Francis observed the opposition, as it stood at the crossroad of history, a moment when its leader with courage and vision could have deflected the government from its destructive path. That was not to be as the opposition was led by an old fashioned Marxist reactionary, who left the way clear for the mop haired adventurer, who as a last resort opted for parliamentary elections, confident his socialist adversary stuck in his 1950s time warp could never gain the confidence of the British people.

BREXIT

JOHN, ALTHOUGH HE WAS a firm Remainer, he was more complacent about Brexit than certain of his friends, in the belief a compromise face saving arrangement would be found.

However, whilst he did not believe in a plot, he had no doubts that a certain class of UK politicians SaW the UK's natural partner as the US, especially those whose financial interests lay in a Transatlantic alliance, and were resolutely set on separating the UK from its European friends.

It was clear that certain Americans including the billionaire Robert Mercer, former head of Renaissance Technologies, a supporter of Donald Trump, played a key role in the Brexit campaign. A long time friend of Nigel Farage, he was a major donor to right-wing political causes in the US, such as Breitbart News, to which Steve Banon was linked along with Cambridge Analytics.

The decisive nature of Brexit was a continuum of European history that went back to Henry VIII and his continental contemporaries, Francois I and Charles I of Spain and their successors, an almost permanent state of confrontation in the balance of power, peaceful or otherwise.

The danger was this time around the UK would end up as somebody else's pawn in a game to weaken Europe, a tragedy in view of the cost paid in World War I and II to all concerned.

Britain's weakness was illustrated by the artist Ai Weiwei, who told the BBC that Beijing sees Britain as a nonentity and that it and the West in general were uninterested in getting involved in the Hong Kong crisis.

When asked if Britain had a specific responsibility, the artist replied that the Chinese government simply laughed at London, noting they could not even manage their own problems. Seen from afar Britain's Brexit entanglement seemed Ruritanian, transforming the country and its parliament into a laughingstock, epitomised by Monty Python-like characters, namely John Bercow bellowing, and Boris Johnson with his theatrics, characterising what was in effect a toothless lion.

After all what did the West do when the Chinese government sent in its tanks to literally crush the demonstrators in Tiananmen into a bloody pulp?

Pat remained confident in spite of what he saw as posturing by the central government in Beijing, he did not envisage another Tiananmen Square horror.

For the moment, as far as he was concerned, the former colony offered a highly desirable advantage to his bank when doing business with China, thanks to its British based style legal system which guaranteed rulings based on fair laws and not corruption.

Hongkongers were justifiably alarmed when nonstop news flashes started scrolling across their TV screens of tank and troop movements on the other side of the border.

On the opposite banks of the creek that separated the city of Shenzhen from the New Territories, less than a dozen or so kilometres from Pat's gleaming headquarters, large numbers of paramilitary forces were seen gathering at different points in the city. In total 12,000 troops with armoured personnel carriers, helicopters and amphibious vehicles were on standby waiting for the order to move.

Pat reassured himself it was nothing but intimidation, a game drawn from the Art of War, the ancient Chinese treatise by Sun Tzu. He recalled one of its main tenants—avoiding direct armed conflict confrontations, a last resort, only justifiable when all other alternatives had been exhausted, and even then, a direct clash of arms was to be avoided.

He talked to a puzzled Lili of the dangers of a Pyrrhic victory as they sipped their morning coffee looking out at the panoramic view of Victoria Harbour far below their vast apartment. Pat was in many ways a self-made man, an autodidact, who compensated for his lacunas by consuming every book of history that came his way, a diversion from the endless stream of documents that arrived from the bank's branches strung across the world.

A Pyrrhic victory would profit no one, he said as he kissed Lili on her forehead, before leaving for his car waiting forty floors below for the short drive to the bank. Normally he would have walked, but the temperature and humidity had risen several degrees as a tropical depression approached the city, besides he did not want to confront the demonstrators and security forces, even at that early hour.

In spite of Pat's optimism, observers generally agreed that something bad was about to happen. Everything pointed to a brutal crackdown as Beijing finally lost patience after ten weeks of riots and the chaotic incursion that shutdown Hong Kong's airport.

Mainland news reports spoke of treachery and terrorism as it prepared the public for an invasion by its special forces whose methods would even make the efforts of Hong Kong's raptors look tame thirty years after the Tiananmen demonstrations were crushed. At that time China's then supreme leader, Deng Xiaoping, confronted by the death of 3,000 young men and women, commented, 'You must remember in this country, a million is not a big number.'

To make matters worse for Zhongnanhai, the events coincided with the 70th anniversary of the founding of the People's Republic of China, to be celebrated in grand style come October 1.

The old ones remembered Chairman Mao boast 'Kill one, frighten ten thousand', but today that would no longer work, brute force in Hong Kong would not only shatter its economy would also provoke urban warfare.

The leaders greatest fear was contagion, though for the moment that seemed unlikely as prosperity stifled political discontent. What would happen if China's economy stalled, if Trump pursued his trade war, or a black swan appeared on the horizon.

AFTER PUTIN

AS THE AMAZON BURNED, WILDFIRES raged across the Taiga, forcing Vladimir Putin to call in the army to fight the fires that swept across vast areas of Siberia, enveloping towns and villages in dense smoke. It was estimated three million hectares in Centre and Eastern Siberia were burning with the Krasnoyarsk region being one of the worst hit, where its governor declared there was little that could be done, the huge almost empty region of Taiga forest was unreachable and Russia had neither the means or the manpower to combat the fires, the most important in living memory to hit that region.

The fires, triggered by high summer temperatures, were accompanied by lightning, strong winds, dry thunderstorms and in general exceptional weather conditions, sending smoke and haze across the vast and often inaccessible region rendering the sun almost invisible.

Such fires were not uncommon during the summer months, but they had spread much further than usual with a total of 12 million hectares of forest affected

Paradoxically, as the temperatures rose and the fires spread, Siberia flooded as the permafrost melted. Russia was rotting at its edges, its industrial cities suffering from the gravest forms of pollution, starting with Norilsk, 400 kilometres inside the Arctic Circle, slowly sinking into the ground, a city built on permafrost, which was rapidly de-thawing causing the its foundation to crumble, threatening its very existence.

Climate change was poised to claim its first major industrial victim.

Norilsk a city of 180,000 was the world's most important producer of nickel and palladium, accounting for three quarters of its needs, in addition it produced a vast range of other metals from gold to cobalt with the mining company Norilsk Nickel generating yearly revenues of almost 12 billion dollars

'Our temperatures are rising two-and-half times faster than the global average,' Vladimir Putin told the press. 'We, are a northern country—70% of our territory is located in the northern latitudes. We have entire cities above the Arctic Circle built on permafrost. If it begins to melt, just imagine the consequences. Catastrophic.'

It was a change of attitude, considering Putin had previously voiced doubts about climate change even suggesting warmer temperatures would benefit his country.

The danger was the collapse of residential and industrial buildings and in one case a doctor was seriously injured on the front steps of a Norilsk blood bank when part of the concrete slab covering the entrance collapsed.

Norilsk was the most polluted city in the Russian Federation and climate change was accelerating the damage, Greenpeace warned of the dangers as thawing permafrost caused thousands of oil and gas pipeline to crack leaking large quantities of crude oil into the environment.

Permafrost covered two-thirds of the country's vast territory, where giant craters had been discovered caused by the explosion of methane gas escaping from the ground.

In the extreme north of Russia, off the Arctic coastline, islands were disappearing as permafrost thawed and sea ice melted, washed away by storms and waves. Roads and railways were hit by subsidence and toxic radioactive pollutants were released into the environment when landslides hit waste water retention dams.

In the recent past, temperatures in Norilsk, which could fall to minus 50°C, were stable, but these had risen two degrees and the surface thickness of the

permafrost reduced, with more moisture in the soil, freezing and expanding in winter undermining the structures of countless buildings.

The same problem affected many other Arctic cities in Russia, including Salekhard, Nadym and Dudinka, and the port on the Yenisei River through which Norilsk Nickel ships its products.

Twenty years after Vladimir Putin was appointed acting prime minister by Boris Yeltsin, he remained popular at home for having brought stability and a certain degree of prosperity and modernity to Russia. This popularity peaked after national pride was restored following the annexation of the Crimea, after of the humiliation that followed the collapse of the USSR.

At the same time the modest looking former KGB officer was transformed into an authoritarian leader, whose declared goal was the restoration of Russia to its rightful place as a first-class world power.

His rejection by the West was accentuated when the Kremlin cracked down on opposition parties, seized control of the media and closed its eyes to rampant corruption.

The encirclement of Russian resulted in a Russia first policy, rebuilding relationships with the Kremlin's former Soviet bloc friends, especially Assad in Syria and Madura in Venezuela.

Little-by-little Putin's Russia resembled an old fashioned dictatorship, structured around a new form of government a politico-economic oligarchy built on authoritarian consumerism, with resource based exports subsidising state revenues.

However, in spite of its vast resources, Russia did not compare to the other economically powerful Western nations, only its nuclear arsenal propped up the Kremlin's pretensions. Its population of a bit more than 140 million was declining, much smaller than Jair Bolsonaro's, who as head of the world's fourth largest country, a vast warm and fertile land filled with incalculable riches and a population of over 200 million, who could afford to cock a snoop at France's president, insulting Macron's wife Brigitte with impunity.

TIPPING POINT

IT WAS WIDELY REPORTED that deforestation in the Brazilian Amazon had surged, various comparisons were cited by the media and by their armchair experts to impress the scale of the reported disaster on the minds of a non-specialised public. One said three football pitches a minute, another an area the size of the UK each year, or monthly losses the size of Greater London, and yet another spoke of 750,000 square kilometres disappearing since 1978.

No one disputed the fires, or the deforestation, legal and illegal, on the other hand the disinformation and sloppy reporting with unverified figures bandied about by so-called experts was misleading, discrediting the work of scientists and serious journalists.

Pat Kennedy viewed the South American continent as a vast new market in which to expand for his bank and had met Jair Bolsonaro and his ministers to discuss his plans. He kept an open mind on the Amazon and agribusiness, it was better to work with Brazil than against it, especially as it was a major supplier of foodstuffs to China.

Some said the number of hectares cut was pushing the world's biggest rainforest closer to a tipping point beyond which it could not recover.

Pat saw his foray into the Amazon as an opportunity to explore the facts and the historical context, which as ever, provided him with valuable tools for tracing a path towards the future. His historical reference point was the Hardenburg's report and Casement's mission at the time when robber barons ruthlessly exploited the indigenous peoples.

Brazil's population stood at 208 million, which meant that in comparison to Europe or China it was almost empty, and it would remain that way, since according to forecasts its growth would not exceed to 233 million before it stabilised at 228 million in 2060.

Which went against the popular theory that explained the world, before the Industrial Revolution, was caught in a Malthusian trap, where increased prosperity was translated into larger populations, leading to no real gains in per capita income.

Bolsonaro could have well taken Bertrand Russell's words to encourage his people, 'Civilised man is distinguished from the savage by prudence, or, to use the slightly wider term, forethought. He is willing to endure present pains for the sake of future pleasures....'

SEPTEMBER

1

THE BANK

PAT KENNEDY'S BANK, like most other Hong Kong banks, was highly profitable, if fact the city's banks were among world's most profitable, thanks to low costs, high asset quality.

That meant nothing to Zhenbao, who like Henrique had studied in London, where both both had met radicalised Mainland students.

Zhenbao had befriended Henrique at the bank's sports club. Though their paths had crossed many times, their backgrounds were poles apart, his position at INI was in the legal department, a nine to five job in the arcane complexities of Hong Kong law, inherited from the British. However, what both young men shared was their enthusiasm for martial arts.

However, outside work, Zhenbao's interest in martial arts took another turn, his hero was Bruce Lee, and Lee's Cantonese form of the art, Jeet Kune Do. Lee in the tradition of the Shaolin monks fought injustice. As such Zhenbao saw the demonstrations as a combat and the opportunity to put his skills into action.

After hours, like Henrique, he donned his street gear, dressing from head to toe in black, donning his helmet and packing his gas mask, arm protectors and walkie-talkie in a compact rucksack that also served as body armour, then quit his Kowloon East apartment and headed out onto the streets to confront the raptors, a special unit of the anti-riot police.

Zhenbao owed his radicalisation to his family background, which had been amongst those who had fled the Mainland in 1969, during the dark days of Mao's Cultural Revolution. They now feared the plans Beijing had for the former colony, and he, a brilliant student, had studied economics at the LSE in London, where he discovered his grandfather's stories about Mao's China were not just the imagination of an old man.

Like Henrique he no longer believed in 'one-country, two-systems', the promise made by China, under which Hong Kong would enjoy autonomy during a period of 50 years from its handover by London in 1997.

During the Umbrella Revolution in 2014, Zhenbao had met a girl, Ailin, a political scientist and a member of a group of hardcore activists at Hong Kong University, called Demos, who enrolled him in their movement.

The declared goal of Demos was nothing less than outright independence.

From that point on Zhenbao participated in the often violent protests that rocked Hong Kong, organising and spearheading the demonstrators, building barricades, dashing from one district to another in a frenzied game of hide and seek with police.

His group's tactics involved targeting Mainland MSS undercover agents and their agents provocateurs, amongst which were certain criminal triads, who staged vicious attacks on police, firemen and public facilities which were attributed to students in the state controlled news agencies.

Zhenbao and his friends, were amongst a growing number of radical Hongkongers who were targeting Beijing and its oppressive policies. Their objective was to organise a structured movement capable of resisting the march towards authoritarianism.

Their plan was to pressurise the government into abandoning the policies being imposed by Beijing in a direct challenge to China's Communist Party, bent on transforming Hong Kong into just another Chinese city.

Zhenbao's plan was independence, which was as dangerous as it was audacious. He with his friends organised themselves in cells, used

pseudonyms, wore balaclavas, dark glasses, dressed in black, risking the fury of Hong Kong's masters by their calls to liberate Hong Kong.

To Zhenbao and his friends, the Hong Kong puppet government saw any challenge to the authority of Beijing as an illegal act, it was why they were determined to overthrow LegCo at any cost.

Chinese officials in an article in the Global Times, a state controlled media organ, publicly accused the demonstrators of terrorism following the storming of Beijing's Central Government Liaison Office by black-clad activists who ransacked the glass-steel skyscraper bearing the state seal of China. Thousands gathered and eggs were hurled at the building and its walls tagged with slogans 'Revolution of Our Time'. In the battle to dislodge the intruders considerable means were deployed with anti-riot police armed with batons, tear gas, pepper spray and water canons tearing into the crowd.

The demonstrators objective was to send a clear message to Zhongnanhai, the seat of the red princes in Beijing with tactics borrowed from Bruce Lee:

Be like water making its was through cracks. Do not be assertive, but adjust to the object, and you shall find a way around or through it. If nothing within you stays rigid, outward things will disclose themselves.

Empty your mind, be formless. Shapeless, like water. If you put water into a cup, it becomes the cup. You put water into a bottle and it becomes the bottle. You put it in a teapot, it becomes the teapot. Now, water can flow or it can crash. Be water, my friend.

To young people like Zhenbao and Henrique, who were adolescents in 1997, the 50 years transition period would be up in their lifetime, when those who made the deal were long dead. Beijing's vice like grip was slowly tightening and their future under an authoritarian regime looked grim, but they would not relinquish their freedoms and rights without a fight.

Leaving Hong Kong for London, Lisbon or Vancouver, was not an option for them. They had little choice but to heed Hong Kong's richest man, Li Kashing, who commended Hongkongers to 'love China, love Hong Kong and love yourself'.

Li's message figured in front-page advertisements in two major newspapers, the Hong Kong Economic Times and Hong Kong Economic Journal, with the two large characters 'No Violence' stamped on the international red 'forbidden' sign. However, the side slogans, according to a learned scholar in Oriental studies, Victor H. Mair, contained a cryptic message that suggested something else: 'The cause and the result depend upon China. Let Hong Kong rule itself', or, 'No violence; China is in overall charge of things, but let Hong Kong take care of its business too.'

The message followed the seemingly endless confrontations between police and protesters that had plunged Hong Kong into its worst crisis since China took over in 1997, which only went to confirming Pat Kennedy's worst imaginings, Hong Kong had embarked on a long slippery road to direct rule from Beijing, which was not a good augur for his bank's future.

UNWELCOME VISITORS

THE MEDITERRANEAN WAS AT the centre of an almost daily drama linked to climate change, or was it was more realistic to say the overpopulation of the planet, an idea that did not please the politically correct luvvies of London and Paris, who either saw shades of racism in anything linked to immigration controls, or eugenics where it came to population control.

The focal point was the Italian port of Lampedusa, where the captain of Sea-Watch 3, a 31 year old German woman, had rescued 40 African immigrants from their sinking boat.

An undeniably laudable act.

However, two weeks later Carola Rackete, a Greenpeace activist was arrested trying to enter Italian waters, to illegally land the immigrants at Lampedusa.

The wretched men and women were victims of multiple dramas, first, poverty and strife in their homelands, second, being caught up in the Libyan civil war, third, shipwrecked at sea, and now the legalities of EU immigration controls in the form of Matteo Salvini, Italy's interior minister, who refused entry of the vessel into his country's territorial waters.

The captain of the vessel declared: 'What I'm really scared of is the damage we are doing to our planet, and the hostility that may be unleashed against those fleeing drought, famine, fires and storms.' She was of course right about the dangers of collapse, but the root cause for the collapse was the proliferation of the human species, wherever it lived.

Helping the immigrants was a humanitarian gesture, but a drop in the ocean, the problem was not there, it was to stop galloping population growth, which was inevitable linked to food, consumption and the need for agricultural land.

None of that was the fault of those desperate migrants seeking salvation in better climes.

Her diatribe about right-wing politics, capitalists, profiteers, 'who either manufacture disaster or take advantage of it to gain wealth and power. The climate crisis will cause disasters that could help tyrants and fascists seize the reins,' missed the point. It was the human species collectively at the source of the problem, their numbers, that motivated the kind of misguided eco-warriors who focused their movements on the political arguments of the past to justify their actions.

VERNISSAGE

SCOTT FITZNORMAN WAS uncharacteristically anxious, with yet another public transport strike, another chaotic weekend ahead in Paris, he was about to inaugurate the first exhibition at his new gallery on rue des Beaux-Arts, a couple of minutes walk from Saint-Germain-des-Prés.

The transformation and the installation of a collection of fine primitive art had taken a lot of time and effort and he was fretting about the effect the strike could have on the many guests he had invited for the champagne vernissage, part of Parcours des Mondes, an annual art show dedicated to traditional art from Africa, Asia, Oceania and the Americas.

He needn't have worried, it was not as if Scott's clients were the kind of people to take a bus, though a few did use the metro, one of them was Camille. She took Ligne numéro 1, from Bastille to Palais Royal. It was automatic, no driver, and for the moment automats had no social issues.

It was just four stops and once emerged on rue de Rivoli she cut through the Louvre, past the tourists ambling around the Cour Carrée, to the other side and the Seine, to the footbridge.

The weather was pleasant, a change from the sticky tropical Amazonian heat she'd endured over the previous two weeks. She wound her way through the crowd, over the Pont des Arts, where a groups of Chinese filmed their visit, snapped selfies, or simply admired the view.

On the Left Bank she turned up rue Bonaparte, then onto rue des Beaux-Arts where Scott Fitznorman's fine arts gallery was situated next to l'Hôtel—that was its name, Hôtel, a splendid five star boutique hotel, noted for its style, which corresponded to the name of the street on which it stood.

Pat had acquired the gallery to expand his field into African and pre-Colombian art. Gallerie Blumenthal was divided into two wings situated either side of the entrance and reception. The gallery's sober facade remained unchanged, which its late owner, Charles Blumenthal, had maintained for almost half a century. Blumenthal's Swiss family, long standing business friends of Pat's, had decided to cede the business to him.

Charles Blumenthal's widow passed the last year's of her life on the Gold Coast of Lake Zurich, whilst their children and grandchildren, now bankers and real estate developers in London and New York, had neither the desire nor the time to consecrate their efforts to the arcane field of ethnic art, though they remained dedicated collectors.

The one condition was the gallery continued as Blumenthal's, a kind of monument to the old man, a lingering vestige of his German grandfather's interest in African Art, which glossed over the fact he had made his fortune in tropical hardwoods following the Scramble for Africa, when the German colonial empire, under its three successive kaisers had colonised the Cameroons, an area then larger than Nigeria today.

Blumenthal's grandfather moved to Switzerland at the outbreak of WWI, where he continued to trade in tropical hardwoods and supply the belligerents with the wood needed for pit props in their coal mines and sleepers for their railways, logged by bonded Africans, often under their Ashanti masters

That history was forgotten now that African Art was prized by rich men for their collections and the collections of reputed museums such as the Getty Center, the Metropolitan and the Smithsonian.

The principal change in the Parisian gallery was the addition of a collection of pre-Columbian pieces, concentrated mostly on South American civilisations, as opposed to those of Meso-America.

Fitznorman was delighted to see Camille, even though there was still another couple of hours before the other guests arrived. 'Where's Liam?'

'With Pat, looking at a property in the Marais.'

'Ah, Pat's investing in a real place in Paris.'

'It seems like it.'

Scott presented the exhibits exposed, African figures and masques, then some even stranger stone figures from Colombia, Chimu-Chavin, a style more distinctive and primitive in comparison with the more recognised classic pre-Columbian styles.

'So Scott, are you ready?'

'As ready as I'll ever be,' he replied turning to admire the exhibits.

'I mean for the film.'

'Oh, yes, the end of next week. HG will be here in a couple of days. After a rest we'll be ready to leave for Bogota.'

'Great. Have you swatted up on Brazilian collectables?' she asked a little seriously.

'Sure, don't worry Camille, everything is ready.'

LIDAR

KEN HISAKAWA had shown how his field of work had been transformed, thanks to Lidar technology, as had the work of other archaeologists, who until recently had to depend on what was visible to the human eye when searching for evidence of unknown sites. Now thanks to laser Light Detection and Ranging, known by the acronym Lidar, all that had changed, as the technology introduced a new way of scanning entire regions in search for undiscovered archaeological sites.

There were two types of Lidar, topographic and bathymetric. Topographic Lidar used a near-infrared laser to map the land by penetrating overlying vegetation, while bathymetric Lidar used water-penetrating green light to measure sea floor and riverbed elevations.

Recently archaeologists with their airborne lasers had explored the Mexican states of Tabasco and Chiapas where they identified hitherto unknown sites through the dense forest cover. In total the ruins of 27 Maya religious and cultural complexes were located.

In 2009, the same methods were used to map Caracol, a Maya city in Belize, a site Pat Kennedy and his friends had visited in 2018. Thanks to this new technology archaeologists discovered parts of the city previously unknown

The questions concerned the origins of the Mayan civilisation and its links with the Olmecs, a culture that preceded it, and more importantly the origins of Mesoamerican civilisations and their links to other in pre-Columbian

cultures, especially sites in the triangle formed by the frontiers of present day Brazil, Ecuador and Peru.

The research was comparable to that of ancient cities of the Khmer civilisation in Cambodia, where apart from the monument and stone constructions, there was little trace of the dwelling places of the inhabitants of those cities. The central areas would have been surrounded by the homes of the privileged elite, and beyond by the modest dwellings of the ordinary people. All would have been crossed by networks of roads and water ways, beyond which were the gardens and fields that provided the city with food.

Almost all of the dwellings would have been built of perishable materials that were long since swallowed up by the tropical forest after the collapse. Even the stone temples were forgotten, overgrown by dense vegetation until 19th century explorers and archaeologists stumbled on the ruins.

It was a subject of intense interest to Pat Kennedy, and the existential question—why? Why had those cities been abandoned? Why had those civilisations collapsed? More importantly was the question of the future of today's civilisation, which seemed more and more fragile, with so many dysfunctionalities. It was why INI, as part of partnership programme, backed research in China, Egypt and Latin America.

The reason for this apparent goodwill was image building, by participating in projects related to social and environmental issues, which had a positive impact on the bank's reputation and in the end its profitability. Pat did not of course manage this personally, it was not his role, his was to guide his ship through the shoals of a world where the financial and geopolitical order was in constant flux

Pat Kennedy had of course his preferred interests with art, history, archaeology and anthropology at the top of the list, and he keenly followed all the news on those subjects, especially research carried out at major pre-Columbian sites, where until recently most effort had been concentrated on the restoration of the monumental works.

Regrettably, little attention had been given to how the ordinary people lived, that is until Lidar was invented. Pat had first remarked the results of Lidar in Nicaragua and Honduras, and when it was suggested he broaden the scope of *Indians* to investigate the existence of early pre-Columbian civilisations in the Amazon, he had in truth needed little persuading, especially when it came from Camille Clancy and Anna Basurko.

Kyril feared that unless the ways of man were rapidly changed, collapse was inevitable, to his mind it the absence of a post-apocalypse survival plan was a political aberration. It was why Kyril, who was no anthropologist or archaeologist, had attached his movement to a revered guru, whose philosophy preached preparedness and survivalism, by a return to the soil, using the same methods as had early agriculturalists, methods that preserved a balance with the natural environment.

Kyril also believed that if civilisation was to survive after the collapse, it would have to do so in a region far from the dangers of densely populated regions, starting again, and safe from the risk of being overrun by Mad Max rabble bent on pillaging the survivors.

There were few places in the world that offered isolation and inaccessibility. Amongst them were the Andes, its western flank, where the source of the Amazon and its tributaries lay.

The idea of raising goats in the Alps or the Pyrenees was unviable, for the simple reason that Europe, like all densely populated regions, was indefensible, easily accessible via its dense networks of highways over open country and the relatively short distances potential safe havens lay from its great cities, rendering those safe havens vulnerable.

Kyril's logic was based on two criteria:

First, he ruled Europe out, it was too densely populated, and never far from marauding armies, throughout the centuries footsoldiers like those of Napoleon's Grand Army had marched great distances across Europe, as far as Moscow, in the same way as had Julius Caesar almost two millennia

earlier when he marched his legions from Rome to Cologne, defeating all those they met on their way.

Secondly, was once the outpost of a new civilisation was established, its priority, by definition, was its survival, its ability to defend itself, what was the use of sustainability if was open to sack.

Whilst the Andes and Amazonia were isolated, and to all intents empty, there was sufficient evidence to show that previous civilisations had prospered in those regions in the distant past. Civilisations that had subsequently disappeared. Why they had not survived was an open question, one which Kyril intended to answer.

All archaeological research needed financing and Kyril's fortuite meeting with Pat Kennedy, thanks to Camille Clancy, offered an almost unique opportunity to explore the Andes-Amazon basin in his search for a post-apocalypse refuge. It was Camille's story of the discovery of the *Espiritu Santo*, a sunken treasure galleon, that had sparked Kyril's interest, its excavation carried out by an expedition to the Alta Guajira led by Pat Kennedy's team—off the coast of Colombia, and the fabulous treasure salvaged.

The documentary film *Indians* would explore the Amazon and its indigenous peoples and their history. The plan was to shoot its different sequences at the homes of representative Indian tribal group or families as well as archaeological sites identified by Pat Kennedy's friend, Ken Hisakawa of New York's Columbia University, certain under his Lidar archaeological exploration programme.

Ken's intention was to determine the extent of those settlements and the size of the population they could have support, and provide an explanation as to why they had disappeared.

His exploration project was modelled on work carried out in Cambodia by fellow archaeologists who had sought to discover the pre-Angkorian capital of the Khmer Empire, which until recent times had attracted little scientific attention given the difficulties of exploring the terrain. Sources indicated the

city had been situated on the Phnom Kulen plateau in the mountainous jungle covered region to the north-west of Angkor, less than 30 kilometres from the famous temples. Until the advent of Lidar technology little had been uncovered by field expeditions in the dense dense and largely unexplored forest, apart from modest vestiges of a few brick temples.

The lack of accessibility compounded by the presence of landmines, a frightening reminder of the terrible Khmer Rouge dictatorship, had not encouraged archaeologists, who in any case often attracted by the more prestigious monumental sites.

Scott Fitznorman had often spoken to Pat Kennedy of the research work carried out in Phnom Kulen, a site which was believed to have played an important role in the early history of the Khmers, before the foundation of Angkor.

New research had been focused on a Lidar scanning programme to map the site, putting into relief the underlying contours and geometrical forms, hidden beneath the vegetation of the jungle, man-made structures built like city grids on east-west and north-south axis.

The aerial survey revealed two essential points, firstly systemic urban planning, and secondly, a network of trenches that supplied reservoirs cut into the bedrock, which indicated a highly structured irrigation system to ensure food for Angkor's population and that of its outlying districts, estimated to have been as many as one million at its peak, when the Khmer Empire covered one million square kilometres, stretching from the frontier with China's Tang Dynasty to the South China Sea.

The mysterious lost city of Mahendraparvata, or the Mountain of Indra, King of the Gods, lay on a densely forested plateau, one of the first capitals of the Khmers, of which little was known apart from a few inscriptions discovered at other sites

Once the high resolution Lidar images were transposed onto maps, they could then used by specialised archaeologists in the field to explore and study the remains of temples, palaces, canals, reservoirs and dams.

THE UN-UNITED KINGDOM

THE GIRLS DEVOURED THE NEWS from London where the media was in a frenzy as revelations linked to the Epstein scandal grew by the day and in which Prince Andrew was drawn in, after a picture surfaced of him with his arm around a teenage girl. His reaction revealed 'Airmiles Andy', as he was known in the tabloids, as a self-important, patronising and out of touch royal—who had once rebuked a journalist, when it was suggested he might consider using trains or the Underground to improve his image, retorting, 'But I am the son of the monarch ...'

Whilst the media was occupied with sex scandals, the scenes in the House of Commons recalled the kind of chaos seen in newly democratic countries, when members of legislative assemblies started pushing and shoving. Soon it seemed Westminster would end up in an all out punch up.

It was well in to night when John Francis glued to his TV screen watched an astonishing and extraordinarily long session in the House, which terminated in a five week suspension of Parliament, and the Speaker announcing his resignation, riposting when one Conservative member objected: 'I couldn't give a flying flamingo what your view is.'

As the Speaker prepared to walk from the Commons through to the Lords, as was required by ceremony, a Labour lawmaker threw himself in front of John Bercow in an attempt to prevent him from leaving the chamber.

Officials immediately intervened and a scuffle broke out as not so young parliamentarians grappled with the overexcited lawmaker, stumbling and crashing into those around him, an undignified farce, which was more akin to a slapstick comedy sketch, than the traditional restraint of Westminster's ancient parliament.

Bercow then announced, 'I will play my part, but this is not a normal prorogation, it is not typical, it is not standard. It is one of the longest for decades. And it represents, not just in the minds of many colleagues, but huge numbers of people outside, an act of executive fiat.'

The United Kingdom was in limbo, a kind of drôle de guerre, awaiting exactly what was unclear. Did it matter? Well it did to Pat Kennedy—London was the seat of one of his most important banking operations and what happened there affected the future of INI.

Would the Incredible Hulk—Johnson break the law, or break free from the manacles of Brussels, or would he find a way to a general election? Nothing was more uncertain as Brits watched the drama enter a new and even more dramatic episode of the Brexit saga with a special eye on Dominic Cummings.

Cummings, the man behind the Hulk and the Vote Leave, was now Johnson's sinister henchman, often seen wearing a Levi's hoodies, a look somewhere between the Dan Dare comic Mekon or Dickens' Edwin Drood, at best a refugee from a Silicon Valley geek camp, rather than that of the spin doctors Brits had all gotten used to. Cummings, whose blog used forgettable commentaries like: 'MPs and pundits who get up, read each other, tweet at each other, give speeches, send press releases, have dinner, attack, fuck or fight each other, do the same tomorrow and think 'this is reality', was scribbling the plot for the next episode which promised even more twists and turns than Game of Thrones.

The political and media discourse had sunk to the level of a delirious football lout's foul mouthed rant after watching Liverpool lose a premier league match against a local team in a Benidorm bar, fuelled by 12 lagers and heatstroke after sleeping off his last round of binging under the burning Mediterranean sun on the nearby playa.

What seemed really galling to sane minded Brits was David Cameron's lamentations in a promotional interview that announced the publication of his 752 page book *For the Record* his legacy, a tainted one at that, which led to his ignominious downfall, and for which he was being paid 800,000 pounds.

To paraphrase the words of Lady Macbeth, all the perfumes of Arabia would not remove the foul odour of Brexit from the hands of 'Call me Dave', one which would mark him for generations to come. With Cameron's short-term perspective, he had calculated a referendum as a low-risk option, to swaying the balance in favour of a re-election victory for the Conservative Party and he as its leader, the British prime minister.

Whatever. In any case his legacy would cast a long shadow when the UK sought to adapt to life after Brexit.

The only good news was Call me Dave promised to donate the Judas money to charitable causes, those close to the Camerons, a sad sequel to a personal tragedy, the death of his son who died of severe epilepsy and cerebral palsy at the age of six.

Cameron told the Times of London how he was depressed and seemingly spent sleepless nights thinking about the consequences of his historic blunder, placing the blame on a 'mendacious' Michael Gove, and Boris Johnson, prominent figures of the Vote Leave campaign, whom he accused of appalling behaviour by 'trashing the government' with the Vote Leave campaign to quit the EU.

Dave was however right on the mark when he spoke of the 'Tory psycho drama', an understatement, a Greek tragedy of excessive pride, in which he himself had defied the gods, and found his nemesis, a national trauma that would plague the UK for decades to come and indelibly mark the history of the United Kingdom.

The problem was no written codified constitution existed for the UK, which depended on convention and precedent, a system that unfortunately left the door open to dangerous adventurers who could choose to ignore

those ancient points of reference, meaning anything could happen, unless they were stopped.

A STRANGE WORLD

MANY BRITS SAW BRUSSELS AS a Soviet style dictatorship from which they wanted to free themselves, a pure fantasy compared to the authoritarian state of affairs in Russia. Ekaterina feared for her family in Moscow where Putin's uncompromising dictatorship state was a reality. The municipal election campaign had been marred by raids on outspoken opposition leaders by government security forces—not that any of her close relatives were outspoken in anyway. But she feared the relentless decline of life and freedom in her home country under Vladimir Putin, who was in the course of changing the system to assure himselt in the role of life president, transforming a semblance of democracy into a hard-line dictatorship along the lines of of a modem Stalin, Mao, Ceausescu or perhaps a somewhat watered down version of the Kafkaesque Kim Jong-un.

She concluded it was time her parents, sister and her children move permanently to the safety of London. John told Katya she was being a little paranoid. It was not as if her now elderly parents or her sister's family represented any threat to the Kremlin.

Ekaterina saw it differently. John, her husband, was part of Pat Kennedy's Clan, as was Sergei Tarasov, head of INI's Moscow bank. Which meant there was certainly a file somewhere—a spravki, on Ekaterina and her family. They were probably spied upon by the many paranoid Russian security agencies, with their CVs, backgrounds, work, friends and relations, political interests, cultural activities, travels, and especially overseas links, regularly updated.

Little had changed since the days of Joseph Stalin, or for that matter the

Ekaterina shrugged off John's remarks by telling him he knew little of how the Russian security apparatus functioned and how it was instrumentalised to put the fear of God into the people by targeting well-known figures and their families, especially if one of them lived overseas.

In June 2017, Smolenkov and his family had flown from Moscow to Tivat, a coastal resort in Montenegro favoured by Russian tourists—where he disappeared, never to return.

It was only when turned up in Stafford, Virginia, less than an hour's drive south-west of Washington, was the story of his disappearance solved. He had been exfiltrated by the CIA, for whom he had been spying.

Smolenkov had flown from Moscow to the small airport at Tivat, used by Russian package tours during the summer months, where he and his family would have blended in with the crowds of Russian holiday makers. From there he was believed to have slipped out on a yacht from nearby Porto Montenegro.

Porto Montenegro was a base for rich yacht owners like Sergei Tarasov, where wealthy passengers were treated with discretion and from where the Smolenkovs had probably sailed across the Adriatic to Italy.

Russians lived in a strange world where according to Ekaterina, nothing was true and everything was possible, a world which the UK now strangely resembled, one in which politicians spun their tales with little concern as to the veracity of their words.

Brexiteers like many others on the lunatic fringe spread fake news and ideas in support of their twisted platforms that had little to do with traditional party politics and ideologies, if any proof was needed one simply had to look at the migration of various parliamentary lawmakers who crossed the aisle to join one fringe group or another. Their plans as vague and ephemeral as making Britain great again, an absurd idea, as if history could be replicated in a totally different world from that of Queen Victoria's empire builders,

when technology and the momentary opening of a serendipitous window had allowed a small island nation to build its empire—brief like so many others before it

The call reminded Ekaterina of the slogan 'Raise Russia From Its Knees with Putin', intoned by Putin's sycophants, convinced he was the man who had raised Russia from its knees, restored its power, divinely inspired by a deep belief in his and Russia's destiny. Defying the US, looking down on a weak sclerotic Europe, mocking a ludicrously shrunken Britain led by its buffoon

Ekaterina had left Russia in 2014 to join John in London, a time so recent when rational politics still ruled. Less than two years later all hell broke loose when David Cameron was elected on a promise to hold a referendum on the future of the UK's membership of the European Union.

Almost overnight otherwise sensible politicians of all shades were spreading ideas and spinning lies that led to alarming comparisons between the European Commission and Nazi Germany, of a totalitarian, undemocratic, Europe, oppressing the UK. Men like Farage, and others normally more serious, promoted an image of fortress Britain, inspired by the spirit of Dunkirk, where its only hope was exit from the EU, in short a litany of lies that attracted the aficionados of every wild conspirational theory in the book.

The comparison with Ekaterina's homeland was too real, one that had abandoned its failed socialistic state for a dictatorship, which was without any clear ideology other than that of making Russia great again, adorned by the theatrical trappings of Czarist Russia.

With Trumpian amateurism coloured by naïvety on the other side of the Atlantic and Xi Jinping's enthronisation in Beijing, one wondered what the world was coming to, where words were meaningless and Tweets meant more than serious reflection by seasoned diplomats.

The root lay in the power of the Internet, which bestowed each and every serious individual and crackpot the means of publicly airing their views,

where moderation was nigh on impossible and where instant opinion led the public and the media alike astray in a world of instant news, commencing with the breakfast news flashes mostly forgotten by the late night talk show.

The Internet had become a chaotic battle field for minds where truth and its multiple versions struggled to be heard, where politics competed with showbiz, celebrity sport, and reality television, where end of the world catastrophism was mixed in a kaleidoscope of competing and often wild ideas.

Some called for transparency on the internet, but whose transparency, Putin's, Trump's, Johnson's, or that of some authoritarian state?

Ekaterina after watching Tarik Saleh's film *The Nile Hilton Incident*, realised that hers in London in spite of its faults was far from the dystopian world of Egypt—one that had echoes of Putin's.

In any case the genie was out of the bottle, images of crowds rampaging through the streets of Hong Kong, Paris or Beirut, were more resemblant of anarchy than of participative democracy.

It recalled post-Soviet Russia, where a totalitarian state built around Communism and the dictatorship of the party had defeated itself, replaced by a personality cult comparable to a Ceauşescu-like regime without any real guiding ideology reinforce its amorphous vision.

Perhaps a form of non-partisan government was the answer where policies could be hammered out by serious leaders, but how could such leaders be elected when all semblance of order in society was absent, when tweets and bluster counted more than well-thought-out political vision, where men like like Boris Johnson could win power on promises even more empty than usual.

After three years of twists and turns, it appeared that the staid Michel Barnier along with his EU Commission colleagues were the only figures of wisdom on an otherwise blurred horizon.

The dangers came not from Brexit itself, but the weakening of the Western Alliance. Where Turkey, a member of Nato, with Trump's encouragement could stumble into a war with Syria as new forces jostled for position in a new distribution of roles, with Russia, Turkey, China and Iran asserting themselves, filling the vacuum left by the West, threatening Europe's stability, security and prosperity.

It would be a new kind of war using weapons of disinformation to undermine politics, economics and the credibility of institutions, arming proxies like Serbia, with fighter jets, attack helicopters and tanks.

Xi Jinping's ambition was to restore the Middle Kingdom's geopolitical role in crisis zones using his loudly announced new Silk Road—the Belt & Road Initiative, weaving a vast network of infrastructure developments linking the Eurasian continent's many countries by land and sea to spread the flow of Chinese goods and the influence of Beijing.

Europe struggled with Brexit and the deterioration of relations with Washington. A task complicated with the volatile American president, ill-fitted as a world leader, a bull in a China shop, overturning agreements, alliances and commercial treaties, whilst even smaller men dreamt of their imperial past victories, crowing about sovereignty in their imaginary worlds.

Costa-Gavras said, discussing his film, Adults in a Room, 'No, there are no winners. Everyone loses something. What we really lose is a strong Europe.'

As China's military capabilities grew, the UK decided to go it alone, forgetting that imperial lesson—economic power goes hand in hand with military power, forgetting how in WWII, their colonies, Singapore and Hong Kong, were overrun in hours by the Japanese Imperial Army.

China's rapidly developing blue water surface and submarine fleet would in the years to come make short work of the UK's much diminished fleet, reducing London to a bystander, forced to accept the order imposed by the powerful.

* * *

At the same time INI had enjoyed a record year as it concentrated its business on corporate banking and wealth management, where the value added was greater than ever, in an ever richer world. Retail banking was localised to Irish and Dutch markets, where INI's historical roots were, and to a lesser degree the UK and Hong Kong.

The same couldn't be said for Pat Kennedy's compatriot, the interim head of HSBC, Noel Quinn, who was cutting back after a steep fall in the bank's profits, even though the HSBC posted an overall 13 billion dollar gain.

Unlike several of his predecessors, Quinn was not from of the HSBC's traditional international manager class. He came from a much more modest background, like Pat Kennedy. Quinn attended the Birmingham Polytechnic before training as an accountant. He told the press his first job was a labourer digging holes on a building site, but his real career commenced at the Midland Bank, bought by HSBC, in 1992, originally name the Shanghai and Hong Kong Banking Corporation, founded in the 19th century. There he worked his way up the hard way, step by step, to the commercial-banking business, much of that time in Asia, until he arrived at the summit of the unit in Hong Kong in late 2015—not long after Pat Kennedy commenced his own fulgurant accession to the top of INI.

Of course there was a difference between Pat Kennedy and Quinn. Pat was one of the main shareholders of his bank, and a very very rich man, a charismatic leader who had reached the summit of his world, not only by chance and circumstance, but by an extraordinary sense of intuition that had opened all the right doors.

CHAOS

CHAOTIC SCENES OF THE parliamentary debate were flashed across TV screens, tablets and smartphones as the House of Commons held a special debate on the question of Brexit.

Just 58 days remained before the fatal date of October 31, set by Boris Johnson, for the UK's exit from the EU. It was a scene of high farce, light years from Churchillian speeches, as leaders and members bumbled, stuttered and spat venomous accusations and counter accusations, which even the theatrically stentorian voice of John Bercow, the Speaker, could not quell.

John couldn't help imagining many viewers being horrified by the scene, when 1,000 years of parliamentary history was reduced to a TV reality show as the future of the UK was put up for grabs.

The small chamber, not even large enough to seat all of its members, was transformed into a vaudeville show, where most of the actors were incapable of pronouncing their lines without stumbling as cheers and jeers were launched across the central aisle.

What had happened to the pomp and dignity of the Queen's Speech? Who was this rabble of amateurs that had taken control of the country? On one side Johnson, looking like a villain from a Batman movie, on the other Corbyn, an old style Marxist, looking like he had stepped out from Brezhnev's politburo, spluttering his invective in a flow of spittle, backed by various overweight red-faced fellow travellers and stand-ins.

Johnson told the chamber 'he thinks the UK's friends are in Paris and Berlin and in Washington, Corbyn thinks they are in Moscow and Tehran and Caracas. Corbyn is Caracas and Corbyn is calling for a general strike.'

Another member declared Corbyn's economic policies as being 'shit or bust', Johnson added they were both.

Even worse, Johnson pointed at Corbyn and said, 'There's only one chlorinated chicken that I can see in this house, and he's on that bench.' Then, 'Call an election, you great big girl's blouse.'

Full of finger jabbing bluff and bluster Johnson brought the house to never before seen lows. If he could have, Churchill would have certainly descended from his pedestal in Parliament Square and headed for his flat in nearby Morpeth Mansions, disgusted by the state the country had descended into of its own accord. At home he would have probably listened—a glass of good Scotch Whisky in his hand, to a soothing broadcast of Desert Island Discs on the BBC Home Service.

Johnson's ploy failed as a number of conservatives voted with the opposition, including Nicholas Soames—the grandson of Boris Johnson's hero Winston Churchill.

It was described by commentators as a grotesque circus, a Mad Hatter's tea party, and in many ways it was. To see Britain's elected parliament exchanging insults reduced the country in the eyes of the world to a third rate power, the sad vestige of a once mighty empire that had defeated Hitler's Third Reich.

For the moment, it seemed to John Francis, that the UK would no longer leave the EU without an agreement, as parliament refused to cede to the lunatics who had taken control of its destiny.

Corbyn had wriggled out of an election which he would have certainly lost. Whilst Johnson saw 21 Conservative MPs vote with the Opposition.

Three years after the referendum the UK was back where it started, it had been a slow-motion car crash that had brought British parliamentary democracy to a full stop.

To cap it all, the Leader of the House, Jacob Rees-Mogg, was photographed, arrogantly displaying the disdain of his class for plebeian members struggling with the English language, reclining with his feet on the front bench like Lord Snooty, taking a pause at his Eton debating society.

Whoever said that politics is showbiz for ugly people had been proved more right than he could ever have imagined.

24 SEPTEMBER

BORIS JOHNSON HURRIED HOME at the end of the week, to strike a blow at his enemies, both at home and in Brussels, by presenting the Queen of England with a fait accompli, obliging her to sign a document for the prorogation of Parliament.

Most people had to look up the meaning of the word prorogation. What it meant was suspension—the suspension of Parliament, which was declared just days after MPs return from their summer break. Johnson's plan was to prevent them from passing laws to stop a no-deal Brexit on October 31.

The now internationally famous Commons Speaker, John Bercow, labelled it a constitutional outrage. His words were of little avail as Johnson pushed ahead, promising the UK would leave the EU on October 31, with or without a deal, leaving MPs just over a week to debate Brexit, before Parliament adjourned.

Moscow must have been delighted by the farce during which questions of the utility of the Nato Alliance were raised. The post-1945 order and the Cold War between East and West were to a large degree a product of WWII and the establishment of Nato and the European Economic Community, designed to contain Germany and restrain the ambitions of the Soviet Union.

It was a bold and risky strategy that ultimately changed the political map of Europe, which led to the demise of the Soviet Union and 15 new countries when its Eastern European and Central Asian empire collapsed. The Berlin Wall had fallen, bringing German reunification, followed by Czechoslovakia's 'Velvet Divorce' and two new nations, the Czech Republic

and Slovakia, which together with the other former Soviet satellites joined Nato and the EU

All that was far away from the worries of Boris Johnson and the British electorate. Hitler was long dead, Germany was safely reunited and memories of the Soviet Union slowly slid into history and Francis Fukuyama famously proclaimed *The End of History*.

Nearly three decades on, it was clear that Fukuyama had spoken too soon. The financial crisis of 2008 was a watershed, announcing the retreat of globalisation, the EU questioned its future as Brexit loomed, and populism cast its shadow across Europe, when Donald Trump turned isolationist, Vladimir Putin reinforced authoritarian rule, and Xi Jinping flexed China's muscles in his new role as president for life.

It was a sombre reminder of Charles I, whose prorogation, from 1628 to 1629 led to the English Civil War and his beheading in 1649, not that Elizabeth II deserved or even risked that bloody comeuppance.

No doubt Charles I felt he had no choice, as he was confronted by 'some fewe cunning and ill affected men' plotting against him in parliament.

The hapless king's suspicions were confirmed, when on January 30, 1649, he was led to the scaffold in Whitehall wearing a white bonnet, where he declared: 'I go from a corruptible, to an incorruptible Crown; where no disturbance can be, no disturbance in the world.'

With no more ado the king laid his neck on the block and one clean blow of the executioner's axe severed the king's noble head from his body.

Charles paid the price for thwarting Parliament, suspended for 11 years, an act that led toward war, bloodshed and the Commonwealth of England under Cromwell's dictatorship, which ended with his natural death in 1658 and a state funeral, though shortly after he was dug-up and his corpse beheaded. The rotten head of the Lord Protector of England, Scotland and Ireland was then displayed on a stake outside the Tower of London for all to see.

One way or another Boris was walking on thin ice.

All of that coincided with a sombre anniversary, it was one hundred years since a lowly German army corporal returned from the Western Front, half blinded by mustard gas and bitter after the defeat of the Kaiser Wilhelm's imperial army. This inconspicuous former soldier was to transform Europe and set its destiny for the next century to come.

Today Adolf Hitler still casts a long shadow over Europe and the institutions founded after WWII, commencing with NATO, designed to preempt the adventurism of Joseph Stalin and firmly anchor Western Europe in the US camp.

Today, even though the defunct USSR and Cold War are fading memories for most older Brits, and outright history for the generation set to vote for the first time in the election planned by Boris Johnson, NATO still dominated the defence policy of the EU, facing off against Vladimir Putin's newly ambitious Russia. Regretfully it seemed like the new leader in Downing Street had learnt nothing of Europe's recent history, which in a sense was logical since he was born more than two decades after that war and went up to Oxford in 1977.

Later according to a biography written by Andrew Gimson, Boris — The Adventures of Boris Johnson, he recounts the story of Johnson as correspondent for The Times and then The Telegraph in Brussels:

'I saw the whole [European Union] change. It was a wonderful time to be there. The Berlin Wall fell and the French and Germans had to decide how they were going to respond to this event, and what was Europe going to become, and there was this fantastic pressure to create a single polity, to create an answer to the historic German problem, and this produced the most fantastic strains in the Conservative Party, so everything I wrote from Brussels, I found was sort of chucking these rocks over the garden wall and I listened to this amazing crash from the greenhouse next door over in England as everything I wrote from Brussels was having this amazing, explosive

effect on the Tory party, and it really gave me this I suppose rather weird sense of power.'

Johnson as a journalist and a writer gave the world an interesting insight as to how he perceived himself, especially in his remarkable biography of Winston Churchill, where it was easy to see Johnson cast himself as his own hero, resisting the enemy single handed and single minded.

'These days it is probably fair to say that thrusting young Tories—and especially males—will regard Winston Churchill as a sort of divinity. These honest fellows may sport posters on their teenage bedroom walls: Churchill in a pinstripe suit and toting a Tommy Gun, or just giving two fingers to the Hun

'On entering university they may join Churchill Societies or Churchill Dining Clubs that meet in Churchill Rooms where his portrait grimly endures their port-fuelled yaketing. They may even wear spotty bow ties.

'When they make it to Parliament they piously trail their fingers on the left toecap of the bronze effigy that stands in the Members' Lobby—hoping to receive some psychic charge before they are called on to speak. When they in due course become Tory Prime Minister, and they find themselves in a bit of a corner (as inevitably happens), they will discover that they can make a defiant speech in St Stephen's Club, where the cameras will capture them in the same frame as the image of the old war leader—pink, prognathous and pouting down at his successor with what we can only assume is pride.'

In Johnson's own words he found himself 'in a bit of a corner (as inevitably happens)'. He saw himself leading '... his country in war... commanding 'not just the long-faced men' perhaps Corbyn and the Remainers, but also, 'hundreds of Tories who had been conditioned to think of him as an opportunist, a turncoat, a blow-hard, an egotist, a rotter, a bounder a cad...'

The moment that would be remembered in British history commenced when Boris Johnson asked the Queen to suspend Parliament, when the Brexit drama reached its endgame.

OCTOBER

1

SANTIAGO DE CHILE

FAR FROM THE AMAZON and comfortable in the belief he was far from the dangers of poisoned darts, arrows and loggers' bullets, Tom Barton couldn't help worrying about Lola and her friends on their rainforest 'camping holiday' as he jokingly called it.

The strike of transport workers in Santiago de Chile seemed like one of those that had regularly hit Latin American capitals. A reminder of how rising prices, fuel costs, poverty, inequality, corruption, the age old tribulations had often wracked those countries.

Recently it seemed things had improved and Tom had almost forgotten those turbulent scenes, with of course the exception of Venezuela.

It was why he was surprised when he heard the sound of helicopters clattering overhead, and looking from his hotel window above the main square saw lines of army truck rumbling past in the street below.

He left his room and hurried down to take a look, he was a firm believer in experiencing events first-hand when the opportunity arose.

Not far from the hotel he was surprised to see groups of armed men in masks assembled on the street corners. Knowing South American methods, he turned around and headed back to the hotel, he did not relish the idea of being beaten up by thuggish police auxiliaries. From the bar with other anxious hotel guests he watched the TV news and images of police firing

what seemed to be live rounds in the direction of the protesters. The newsreader announced the establishment of martial law and an immediate curfew, followed by Chile's president, Sebastian Piñera, who solemnly announced his country was at war.

His speech was followed by live images of mobs looting shops and attacking petrol stations, the violence followed clashes with police that left at least 12 dead according to the television report.

It was the first time soldiers were seen on the streets of Santiago since an earthquake devastated the country in 2010.

Perhaps it was time to get out of the city, but the transport systems ground to a halt and reports of more riots came in, burning gas stations, as police riposted with teargas and water cannons in their attempt to regain control of what was becoming a desperate situation.

There wasn't much to do but hunker down and wait for a lull in the rioting. He wondered what Chile's unlikely hero, Bernardo O'Higgins, would have thought of the troubles, whose statue he had discovered the previous day in a park a couple of blocks from the Palacio de la Moneda—the presidential palace.

Few outside of Chile had ever heard of Ambrose O'Higgins, the viceroy of Spain's richest colony, the source of the silver that built an empire, or his son Bernardo, the first president of Peru.

Bernardo O'Higgins was born in 1778, in Chile, the illegitimate son of Ambrosio O'Higgins, 1st Marquis of Osorno, a Spanish officer born in County Sligo, Ireland, who became governor of Chile and later viceroy of Peru.

Ambrosio, or Ambrose, was born in 1720, in Ballynary, County Sligo, Ireland, he was the son of Charles O'Higgins, an impoverished farmer, who at some point moved to County Meath where Ambrose is said to have been employed by Lady Jane Rowley of the Rowley-Langford family.

In 1751, O'Higgins quit Ireland for Spain at the time when anti-Catholic Penal Laws were in force, laws imposed in an attempt to force Irish Catholics and Protestant dissenters to accept the established Church of Ireland, in fact the Anglican Church. He arrived at Cádiz as an employee of the Butler Trading House, an Irish merchant firm. At that time the port of Cadiz was a prosperous city, the trading hub of the vast Spanish Empire and base of the Spanish navy, then the most powerful in the world.

He sailed for the New World in 1756, where on behalf of a group of Spanish businessmen he set up his counter in La Plata Colony, now Buenos Aires. From there he opened an overland route to Chile over the Andes.

It was the start of an extraordinary rise to fame and power for this modest Irish lad, starting in southern Chile, where Ambrose became friendly with a landowner Don Simon Riquelme y Goycolea, a member of the Chillan Cabildo, or council, and in particular his teenage daughter, Isabel, with whom he fathered an illegitimate son Bernardo Riquelme, whom he never met.

Then, after series of adventures and successful business enterprises in Spain, he was named 1st Baron of Ballinar, his home town, by the King of Spain and appointed governor of Chile and in 1795 he was made viceroy of Lima, the highest royal official in Spanish America.

Bernardo, who was never openly recognised by his father, lived with his mother's family and used her surname, though a distant relationship was maintained with his father who supported him financially.

At the age of 15, he was sent to Lima by his father and soon after Isabel married a friend of the family. His father, concerned about the education of his son arranged for him to be sent to school and then to London at the age of seventeen where as an almost impoverished student of history and the arts in London he was soon filled with American ideas of independence.

When his father died in 1801, he left his fortune to his son and Bernardo returned to Chile the following year where he adopted his father's surname

and began life as a gentleman farmer on the large tract of land bequeathed to him

In 1808, during the Napoleonic wars South America was largely abandoned by Spain and Chile decided to form an autonomous government to rule in the name of the imprisoned the Spanish King.

As for Bernardo, he joined the anti-Royalist movement, leading a long war for independence, finally defeating the royalists in 1817, becoming the first leader of an independent Chile. After six years Bernardo O'Higgins was deposed and lived in exile in Peru for the rest of his life.

When Tom Barton recounted the story of O'Higgins to Pat O'Connelly, Pat wasn't in the least surprised, after all many Irishmen had quit their island home, forced or otherwise, and not a few had left their mark, especially in the arts, starting with James Joyce.

We don't know what Ambrose O'Higgins thought about the country of his birth, where he grew up, perhaps he saw it like other famous Irish expatriates, such as Joyce, a country trapped in the legacy of its English occupiers, where the only hope for Irishmen was anywhere but home.

James Joyce, closer to our world, died in Zurich in 1941, his passing provoked the secretary of the Department of External Affairs in Dublin to ask the representative of the Irish government in Switzerland to wire the details about Joyce's death, and 'If possible find out if he died a Catholic?'

So much for what Ireland thought of great Irishmen in those dark days.

'Exiled,' Joyce liked to tell people. He left Ireland in his early twenties, forced to flee his country's spiritual impoverishment, its ever present and crushing oppression, a religious and narrow-minded oppression that left so many with no other alternative than exile.

Of course in the days of the Irish Free State his book could not have pleased the likes of Eamon de Valera. Ulysees, then very controversial, was published in Paris, in 1922, by Sylvia Beach, an American, who owned a bookstore and lending library, Shakespeare and Company, the now a famous

landmark, which first opened in 1919, on rue Dupuytren, in the 6th arrondissement, just around the corner from 12, rue de l'Odéon, where it moved to soon after.

It never reopened after WWII.

The bookshop of the same name, now visited by countless tourists, was opened by George Whitman, in 1951. At first he called it Le Mistral, at a time when the Beat Generation was just making its mark in Paris with the arrival of writers like James Baldwin and Allen Ginsberg. George changed the name to Shakespeare and Company in 1964, in Silvia's honour, after her book of the same name, which was published in 1956. The change of name coincided with the 400th anniversary of the Bard's birth.

Sylvia Beach was a monument to pre-war literature, her bookshop and lending library became a hangout for Lost Generation writers. She was a friend of Hemingway, D.H.Lawrence, Scott Fitzgerald, Gertrude Stein, Ray Man, Ezra Pound, and of course Joyce as well as many other famous literary personalities of the period. It was Sylvia Beach who first published Joyce's *Ulysses* in its complete form since it was deemed obscene in Britain and America, not to mind Ireland where Joyce would have been condemned to hell and brime stones for such a blasphemous work.

Just across the Seine from Pat O'Connelly's Paris home, on quais des Célestins, the bookshop has become a tatty tourist attraction visited by innumerable Chinese, amongst others, who unfortunately understood as little of Joyce as we do of Zhou Erfu.

Pat 'Dee' O'Connelly, as a writer, was in certain manner of thinking, a witness to his times as well as the places he travelled to and lived in. It was the case of all writers, even science fiction writers who imagined worlds different to their own, but which were in effect conditioned by their owns visions, fears and desires, and those of the societies in which they themselves lived. Some writers spend their lives trying to explain the past, their own past, like James Joyce, who had spent most of his life in exile, starting in Trieste, the principle port of the Austro-Hungarian Empire. It was a good starting point for his great literary odyssey, a cosmopolitan city on the

Adriatic seaboard of a soon to disappear world, that of Kafka, Stefan Zweig, Karl Kraus, Hugo von Hofmannsthal, Arthur Schnitzler, and Rainer Maria Rilke, and where Freud was inventing psychiatry.

Joyce left Dublin in 1904, at the age of 22, and set off for the Continent, leaving behind the city and country that to him had become intolerably suffocating and provincial. With him was Nora Barnacle, a country girl from Galway, whom he had met just a few months earlier, and finally married in 1931.

After a pause in Zurich the couple moved to Trieste in 1904, where, after a series of peregrinations, they settled the following year when he was hired by the Berlitz School and commenced one of the most productive phases of his literary career.

Curiously, in spite of the strange new world that surrounded him, he remain fixed on his home town, Dublin, completing Dubliners, started work on Exiles - a play, and on his ground breaking novel Ulysses, neither of which were completed until he moved to Paris after the war in 1919.

He remained in France for 20 years, where he joined Getrude Stein's circle of artists and writers, meeting Picasso, Dos Pasos, Hemingway, Man Ray, Henri Matisse, Scott Fitzgerald, Ezra Pound, George Orwell and many others

George Orwell's account of his vagabond years, *Down and Out in Paris and London*, gives a startling glance at a past world with harsh, vivid, descriptions of his own experiences.

In contrast, Stefan Zweig's epic story of his early years in the latter part of the 19th century, *The World of Yesterday*, bears witness to the now forgotten life of Vienna in those times, in which he paints a broad and fascinating picture of the resplendent capital of the Austro-Hungarian Empire and its slow decline, driven by the nationalistic divisions, towards the end of the long reign of Franz Joseph, who ruled his empire for 68 years.

As for Joyce, when asked toward the end of his life whether he would ever consider returning to Dublin, he replied, 'Have I ever left it?'

At the time Joyce sailed from Ireland, it was a dull, oppressive, theocracy, one that was to continue unchanged for nearly three quarters of a century more, a society that stifled intellectual and sexual freedom, and for that matter individual freedom in general.

In his book A Portrait of the Artist as a Young Man through the character of Stephen Dedalus, Joyce settled his account with Ireland, when Dedalus told his friend Davin: 'My ancestors threw off their language and took another Stephen said. They allowed a handful of foreigners to subject them. Do you fancy I am going to pay in my own life and person debts they made? What for?'

and then:

'Do you know what Ireland is?' asked Stephen with cold violence. 'Ireland is the old sow that eats her farrow.'

A damning judgement of the Ireland Joyce left behind, where he was a servant of two masters: 'The imperial British state, Stephen answered, his colour rising, and the holy Roman catholic and apostolic church.'

A century has passed since the publication of Ulysses in Paris and Ireland had become one of the most outward looking nations of Europe, a paradox and a strange reversal of roles, as England, once the centre of a great empire, stumbled blindly towards Brexit led by the pastiche of a Churchillian figure.

Pat 'Dee' O'Connelly couldn't help thinking of Dublin, where Joyce had left an indelible mark through his works, the Liffey, the city Georgian architecture, Croke Park, the National Library, the Ormond Hotel, the house where The Dead was set at 15 Usher's Island, now derilict, and the street where Stephen Dedalus and Leopold Bloom passed each other on the afternoon of 16 June 1904.

A PAINTING

EKATERINA WAS BACK IN PARIS for the pre-opening of the Louvre's Leonardo da Vinci exhibition. She wouldn't have missed it for anything with the mystery surrounding the painter's work, Salvator Mundi. She like many others was disappointed, it was nowhere in sight.

The painting, one of a series painted by Leonardo, was believed to be owned by Saudi Arabia's Crown Prince Mohammed ben Salmane, who was implored by the president of the French Grand-Palais, when attending an investment forum in Riyadh, to send the painting to the Louvre for the October 2019 exhibition set to mark the 500th anniversary of the painter's death.

What she saw was a another version, attributed by the Louvre to the studio of Leonardo da Vinci, the Ganay version, which had been attributed to Leonardo's disciple Marco d'Oggiono, or, to Leonardo himself, by the art historian Joanne Snow-Smith, who wrote that it had been painted 'between 1507 and 1513, when the artist was in the service of Louis XII.'

The real question was whether the other Salvator Mundi, a 65 x 45 centimetre treasure depicting Christ emerging from the darkness, blessing the World with one hand while holding a transparent globe in the other, was on the Saudi prince's 500 million dollar mega-yacht *Serene*, or not, since it had not been seen in public since its sale, at Christie's in New York in 2017, for a phenomenal record breaking 450 million dollars.

Rumour said it had been acquired as a gift for the Louvre Abu Dhabi, a partner of the Parisian Museum, in any case it was not in Paris, as Ekaterina could confirm, at least for the moment.

As for the Crown Prince's yacht it was believed to be in the Red Sea somewhere off Sharm el-Sheikh, on the Sinai Peninsula, which was not an ideal place for a fragile work of art, originally rumoured to have been acquired as a gift for the Louvre in Abu Dhabi.

There was another story linked to the painting which Pat Kennedy had seen at its auction in New York in December 2017. He had been marked by the mysterious painting sold for a record price, the highest ever paid for a painting—450,312,500 dollars, painted by one of history's greatest and most renowned artists, Leonardo da Vinci.

Pat was amongst nearly 1,000 art collectors, dealers, advisors, journalists and onlookers packed into Christie's main auction room at the Rockefeller Center in New York. He had already viewed the painting two months earlier at Christie's Hong Kong office in Alexandra House on its world tour before the sale, when it was estimated at 100 million dollars.

Its history he discovered a year later after the re-discovery of the Sommières collection when Ekaterina told him the storey of its Russian owner.

Leonardo da Vinci's Salvator Mundi disappeared in 1763 and did not surface again until 1900, when Sir Charles Robinson bought it for the Cook Collection, at Doughty House, on Richmond Hill in London. At the time the painting had been attributed to the school of Giovanni Boltraffio, a pupil of Leonardo

In 1958, the entire Cook Collection was sold off at an auction in which Salvator Mundi fetched forty five pounds when sold to a buyer named 'Kuntz', and disappeared from public view.

The painting did not reappear again until 2005, when it was purchased from an American estate at an insignificant regional auction house for an undisclosed sum, though it was rumoured to be ten thousand dollars.

After six years of research and restoration, Salvator Mundi was attributed to da Vinci and acquired for Dmitry Rybolovlev through the intermediary of Swiss art dealer Yves Bouvier. Rybolovlev paid Bouvier near on one hundred and twenty seven million dollars for the painting, then, believing he had been cheated on the price launched a legal battle with accusations of breach of trust directed at Bouvier

And to top it all, Leonardo da Vinci's painting Salvator Mundi, for one hundred and twenty eight million dollars.

In January 2015, Rybolovlev's lawyer, filed a complaint in Monaco for fraud against Bouvier, citing the sales of the Leonardo and the Modiglianis, on which Bouvier was accused of making around seventy million dollars in dishonest profits.

That all changed in November 2017, when there was a sudden and unexpected new twist in the drama. Salvator Mundi was bought by an unidentified buyer for the staggering sum of over 450 million dollars, at the Christie's auction in New York, exploding all previous price records, and, exceeding by far the 127 million paid to Yves Bouvier by Rybolovlev in 2013.

With the sale Rybolovlev made a stunning profit of 300 million dollars over the price he'd paid for the painting.

In any case the sale saved Rybolovlev, Bouvier and made a stunning commission for Christie's and inspired Pat Kennedy to name his Campus in Barichara, Salvator Mundi—Saviour of the World.

Ekaterina's visit to Paris coincided with the annual Foire internationale d'art contemporain at the Grand Palais, which came on the heels of an acceleration of activity in the French capital, as London galleries, like Ekaterina's, opened new spaces in the city.

Paris was again in vogue, a renaissance that recalled the traditions of rue Laffite and its art dealers like Ambroise Vollard who at the beginning of the 20th century dominated the art scene. The arrival of newcomers was due in part to the imminence Brexit created a movement towards the city and the influence of the billionaires François Pinault and Bernard Arnault.

The new poles of attraction were Arnault's Fondation Louis Vuitton in the Bois de Boulogne and Pinault's new museum situated in the ancient Bourse de Commerce in Paris in the Quartier des Halles planned to open in the middle of 2020.

* * *

Ekaterina asked John how a small country like Abu Dhabi could afford to invest such a sum of money in a painting. He reminded her it was oil and gas and perhaps one day when the oil boom came to an end the painting would come back to Europe.

Inevitably those cities that lined the shores of the Persian Gulf would end up like Manaus, forgotten backwaters, after the Brazilian rubber boom came to an end

If the clean energy promises of today's politicians were fulfilled, oil would suffer the fate of Brazilian rubber, or guano after the Peruvian Chincha Islands were depleted of nitrate bearing deposits in 1873, bringing Lima's Guano Era to an end.

Manaus and Lima had known an extraordinary period of prosperity in the 19th century when the world was desperate for rubber and nitrates.

Would the countries that had prospered during the oil boom fade into seedy forgotten flybitten vestiges of their former selves like Potosi in Bolivia

Or would they become new Eldorados like Brazil, which was riding a new wave exporting soya, palm oil and beef to China?

Perhaps the oil and gas rich countries of the Middle East had learnt the lesson.

For the moment there was no cheap viable alternative to oil, gas, and based on that certainty another crop of towering glass, steel and concrete forms was rising out of the desert sands of the Qatari coast, an entirely new city, Lusail, the Sheikhdom's hedge, just in case, for the after-oil, whenever that came, diversification of its economy.

It was a pharoahonic enterprise, the vision of the country's former emir, Sheikh Hamad bin Khalifa al Thani, in an effort to wean itself off its dependence on oil, a project that took form when Qatar was selected as the host country of the 2022 World Football Cup.

Pat Kennedy was not convinced, the Middle East's history was one of war and strife, 3,500 years or more. Competing civilsations, gods and cultures.

The population of the Middle East had exploded, its extraordinary resources—oil, gas, water and agricultural land squandered.

Qatar's hopes that people would be attracted by the new city's marina, shopping malls, business districts, golf courses, artificial islands and amusement park, seemed vain when war was a permanent threat.

Who would want to live there with Ayatollahs, across the water, mullahs and terrorists across the borders, not to mention medieval justice. The thought of missiles pointed at the glass towers was enough to frighten any normal European off. What Westerner in his right mind would think of permanently settling on the Persian Gulf, perhaps for a vacation, in Dubai, but to build a future?

As for the likes of immigrant workers, from Pakistan, Nepal and Bangladesh, life as third class citizens was a daunting option in a country where a mere 20% of its 2.6 million inhabitants were full citizens.

Europeans had been migrating to South America for centuries, a continent where they found themselves in a familiar world.

For the moment, the Middle East made the headlines not for its quality of life, but for missile strikes or attacks on cargo vessels passing the Strait of Hormuz, a shipping lane through which a fifth of the world's oil transited.

For decades, the Gulf had been at the centre of regional tensions and now the narrow waterway, where nearly 20 million barrels of oil passed each day, was being used by Iran as a pawn to blackmail the US. Unfortunately, Europe and the rest of the world would be the first victims of its closure, given the US was no longer dependent on the Middle East for its oil and gas.

REFLECTION

JOHN FRANCIS SAT COMFORTABLY laid back in the plush seat of Pat Kennedy's Gulfstream. He was flying to Bogota via Panama City accompanied Anna and Camille, where they would meet up with Tom and Lola Barton before heading down to the distant region where Colombia and Peru met in Amazonia for the final sequences of *Indians*.

He flipped through the English news papers before he settled down for the long flight over the Atlantic. He stopped when he saw an article on the spending habits of the super-rich. As always he felt a little uneasy, a sense of guilt, in the carbon spewing jet he felt so comfortable in, his old bones were his excuse, a weak one, but it wasn't just him, it was the planet with its teeming billions, like locusts eating their way to an early extinction.

He thought of the Roman emperors and oriental potentates of antiquity and their profligate luxuries. Theirs was a problem of inequality, not environmental destruction. In those ancient historical times, the population of the whole world was just 300 million, the Roman Empire's share a mere 65 million—less than today's population of the UK, compared to the 600 million that live today in the same space that was once occupied by Augustus. The idea that the planet would soon reach 10 billion was indeed reminiscent of the biblical scourge of locusts eating their way through Egypt's wheat fields.

If the clock could be turned back to 1900, when the population of the planet was 1.5 billion, with good management and a better distribution of wealth, the people of the world could have lived well with easier lives, for

all, including the super-rich, who were a natural part of the human termite mound's hierarchy.

His thoughts were not a justification, but very hard reality, which did not however justify corruption, the theme of which lay at the heart of his newspaper's article, based on a report produced by Transparency International, an NGO based in Berlin—a German registered voluntary association, financed mostly by government institutions.

John knew of them well, and the Fitzwilliams Foundation, of which he was head, had cooperated with them and contributed donations to their different projects. It was a wise thing as the bank, INI, had been, and probably still was, the unwilling vehicle for the movement of dirty money, it was unavoidable, no bank could control all the sources of the money that flowed through its accounts.

Transparency International in their latest investigation revealed the assets bought by corruption and money laundering included 421 luxury homes, three super-yachts, seven private jets and even a hovercraft.

Their analysis showed hundreds of billion of suspect dollars had passed through UK banks, and law and accountancy firms. Much of it was spent of the acquisition of prime properties, yachts, luxury cars, art works and jewellery—including more than one million dollars on Cartier jewellery, and fifty thousand on a Tom Ford crocodile-skin jacket with a matching crocodile-skin handbag from Harrods.

More than 400 cases of bribery, corruption and money laundering were analysed in 116 countries—involving 582 UK firms and individuals who had rendered services that enabled the beneficiaries to channel funds into the UK through 17,000 shell companies, 1,455 of which were registered at a single address situated above a wine bar in Birmingham.

The rot was everywhere, even in prestigious schools and universities—amongst which were Charterhouse, Harrow, Lancing College and the London School of Economics, where fees were paid through shell companies

for the education of the offspring of criminals and dictators, including a niece of the Syrian tyrant, Bashar al-Assad.

Then there was the case of Vlad Luca Filat, the son of the former prime minister of Moldova, who lived in a one thousand dollar a day Chelsea penthouse and drove a Bentley Bentayga, all paid for from companies registered in offshore tax havens including the Cayman Islands where money was transferred through HSBC bank accounts.

According to Organized Crime and Corruption Reporting Project, a consortium of investigative centres, media and journalists based in Eastern Europe, the Caucasus, Central Asia and Central America, the Russian oligarchy and its friends used the so-called Troika Laundromat scheme to obtain places for their children in top private schools in the UK. billions of dollars out of Russia, allowing oligarchs and politicians not only the possibility of paying school fees, but very much more, including the secret acquisition of shares in state-owned companies, property, jets and luxury yachts, and in general an extravagant life style paid with the money stolen in one way or another from Russia's citizens.

Russians not only recycled their money through the UK Laundromat, they lived in London, bought second or third homes in London and sent their children to the UK for their education. That education not only made them citizens of the world, but also taught them a lot about their own country and how it allowed their parents to get where they were. A lesson they could apply for the continuity of their families power and wealth.

Returning to Russia with their Western education and gloss they were better able to understand and control the machine of state and how their country's economy could be better milked.

It was as if the czarist system had returned, when an elite with European ideals ruled over a country of serfs, only instead of farming the land the serfs worked in hellholes like Norilsk, digging nickel from the ground and refining it, or drilling oil and gas wells in the uninhabited frozen landscape surrounding Norilsk in the vast region of Krasnoyarsk, Siberia.

Whilst the Russian elite lived like nobility in the UK, in stately homes and on their estates, they never forgot the man who ruled them—like a latter day Czar, all powerful, deciding who was rewarded with what for their loyalty to his authoritarian state.

Putin's plan was not to recreate the Soviet Union, but a New Russia with its zone of influence, without the burden of socialism and its costs.

It was all so familiar to John Francis who regularly warned Pat Kennedy of the dangers to getting to close to politicians and billionaires. John Francis, an economist and historian, personal friend and advisor to Pat Kennedy, had himself become one of those billionaires and almost by accident, freely admitting he had been born with a silver spoon in his mouth, which didn't mean he wanted to end his days in an orange jumpsuit, prisoner of the FBI, caught up in some financial scandal.

In the case of INI, it was certain that money from pulp and paper mill companies, loggers and oil palm plantation owners, passed through their accounts. Pat Kennedy explained the banks were neither moral guardians nor politicians, and even less law makers, but they obeyed the laws and whenever they suspected gross infringements they quietly alerted the competent authorities.

INI operated on all continents, though its presence was less so in North America, and no more than a token in Africa. Their primary bases were in Europe, Asia and the Caribbean. That the finger was always pointed at the Caribbean, China and Russia, was part of INI's everyday existence, and their sins were no less than those of other businesses. As Pat often remarked, 'Render unto Caesar the things that are Caesar's, and unto God the things that are God's' were a few of the words worth remembering from his school days at the Christian Brothers in Limerick.

Corruption, economic crime and wilful destruction of the planet's natural resources involved some of the world's best known investment banks. Banks such as Goldman Sachs, JPMorgan, Bank of America and Morgan Stanley, invested heavily in the Brazilian agribusiness, a sector that was largely

involved in the burning of the Brazilian rainforests to open new land for plantations and cattle raising ranches.

Between 2001 and 2015, according to Global Witness, over 300 million hectares of tree cover was destroyed, equivalent to the size of India, that's two-thirds of 1% of the planet's land surface, for oil palm plantations and farms. It was a contradiction in terms considering much of that was backed by well-known international business corporations and financed by major banks, all of which crowed about their attachment to ecology and ethics, policies that were barely worth the paper they are printed on.

Many financial institutions had publicly declared policies designed to limit deforestation by legal and illegal loggers, an activity that was linked to human rights abuses and corruption. Amongst these institutions were investors, managing eight trillion dollars in assets, who publicised their efforts to force the palm oil industry to limit or stop deforestation. Added to that were banks that had signed the Soft Commodities Compact, an agreement that was aimed at zero deforestation in industries and supply chains linked to the production of soya, palm oil, beef and paper, in which 400 companies, having combined sales of 3.5 trillion euros, were engaged.

Unfortunately, as was the case for so many good intentions, they were very far from reaching their objectives, and not only that, their actions were opaque, unverifiable, and even worse simply window dressing, developed by their communication teams, since they and the world's leading financial institutions continued to sink vast sums into agribusiness companies, in blatant violation of their own policies and public commitments. Amongst them, according to Global Witness, were: Barclays, Deutsche Bank, HSBC, Santander and Standard Chartered, in addition to those were the big name investment bankers: JPMorgan Chase, Goldman Sachs, Bank of America, and Morgan Stanley.

EVENT201

AS THE GULFSTREAM FLEW over US airspace, an event which would prove to be prophetic was taking place in New York City at The Pierre Hotel where 130 people were assembled for an exercise named Event201, the simulation of a severe pandemic.

The following text is taken from The Johns Hopkins Center for Health Security Homepage:

The Johns Hopkins Center for Health Security in partnership with the World Economic Forum and the Bill and Melinda Gates Foundation hosted Event 201, a high-level pandemic exercise on October 18, 2019, in New York, NY. The exercise illustrated areas where public/private partnerships will be necessary during the response to a severe pandemic in order to diminish large-scale economic and societal consequences.

In recent years, the world has seen a growing number of epidemic events, amounting to approximately 200 events annually. These events are increasing, and they are disruptive to health, economies, and society. Managing these events already strains global capacity, even absent a pandemic threat. Experts agree that it is only a matter of time before one of these epidemics becomes global—a pandemic with potentially catastrophic consequences. A severe pandemic, which becomes 'Event 201' would require reliable cooperation among several industries, national governments, and key international institutions.

The conclusion was the following call to action:

The next severe pandemic will not only cause great illness and loss of life but could also trigger major cascading economic and societal consequences that could contribute greatly to global impact and suffering. Efforts to prevent such consequences or respond to them as they unfold will require unprecedented levels of collaboration between governments, international organizations, and the private sector. There have been important efforts to engage the private sector in epidemic and outbreak preparedness at the national or regional level.1,2 However, there are major unmet global vulnerabilities and international system challenges posed by pandemics that will require new robust forms of public-private cooperation to address.

The Event 201 pandemic exercise, conducted on October 18, 2019, vividly demonstrated a number of these important gaps in pandemic preparedness as well as some of the elements of the solutions between the public and private sectors that will be needed to fill them. The Johns Hopkins Center for Health Security, World Economic Forum, and Bill & Melinda Gates Foundation jointly propose the following:

Governments, international organizations, and businesses should plan now for how essential corporate capabilities will be utilized during a large-scale pandemic. During a severe pandemic, public sector efforts to control the outbreak are likely to become overwhelmed. But industry assets, if swiftly and appropriately deployed, could help to save lives and reduce economic losses. For instance, companies with operations focused on logistics, social media, or distribution systems will be needed to enable governments' emergency response, risk communications, and medical countermeasure distribution efforts during a pandemic. This includes working together to ensure that strategic commodities are available and accessible for public health response. Contingency planning for a potential operational partnership between government and business will be complex, with many legal and organizational details to be addressed. Governments should work now to identify the most critical areas of need and reach out to industry players with the goal of finalizing agreements in advance of the next large pandemic. The Global Preparedness Monitoring Board would be well positioned to help monitor and contribute to the efforts that governments, international organizations and businesses should take for pandemic preparedness and response.

- 2. Industry, national governments, and international organizations should work together to enhance internationally held stockpiles of medical countermeasures (MCMs) to enable rapid and equitable distribution during a severe pandemic. The World Health Organization (WHO) currently has an influenza vaccine virtual stockpile, with contracts in place with pharmaceutical companies that have agreed to supply vaccines should WHO request them. As one possible approach, this virtual stockpile model could be expanded to augment WHO's ability to distribute vaccines and therapeutics to countries in the greatest need during a severe pandemic. This should also include any available experimental vaccine stockpiles for any WHO R&D Blueprint pathogens to deploy in a clinical trial during outbreaks in collaboration with CEPI, GAVI, and WHO. Other approaches could involve regional stockpiles or bi- or multinational agreements. During a catastrophic outbreak, countries may be reluctant to part with scarce medical resources. A robust international stockpile could therefore help to ensure that low and middle resource settings receive needed supplies regardless of whether they produce such supplies domestically. Countries with national supplies or domestic manufacturing capabilities should commit to donating some supply/product to this virtual stockpile. Countries should support this effort through the provision of additional funding.
- 3. Countries, international organizations, and global transportation companies should work together to maintain travel and trade during severe pandemics. Travel and trade are essential to the global economy as well as to national and even local economies, and they should be maintained even in the face of a pandemic. Improved decision-making, coordination, and communications between the public and private sectors, relating to risk, travel advisories, import/export restrictions, and border measures will be needed. The fear and uncertainty experienced during past outbreaks, even those limited to a national or regional level, have sometimes led to unjustified border measures, the closure of customer-facing businesses, import bans, and the cancellation of airline flights and international shipping. A particularly fast-moving and lethal pandemic could therefore result in

political decisions to slow or stop movement of people and goods, potentially harming economies already vulnerable in the face of an outbreak. Ministries of Health and other government agencies should work together now with international airlines and global shipping companies to develop realistic response scenarios and start a contingency planning process with the goal of mitigating economic damage by maintaining key travel and trade routes during a large-scale pandemic. Supporting continued trade and travel in such an extreme circumstance may require the provision of enhanced disease control measures and personal protective equipment for transportation workers, government subsidies to support critical trade routes, and potentially liability protection in certain cases. International organizations including WHO, the International Air Transport Association, and the International Civil Aviation Organization should be partners in these preparedness and response efforts.

- 4. Governments should provide more resources and support for the development and surge manufacturing of vaccines, therapeutics, and diagnostics that will be needed during a severe pandemic. In the event of a severe pandemic, countries may need population-level supplies of safe and effective medical countermeasures, including vaccines, therapeutics, and diagnostics. Therefore, the ability to rapidly develop, manufacture, distribute, and dispense large quantities of MCMs will be needed to contain and control a global outbreak. Countries with enough resources should greatly increase this capability. In coordination with WHO, CEPI, GAVI, and other relevant multilateral and domestic mechanisms, investments should be made in new technologies and industrial approaches, that will allow concomitant distributed manufacturing. This will require addressing legal and regulatory barriers among other issues.
- 5. Global business should recognize the economic burden of pandemics and fight for stronger preparedness. In addition to investing more in preparing their own companies and industries, business leaders and their shareholders should actively engage with governments and advocate for increased resources for pandemic preparedness. Globally, there has been a lack of attention and investment in preparing for high-impact pandemics, and business is largely not involved in existing efforts. To a significant extent

this is due to a lack of awareness of the business risks posed by a pandemic. Tools should be built that help large private sector companies visualize business risks posed by infectious disease and pathways to mitigate risk through public-private cooperation to strengthen preparedness. A severe pandemic would greatly interfere with workforce health, business operations, and the movement of goods and services.

A catastrophic-level outbreak can also have profound and long-lasting effects on entire industries, the economy, and societies in which business operates. While governments and public health authorities serve as the first line of defence against fast-moving outbreaks, their efforts are chronically under-funded and lack sustained support. Global business leaders should play a far more dynamic role as advocates with a stake in stronger pandemic preparedness.

6. International organizations should prioritize reducing economic impacts of epidemics and pandemics. Much of the economic harm resulting from a pandemic is likely to be due to counterproductive behaviour of individuals. companies, and countries. For example, actions that lead to disruption of travel and trade or that change consumer behaviour can greatly damage economies. In addition to other response activities, an increase in and reassessment of pandemic financial support will certainly be needed in a severe pandemic as many sectors of society may need financial support during or after a severe pandemic, including healthcare institutions, essential businesses, and national governments Furthermore, the ways in which these existing funds can now be used are limited. The International Health Regulations prioritize both minimizing public health risks and avoiding unnecessary interference with international traffic and trade. But there will also be a need to identify critical nodes of the banking system and global and national economies that are too essential to fail - there are some that are likely to need emergency international financial support as well. The World Bank, the International Monetary Fund, regional development banks, national governments, foundations, and others should explore ways to increase the amount and availability of funds in a pandemic and ensure that they can be flexibly used where needed.

7. Governments and the private sector should assign a greater priority to developing methods to combat mis- and disinformation prior to the next pandemic response. Governments will need to partner with traditional and social media companies to research and develop nimble approaches to countering misinformation. This will require developing the ability to flood media with fast, accurate, and consistent information. Public health authorities should work with private employers and trusted community leaders such as faith leaders, to promulgate factual information to employees and citizens. Trusted, influential private-sector employers should create the capacity to readily and reliably augment public messaging, manage rumours and misinformation, and amplify credible information to support emergency public communications. National public health agencies should work in close collaboration with WHO to create the capability to rapidly develop and release consistent health messages. For their part, media companies should commit to ensuring that authoritative messages are prioritized and that false suppressed including though the use of technology. Accomplishing the above goals will require collaboration among governments, international organizations and global business. If these recommendations are robustly pursued, major progress can be made to diminish the potential impact and consequences of pandemics. We call on leaders in global business, international organizations, and national governments to launch an ambitious effort to work together to build a world better prepared for a severe pandemic.

Exactly six months later—as thousands of New Yorkers died of Covid-19, America, and just about every other nation on earth, was asking why not one single country had taken note, not to mind action, following the recommendations issued by Event201.

HONG KONG

THE INVOCATION OF EMERGENCY LAWS, which dated back to colonial times, were a sign that things were getting out of hand in Hong Kong, a situation that prompted Pat Kennedy to quietly accelerate the measures he had taken to pre-empt the consequences for his bank of an eventual crackdown by Beijing.

The crisis was deepening, the worst since the handover in 1997 that transformed the city into a semi-autonomous Special Administrative Region of the People's Republic of China.

By deciding to invoke the draconian Emergency Law to quell four months of unrest, the Hong Kong government under Carrie Lam, had bypassed the legislature, signalling a turn of the screw, which Pat feared could lead to a totally unpredictable situation.

In anticipation of further violence, major shopping malls as well as banks and businesses in central districts closed following the announcement government offices and schools would shut early as a new wave of protesters thronged onto the streets.

As night fell the cycle of violence continued as the mob lit fires at metro stations and attacked what they saw as symbols of Beijing's presence, smashing shops fronts and sackaging businesses believed to have links with the Mainland.

As news broke of a young demonstrator being injured by police gunfire, it was clear that a radicalisation was underway, some spoke of Beijing's agent provocateurs, others of foreign interference, as security forces deployed

water cannons, rubber bullets and tear gas, pushing back the demonstrators with shields and batons in street battles as tolerance gave wave to force.

It reminded Pat of the streets of Paris, the difference was France was not under the control of a one party authoritarian state under a life-president with dictatorial powers.

The slow erosion of rights had been inevitable since the handing over of the colony by the British, and now the people, especially the young, were beginning to understand their days of Western style freedom were numbered. The future, defined by the Chinese Communist Party leaders, where consume and be happy, was their version of Huxley's soma in his Brave New World.

The Emergency Law, originally introduced by the British, gave the government widespread powers. It had been introduced in 1922 to control striking dockers and had last been applied in 1967 to put down procommunist riots. It was a complete reversal of the original scenario where the Communists now called the shots with the power to impose censorship, control communications, arrest, detain and deport Mainlanders or foreigners, search and confiscate, and freeze assets.

Pat saw it an example of falling investor confidence in Hong Kong's rule of law and freedom of speech, principals that had formed the cornerstones of Hong Kong's status as a global financial hub.

At first Pat had been surprised and relieved when Cathy Lam announced the withdrawal of the extradition bill that had provoked months of protests and plunged territory into its greatest political crisis in decades.

He liked to explain that as an Irishman he had nothing to do with the colonisation of Hong Kong, though John reminded him Ireland was part of Great Britain at the time when treaties were forced on China and Irishmen were engaged in the British administration and formed a large part of its army.

It was argued that no living person had anything whatsoever to do with the events of the early 19th century agreements that ceded Hong Kong Island to the British crown. However, that no living person was victim of those events

was highly debatable, which also lay with the Imperial Chinese authorities who through weakness and corruption were signatories to that treaty.

Needless to say when the withdrawal of the extradition bill finally came, it did little to put down the demonstrators ardour, the result was the invocation of the Emergency Law that gave government the power to do as it liked.

CHALLENGES

POLITICIANS READY TO GRAB the opportunity offered by climate change conferences talked tough, eco-warriors declared war, luvvies swooned, celebrities climbed on the bandwagon, and Greta Thunberg squeaked angrily. By now everybody had understood the urgency, but where was the action?

Keeping the global mean surface temperature at no more than 1.5°C above post-industrial levels was the declared target, less than the 2°C agreed at the Paris conference in 2015.

In order to achieve this target the world would have to cut emissions in half by 2030 and completely by 2050, which in turn meant a 100% transition from fossil fuels to renewable energy sources.

According to the Intergovernmental Panel on Climate Change this would require an investment of some 2.4 trillion dollars annually, figures that are difficult to grasp, but putting it into perspective, the totality of present investment in energy production is less than this annual sum. In other words an impossible 48 trillion dollars would have to be found over the coming two decades to cover the investments needed to generate clean energy.

'The alternative we know is a dangerous world,' John told people. 'Only by reducing our lifestyles and putting a brake on the burgeoning populations of the developing world—many of whom don't enjoy the luxury of clean water or electricity, could we help improve the poverty stricken existence of the disinherited.'

Many of the countries that signed the agreements were paying simple lip service when it came to ensuring the flow of aid from the rich nations—certain of whom did not even honour the recent conference with their presence not to mind signing the agreements, starting with the US, after Donald Trump pulled out of the treaty.

It was a long way from the time when the US led the way for the 1995 Kyoto Treaty, when many countries pledged cuts, but few delivered.

Most renewable energy sources relied on favourable weather conditions, for example hydro power needed sufficient rain to fill dams, wind turbines needed wind to turn their blades, and solar panels needed clear skies. With current technology it would be difficult to produce the same quantity of electricity as that produced by traditional fossil fuels.

The best alternative, or compliment to renewables, was nuclear power, however, environmentalists were opposed to it. This opposition was due to the dangers, risks such as those that caused the disasters at Three Mile Island, Chernobyl and Fukushima, and of course radioactive waste, and not the least the huge cost of building nuclear power plants and dismantling old ones.

But there was hope on the horizon, new nuclear technologies, including Bill Gates Terrapower reactor that used waste radioactive by-products from conventional reactors, but development was hampered by politics as Trump's sanctions forced Gates out of his agreement with China to build the first reactor. It was not good when saving the planet could always be put-off for another day by the whim of one man.

MADRE DE DIOS

DEE AND JOHN ENNIS stared ahead, the road was barely visible through the clouds of rose coloured dust churned up by the buses and trucks that thundered by. The village finally appeared out of the choking haze, then the mine, which lay another few kilometres further up a valley. It was there the water tailings originated, running down into the river, polluting its waters, and on towards the forest where it joined one of the many streams that ultimately flowed into the Amazon.

They with a camera crew had followed up on the story of gold miners in the Peruvian region of Madre de Dios, an operation owned by a European group based somewhere in Switzerland. The hills surrounding it had been denuded of trees over dozens of square kilometres to make way for the excavators that dug the ore from vast open cast pits.

On the shores of an artificial lake smoke belched from the smelters that reduced the ore, its foul smell saturating the surrounding air twenty four hours a day, seven days a week.

The Indians that lived in the forest downstream had seen their once green world transformed into a polluted hell, crossed by unsurfaced access roads that cut through their lowland forest, covering it in a pall of dust and pollution, where the leaves of the trees withered and low lying vegetation yellowed and died, abandoned by birds, animals and insects.

Forced from their homes to make way for the miners, the Indians spoke of poisoned drinking water and food shortages, as their vegetable gardens perished, and their children fell ill with persistent coughs, skin rashes and eye infections. Those who dared demonstrate against the mines were harassed, arrested and even murdered.

The mine denied responsibility, pointing to illegal miners who had invaded the area on the periphery of the mine's concessions, which was the responsibility of the government, which had neither the means nor the desire to intervene. They preferred to prioritise economic development in an industry that employed 100,000 workers across the country, producing two billion dollars of illegal gold exports each year, more than that of drug trafficking, destroying tens if not hundreds of thousands of hectares of the Amazon forest in region of Madre de Dios.

The goldmine was owned by a Canadian company, but who exactly was behind it was nebulas. It was normal for that kind of business, where investors hid behind a cascade of offshore companies. But checking more closely Dee had discovered, one of the prominent Canadian gold miners was Frank Giustra

Giustra in an investors' document for a new GoldX mining project at Toroparu in Guyana's part of the Amazon forest, declared, 'I believe we are in the third and final phase of the gold market that started in 2001 and this will be the most explosive phase for gold.'

Giustra had hit the headlines in the sensational story surrounding Meghan Markle and Prince Harry when it was revealed he, or his pal Yuri Milner, had rented a villa to the royal couple with the help of a mutual showbiz friend. David Foster.

It was funny, but as they say, birds of a feather—and these were some very high flying birds, friends of Meghan and Harry. In addition to Yuri Milner, there were the Clintons, yes Bill and Hilary, whose former publicist, Sara Latham, was now Meghan's.

There was also Elton John, who wasn't into gold mining, in the conventional sense that is, he had been a close friend of Princess Diana, Harry's mother, and was currently a close friend of the royal couple, to

whom he had loaned his Riviera villa and a jet. The singer was of course a friend of the music producer David Foster.

Milner and Giustra had another common friend in the mining business, uranium to be be exact, and none other than Alisher Usmanov, the Uzbekborn mining oligarch, one of the biggest names in Russian business, who had long history of investing on behalf of his friends in the Kremlin, with close links to Dmitry Medvedev, Putin's former puppet president and prime minister. Usmanov also carried out business with the state-owned giant Gazprom of which he had once been head of investment.

Milner's investment fund, DST Global, had business links with Giustra and Usmanov, notably in uranium. Milner and Usmanov were both into Mail.ru—Russia's biggest Internet company. Usmanov had been trained at the Moscow State Institute of International Relations, known not only for forming statesmen and diplomats, but also spies. Strangely for a powerful man he had served six of an eight year prison sentence in Russia for 'theft of social property'.

Usmanov, owner and founder of USM, a private holding company, had interests in metals and mining, telecoms, technology and internet sectors. The oligarch, amongst many other things, had put 460 million dollars into Facebook and another 420 million via his friend Yuri Milner, an investment that reaped him a fivefold profit.

Ekaterina told John, Usmanov owned Kommersant, and its parent Komnersant Publishing House, a prominent Russian newspaper and media group.

The partnership between Yuri Milner, Usmanov via DST Global had been approved with the Kremlin's blessing, thanks to Alisher Usmanov's close relationship to Medvedev, who like Milner had served on Medvedev's Commission for Modernization, during which time he had backed government subsidies for broadband expansion that in turn favoured DST Global, his own venture capital fund, founded by Milner in 2009 'for the purpose of making minority investments in the most significant and fast growing internet companies'.

DST Hong Kong was highly active in Xiaomi Inc, once dubbed China's Apple. Its founder Lei Jun, whose bonus for the year 2018 was the bagatelle of 735 million dollars, was worth eight billion dollars even after a brutal ride following Xiaomi's IPO on the Hong Kong stock exchange in 2019, during which it lost 40% of its value.

Milner, Giustra and Usmanov, were wolves, playing in the global casino, and the young royal couple had unwittingly wandered into their den, running the risk of either ending up as their plaything or being marked as friends of big capital, and miners to boot, not a good thing in their chosen roll as ecowarriors

Beyond the young royals naivety, they were cashing in on their titles, selling themselves to friends of Russia. Any politician in power would have been ejected for corruption, any high level civil servant for collusion with a foreign power, the poor Casement would have turned over in Pentonville Prison grave.

Here was the grandson of the Queen of England, 8th in-line to the throne, accepting gifts from businessmen whose links to the Kremlin were there for any journalist worth his salt to see.

Harry had chosen to tread the slippery path of his great-uncle the Duke of Windsor

* * *

All across the Amazon basin, from Peru and Colombia, across Brazil to Guyana, illegal gold-mining camps flourished. They were more than a few miner's shacks, they were towns and villages with shops, bars, restaurants, pharmacies, brothels and evangelical churches. Some of the illegals were the former workers of American and Canadian owned gold mines, many were Brazilian garimpeiros, who spread malaria and sexually transmitted diseases, bringing prostitution, alcohol and violence to the indigenous peoples.

Their pits in the red earth were surrounded by tarpaulins and scaffolding built from trees cut in the forest and held together by rattan cords. In the background black smoke belched from deafening diesel engines, a hellish picture that contrasted with the bright green of the jungle that bordered the tortured red earth.

The miners toiled waist-deep in sludge with pressure hoses jetting water into the earth, eroding the landscape, transforming it into a river of mud that poured down rough wooden channels to sluice boxes, where the earth and gravel is separated from the gold, which is heavy, sinking to the bottom of the sluice, trapped in the miner's matting.

They came from small impoverished towns and villages, many of them landless farmers. Their wildcat mines not only destroyed the forest, but also its wildlife, as streams became choked with mud and chemicals. Far downstream of the mining areas high levels of mercury were found in river dolphins and even in jaguars.

In the broader streams, miners built crudely hewn wooden barges that were used to dredge for gold, destroying river banks and changing the courses. The mercury they used as an amalgam to separate out gold particles from the mud they dredged spread into the aquatic ecosystem and passed into the food chain—plants that were eaten by birds, animals and fish, which in turn were eaten by indigenous hunters and fishers.

The miners often employed the younger indigenous men to work clearing the forest in exchange for machetes, tools, batteries and hammocks leaving their elders in their villages to hunting with bows and arrows.

* * *

HG told her friends about Papua New Guinea, where vast tracks of forest were devoured for mines and oil palm plantations.

'How many people can point to Papua on a map?' she asked. 'How many people in Europe or the US have ever heard of New Britain? What about Bougainville? Oh yes, the Bougainvilleas in the garden, or the explorer if you're French. Well for your information it's an island next to New Britain,

off the coast of Papua New Guinea. They're about to vote for independence from New Guinea.

'Funnily enough,' HG said looking at Dee triumphantly, 'your Bertie Ahern, former Taoiseach of Ireland, was appointed to chair the Bougainville Referendum Commission in 2018.'

'For information it was part of the German colonial empire before WWI,' she added with a laugh. 'After it was occupied and administered by Australia until 1975, that's when Papua New Guinea took over mandatory power. Now they're voting for independence. You know why? I'll tell you, gold and copper!'

The mines had until recently been run by Rio Tinto, an Anglo-Australian multinational, one of the world's largest metals and mining corporations, which walked away from Bougainville in 2016, leaving its rusting equipment and machinery abandoned at mining sites in the island's remote mountain valleys, gutted buildings, polluted rivers and streams, unstable tailing dumps and chemical storage sites. Environmental agencies estimated the clean would cost billions if ever Rio Tinto accepted its responsibility.

All the rivers downstream of the mines are polluted by mercury, cyanide and acid,' said HG, who pointed at Camille's wedding band, 'Do you know how much toxic waste is generated to produced the amount of gold contained your gold wedding ring.'

A look of guilt appeared on Camille's face.

'No,' she mumbled.

'About 20 tons'

Unconsciously she covered her fingers.

'There aren't any dams to retain the waste in the wilderness of the Andean foothills, far from civilisation, out of view, and waste water from the mines loaded with cadmium, arsenic, lead, and iron, seep into the earth, the groundwater and streams, poisoning fish and plants,' she said to her shame.

They all laughed at Camille's embarrassment, but they were all just as guilty.

All those mines now belonged to Bougainville together with the massive environmental legacy of the vast open pit site, where, in spite of the destruction, vast quantities of copper and gold worth worth an estimated 58 billion dollars were still in the ground, ready to be torn out to feed the voracious appetite of China and the rest of the world for raw materials, once Bougainville could get back to business. A good reason for independence, and to avoid sharing the financial bonanza with New Guinea.

In New Britain, an island of Papua New Guinea, next to New Ireland, bordering the Bismarck Sea, A Malaysian company, RHG, had deforested more than 20,000 hectares for oil palm plantations.

Those distant places with strange names, echoes of a colonial past, were now exploited by the Malaysian firm which had the intention of planting up to 31,000 hectares of oil palms to the detriment of the indigenous peoples, owners of the land since since time immemorial.

The group's financiers included the State Financial Secretary of Sarawak, which operated as a financial authority with amongst other things an investment division. Sarawak, a Federal State in the Federation of Malaysia, was part of the island of Borneo the island of Borneo—HG's birthplace, part of the vast archipelago that lay between Australia and the Asian mainland, the home to a large part of what remained of the world's tropical forests and biomes—distinct biological communities, which according to the Convention of Biological Diversity, contained 10% of all documented mammals, birds, reptiles and fish species on the planet.

For decades that archipelago had been losing its forest at a dramatic rate to oil palm plantations and logging. All financed by international banks and institutions that pumped over 20 billion dollars into industries producing: timber, palm oil, and pulp and paper, all of which pretended to be supporters of sustainable forestry operations.

INI Hong Kong, Pat Kennedy's bank, as well as HSBC and other major financial institutions had bankrolled palm oil companies responsible for the destruction of vast tracts of primary forest, violating the rights of their indigenous inhabitants, and all with the help and complaisance of the governments in the countries concerned.

John Ennis, who had decades of experience in South East Asia, had looked on helplessly as relentless deforestation continued unabated, which alone was responsible for 8% of the world's annual greenhouse gas emissions, more than the emissions of the entire European Union and its 500 million population.

NOVEMBER

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FRIDAY 13 NOVEMBER AD2026

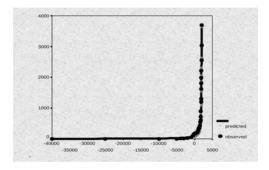
ANNA HAD INTERESTED Pat Kennedy in a new science—cliodynamics, one which attempted to build a mathematical model of history, to explain the rise and fall of empires, social discontent, civil wars, and revolution. It was part of Pat's Doomsday project with which deep into the planning with Tom Barton and John Francis

Both John and Anna were historians with their respective specialisations, John in economics, Anna in the history Spain's New World Empire—more precisely underwater archaeology.

To many, history followed a haphazard path, to certain, especially certain figures in London with a nostalgia for empire, it was the result of wise leadership in enlightened civilisations. That was evidently far from John or Anna's personal ideas. They sought something more scientific, a pattern, an overriding logic. They were not the first, some, like Spengler and Toynbee, dreamt of rationalizing history, others, from Adam Smith to Joseph Schumpeter, attempted the same thing through economics, and Peter Turchin through the rise of empires, all of which laid the foundations for a new scientific field called cliodynamics, after the Greek muse of history, Clio, and the word dynamics—force and motion. In other words the forces that drive history, and in this precise case the development of a hypothetical mathematical model to explain it.

$$N_t = \frac{C}{t_0 - t} ,$$

Three Russian scientists, Andrey Korotayev, Alexander Markov and Daria Khaltourina, presented a mathematical model in 2006, which demonstrated how, according to their words 'more than 99% of all the variation in demographic, economic and cultural macrodynamics of the World System over the last two millennia could be accounted for'.



They described how In 1960 Heinz von Foerster, Patricia Mora, and Lawrence Amiot published, in the journal Science, a remarkable discovery. They showed that between Anno Domini 1 and AD1958 the world's population (N) dynamics could be described in an extremely accurate way with an astonishingly simple equation:

where Nt is the world population at time t, and C and t0 are constants, with t0 corresponding to an absolute limit at which N would become infinite.

By applying the formula to dates 40000BC to AD1970 the curve shown in the above diagram is obtained:

As can be seen the population in 1970, according to the curve is in the order of 3.7 billion, now comparing this to the 1970 estimate by the World Bank of 3,700,437,046—a truly extraordinary demonstration, and which was

valid for whatever year chosen during the period according estimates by historians and extrapolations from historical censuses.

It was an exponential curve, in simpler terms, a curve that goes ballistic, which is worrying to say the least, considering humanity's point on the curve today, or in Pat's more colloquial terms, 'a point where any sane person should go apeshit just looking at it.'

But no, it didn't stop leaders from sleeping at night, or encourage the luvvies and fellow travellers to protest against population growth, or encourage legislation to reduce birthrates.

In fact any suggestion of population control raised cries of eugenics.

* * *

Work at the site in Barichara progressed as protesters through the streets of Bogota in a demonstration against the government of Ivan Duque. It was becoming a familiar scene: Paris, La Paz, Barcelona, Hong Kong, Baghdad, Cairo, and even Teheran, where the acrid stink of teargas infested city centres almost daily.

Was the world becoming ungovernable, or were people revolting against inequality, corruption and bad government?

As far as Pat was concerned, it was another sign of the coming chaos, comforting his decision to build a site in Ireland and his search for yet another one, in the long term it was an insurance policy in the short it was a business decision attracting numerous high-wealth investors.

The hundreds of thousands of mostly peaceful demonstrators on the streets were a reminder of how dangerous large cities could become as police helicopters hovered overhead and teargas was fired at protesters who blocked Bogota's Plaza de Simon Bolivar with makeshift barricades.

An organised demonstration degenerating into skirmishes with the police, a few burning garbage bins, an overturned car or two, looked worrying enough, but it doesn't take too much to imagine what would happen if the food chain broke down, the demonstrations that perturbed the peace in big cities today, would be nothing compared to the tens of thousands willing to kill in order to eat, tomorrow, when survival was a matter of a meal or two.

It was not difficult to imagine the first days of collapse—riots, looting, fires, the breakdown of law and order, followed by the collapse of government and services, mayhem, violence and deaths by the hundreds of thousands, followed by starvation, malnutrition and disease.

Those who thought an isolated cabin in Montana or New Mexico was safe were in for a shock, they would be easily overcome by armed marauders in search of food, arriving on the backs of pick-ups fitted with automatic weapons.

The world of Mad Max was never more than just a few heart beats away.

DIVERSIFICATION

These great towns and temples and buildings rising from the water, all made of stone, seemed like an enchanted vision ... I stood looking at it, and thought no land like it would ever be discovered in the whole world ... But today all that I then saw is overthrown and destroyed; nothing is left standing.

Bernal Díaz del Castillo on the Aztec capital, Tenochtitlán

PAT OBSERVED THE DEMONSTRATIONS from the sidelines, against the advice of Lili, who could do nothing to stop him. Accompanying him were a couple of men from his close protection team ready to extract him if necessary. It was his like of first-hand information that motivated his taking risks, but it would have looked stupid if he, a capitalist banker, was arrested.

As night fell thousands of protesters occupied the streets of Kowloon, many with hard hats, goggles and gas masks, certain dressed in black, recalling the Black Bloc movement in Paris, set up makeshift barricades barriers and anything else that came to hand.

It became dangerous when the police started firing rounds of teargas and even moreso when rubber bullets were fired at the demonstrators pressing forward armed with makeshift shields, riposting with anything that came to hand, some carried lasers pointers with which they targeted the eyes of the riot-police.

Defying police orders, the crowd deviated from the approved route in Mong Kok and headed south to Tsim Sha Tsui, a tourist shopping district, where they hoped the police would not be expecting them.

Soon the demonstrators occupied the main roads and blocked the cross harbour tunnel where they threw a Chinese flag into the sea.

Pat realised that it would not be long before Beijing lost patience, already they had issued veiled threats and the possibility of military intervention seemed imminent as the head of the Chinese garrison in Hong Kong declared the military was determined to protect the national sovereignty of Hong Kong and would not hesitate to act if requested by LegCo.

Initially the demonstrators had been young people, but as the movement gathered force they were joined by those from a broader spectrum of local society, those who feared for their future liberty as the authoritarian shadow of Beijing was cast over the former colony. They included civil servants, hospital workers, white-collar workers from the city's finance sector, bus and tram drivers, all backed by major businesses and unions.

The public was behind the movement as it was possibly the last mass demonstration the city would see and many people felt it was the last opportunity to manifest their opposition to Beijing.

In spite of the apparent success with do many people responding to the organisers call, hope was low, inevitably the Legislative Council was answererable to Beijing, which was unlikely to change its podition, too much was as stake for the central government. Hong Kong was too small and the men in Zhongnanhai would not let the tail wag the dog, as they, to the ire of China's powerless neighbours, spread their military power into the South China Sea in a brazen saber rattling confrontation with the American Pacific Fleet.

Pat was grappling with the headwinds caused by the escalation of the trade war between China and the US, coupled with an easing monetary policy cycle, Brexit and the unrest in Hong Kong. The shares of INI were down, though somewhat less than other major banks as he had progressively spread the risk by broadening his market.

In addition to interests in Asia, the EU, South and Central America, and Russia, Pat Kennedy was expanding into India and North America, but that took time. As for London Brexit weighed heavily on his decisions as he watched Boris Johnson who it seemed was facing an uphill struggle.

It could have appeared incongruous that the CEO of a world class bank was braving tear gas and rubber bullets on the streets of Hong Kong, especially in view of his solid figure, which stood out from those of the slighter more lithe Hongkongers. Even though he kept clear of the mele he stood out, a curious sensation seeker caught up in the fray, with his baseball cap, shorts and sneakers. In his pocket he carried a press armband in Chinese and English if needed.

INI's investment division was amongst those of banks that oversaw billions of dollars in assets in diverse sections, from real estate to industry and distribution, from mining to oil and gas, from utilities to transport, and from agriculture to forestry industries. You name it they were there somewhere in the woodpile. INI was not as big as banking houses like JPMorgan, HSBC or City & Colonial, neither did they control the vast asset portfolios as did BlackRock, Vanguard or State Street, three investors that together controlled assets worth more than China's entire GDP.

They controlled, but did not run those many businesses and industries, though they were pointed at as being responsible, at least in part, for climate change and environmental degradation. That was indirectly true, but they were not governments, in fact they worked for governments, lending them money, financing their projects, and even their wars, as bankers had always done. They also managed pension funds, health insurance schemes, education endowments and financed home loans.

Pat Kennedy did not get involved in politics, did not finance political parties, did not judge the moral worthiness of his customers businesses. He invested his customers money in search of gain, that was his business.

Did he have a conscience when it came to the morality and legality concerning the origins of the money confided to him by investors, or how the businesses where it was placed were run? Certainly. But he was not God, not elected, not responsible for political decisions, not guilty of crimes perpetrated by corrupt men and women, or by criminal organisations. His bank functioned within the limits of the laws in vigour in the different jurisdictions where his bank carried out its daily business.

To mitigate those accusations he sponsored projects in many humanitarian fields, especially those that excited his own febrile mind, culture, archaeology, primary arts, museums, and the research linked to those fields. His more recent interests extended to future sciences, AI and genetics.

He was amused by the reaction of ecologists when he asked them who supplied the electricity for needs in the favelas of Rio, who put the oil in Delhi's tuk-tuks, supplied the fertilisers for Bangladeshi farmers, supplied wheat to Egypt, supplied chicken and porc to China, supplied jobs for the teeming billions of the third world, however lowly those jobs were, that enabled workers to fill theirs and their families bellies.

His many visits to the jungles of South East Asia and Central and South America had stimulated his interest in the indigenous peoples of those regions, their history and culture.

That large funds invested coal, oil and gas was normal, the energy sector represented a large slice of the global economy, which in spite of its deserved negative image, served humanity. If tomorrow electricity and transport were to stop, the result would be the collapse of civilization and hundreds of millions of deaths.

How humanity got there was a long story, from hunter gatherers to the builders of pyramids, empires, the first steps of space exploration ... and there was no turning back.

Could something be learned from the original peoples of the New World, or the lost civilisations they built and why they disappeared.

Could they provide the world with answers, how to invert the curve of population growth and avert apocalypse.

There were plenty of whistle blowers, cries of alarm, 'the end is nigh', but there were few realistic answers. Abandoning coal was fine for lesson giving Europeans, but what would that do for the billions of poor Indians, Africans, Chinese and developing nations?

The investment funds were accused of inaction, abstention, and even opposition to actions to mitigate climate change, from their positions in the thousands of funds they managed in oil, coal and gas companies. Those same funds also invested in environmental friendly businesses oriented towards renewable energy sources. But they were neither the law nor the police, their role was to make profits, the source of all capital since the invention of agriculture.

BlackRock Inc. employed 15,000 people, who followed markets and investment activities, it was impossible for their organisation to participate in the countless decisions made in the thousand of companies they had invested in via subsidiary funds, they had neither the technical expertise nor the manpower.

The Vanguard Group had investments in 10,000 companies with millions of employees around the world.

If economies and investments were left to countries like modern Egypt there would be no profit. It would be like building the pyramids of Giza, when the Pharaoh Khufu commandeered Egypt's labour, a transfer of wealth, not its creation, to build an Ozymandian monument, a promise of immortality, a path to nemesis

It seemed like nothing had changed when a few millennia later Egyptian debt was bought by Egyptians, diverting private investment from development, a system unchanged over countless generations, where Egyptian productivity was transformed into government debt, reducing national savings, and depriving productive Egyptian businesses and industries of investment funds.

Fortunately foreign investment funds were able step in and avoid the collapse of a country that imported most of its energy and grain, where national banks squirrelled their money into safe government projects, avoiding private investment, a situation that repeated itself over and over across the developing world.

Fortunately for nearly 100 million Egyptians, companies with vision, in pursuit of profits, like INI, Siemens, BP, Eni, Abu Dhabi's Masdar Clean Energy and General Electric were there, backed by international investment funds with their billions to invest in the country's private energy sector, rather than non-productive monumental tombs.

The call for divestment in energy and mining was a two edged sword, one that would amputate the livelihoods from millions of poor families in the developing world who worked in those industries.

THE CARIOCA SOCIETY

PAT WAS DELIGHTED to learn Henrique had adapted so quickly to his new environment, conversing easily in Brazilian Portuguese, Spanish and English. As a young banker Henrique had been quick to note Brazil was a real Eldorado and told Pat Kennedy so, which pleased the banker enormously, a country where there an ever increasing number of billionaires, who lived in their vast villas and high security condos in the most exclusive neighbourhoods of the country's large cities, but mostly in Rio de Janeiro and Sao Paulo, the homes of many of the country's 60 billionaires, whose combined wealth exceeded 175 billion dollars.

In October Pat sent Henrique on a fact finding mission, his personal emissary, to Rio and Sao Paulo armed with all the means necessary for a banker, that is no expenses spared, to meet people like Teixeira de Souza, a home construction billionaire, who told Henrique, 'We have everything, the workforce, the land, the consumers, and we are the most well-organized of all BRIC countries.'

Henrique learnt how Brazil's ultrahigh net worth individuals got richer, maintaining their wealth from generation to generation, flying around in 50 million dollar intercontinental jets, from São Paulo to Miami, New York and Paris, nonstop, there was even a waiting list for those who wanted to but a transcontinental jet.

He dined in places like D.O.M., a Michelen two star restaurant, the best in São Paulo, if not all of South America, situated on rua Barão de Capanema, known for its Brazilian specialities, where a meal cost one thousand dollars for two.

He met the rich in their vast penthouses, who travelled to their offices or beachfront villas and super-yachts in Ipanema, by helicopter—directly from the rooftops of their towers. Their homes were equipped with panic button, metal shutters on the doors and bulletproof windows and protected day and night by gun totting security guards.

They bought art in Miami, at the Art Basel fair, which was attracting more and more buyers from Brazil. He met the country's top art buyer, Bernardo Paz, who made his money in mining, and founded Inhotim one of the largest foundations of contemporary art in Brazil with the largest outdoor art museum in Latin America—ranked in the top 25 best in the world by TripAdvisor.

Money flowed into and out of Brazil easily with its free-floating currency and sophisticated stock, bond and derivative markets, facilitating exchange with China, its top customer exporting its vast resources of raw materials. Brazil was the world's biggest seller of iron ore, beef, chicken, sugar and coffee as well as being an important producer of oil and gas.

A new class of Brazilian jet setters were splashing their money everywhere spending more than ten billion on overseas shopping sprees and in Miami shops, restaurants and hotels were hiring Portuguese speaking salespeople to serve them

Henrique also discovered many billionaires kept such low profiles as to be almost invisible, their wealth lay in real estate, mines, cattle raising and many other sectors, family businesses which did not publish reports. And many fortunes were built on a dark history.

It was time to set up a branch in Brazil and Henrique would be the man to do it, if all went well. In any case the young man wouldn't be going back to Hong Kong soon given the political crisis with the riots and his arrest.

BE CAREFUL OF WHAT YOU WISH FOR

PAT HAD BEEN ESPECIALLY STRUCK by the story of the Wayyu Indians in Colombia's Alta Guajira region, one he had witnessed first hand during the salvage of the *Espiritu Santo* treasure in Colombia the previous year.

Situated on the north coast of the Guajira Peninsula was a vast mineral shipping facility, connected to the interior by road and railway, complete with cranes, sidings and berths for huge ocean going bulk carriers.

The port had been specifically built for the coal that arrived by rail from the Cerrejon open-pit mine, near Barranca, which lay 150 kilometres to the south-east, the largest of its kind in South America.

Cerrejon was jointly owned by BHP Billiton, Anglo American and Glencore, producing over 32 million tonnes of coal a year with reserves of over 5 billion.

By a strange coincidence there was a link to distant Ireland, the ESB coalpowered station on the Shannon Estuary, in County Clare. As the producer of 20% of Ireland's electricity each year, ESB imported 2 million tons of coal a year from Cerrejon. This had become the subject of a moral conundrum, since the power station was scheduled to shut down for environmental reasons, a decision which didn't go down well with the 10,000 Colombian workers who depended on the mine for their wages in one of the planet's poorest and most socially deprived regions of the country.

As rich nations fretted about the planet, countless miners worked, often in harsh conditions, to supply us with our comforts, seeing their lands ripped up and polluted for generations to come by foreign mining giants on whom the survival of their families depended. What did Irish men and women know or care about the Wayuu Indians and their communities, whose hunting, fishing and farming lands had been swallowed by the mine.

'What did pampered bourgeois liberals, ecologists and luvvie's know about those affected by their bleeding hearts,' Anna asked, 'and who would pay for the devastated landscapes left behind after the mines were closed and hydroelectric dams silted up?'

Anna had seen the ruins left by mines and steel mills in the Basque Country, and the effort to rebuild Bilbao, now reborn as a tourist destination. But who would build a Guggenheimin Barranca? That was another story.

The fact remained that in the generation to come, the population of the planet would explode, and the energy demands were such that China, India and Africa would continue to rely on coal, oil and natural gas with all the consequences that brought. That was written in black and white in BP's Outlook 2040, published in 2019.

FOUNDATION

LOLA BARTON LAID THE FOUNDATION stone at the future Campus Salvator Mundi in a public ceremony on a green field site at the entrance to a valley leading the hills to the west of the picturesque town of Curiti, between Barichara and the Chicamocha Canyon, on the Cordillera Oriental of the Colombian Andes. It was ostensible the site of a new scientific campus and research centre that would a some point become the economic driver of Cuidad Salvator Mundi, Tom Barton's town of the future.

The stone marked the centre of a large plaza, which in the future would be surrounded on the north-south sides by shops, bars and restaurants. To the west side of the plaza would be a cultural centre with a theatre and concert hall, and to the east facing the mountain would be the administrative buildings of the Campus Salvator Mundi, all of which conceived in an architecture somewhat more futuristic than the old colonial towns that lay in the region between Bogota and Bucaramanga.

The campus once completed would include a multi-sports centre with a riding club and stables, all of which would be protected by its paramilitary security force, for the moment patrolling the perimeter of the site to ward off unwelcome visitors, and would a some future point form the core of a defence force, an essential element to ensure the survival of the city in times of danger.

There was however a difference, the plans were the town would function with energy entirely generated by solar and wind power. The climate of the Cordillera was generous, 300 days of sunshine graced the summits of its

peaks and the valleys through which flowed clear mountain streams, an earthly paradise caressed by gentle winds.

Beyond the Campus site was the disused road that led up the valley to the abandoned mine where Minerales Andinos had commenced construction work, with heavy trucks rumbling up and down the resurfaced road daily.

Ciudad Salvator Mundi promised Pat Kennedy and his friends a better, safer, future far from sea coasts eaten by erosion and encroaching deserts scorched by the sun, far from the teeming hungry masses and their diseases. Climatic conditions projected for 2100 were now expected in 2050, and soon large regions of the planet, occupied by men for hundreds and thousands of years, would become inhabitable.

Pat had seen the desertic region of the Alta Guajira had spread, glimpsed the dystopian future of the Gulf of Venezuela, the flood of men and women fleeing from the dysfunctional state of Nicolas Maduro. Time was short, they could no longer wait, the time for words had passed, only actions mattered.

Colombia was still harassed by the remnants of the Farc, the revolutionary army that had fought the government in a long-drawn-out war, a vestige of the Cold War confrontation, when Cuba and its barbudos led by Che Guevara had exported Castro's revolution to the South American continent.

In five decades of bitter guerilla warfare, at least 260,000 people died and seven million were forced to flee their homes.

The signing of a peace agreement had promised a new future, but that was compromised by Venezuela's struggle to escape the clutches of Nicolas Maduro, the successor of Hugo Chavez, who had transformed Venezuela into a new Cuba, with its misery and privations, an achievement considering Venezuela sat on the world's greatest reserve of oil.

In the vast and lawless Catatumbo National Park region to the south of Bucaramanga, near to the border with Venezuela, violence reigned. Many of the former Farc combatants had taken up arms again, for multiple reasons, but often for the rich takings of crime—drug trafficking, extortion and illegal gold mining.

A new rebel group had appeared, the National Liberation Army, taking over from where the Farc had left off, taking advantage of the turmoil in Venezuela, and expanding its law as far as Guyana.

Maduro, saw the chaos to his advantage, as yet another faction, the Popular Liberation Army, battled for the control of the territory, in the same way as criminal gangs, where coca growers prospered and the jungle hid the clandestine laboratories used by traffickers to transform coca into cocaine.

The region's proximity to Venezuela, made it a perfect home for rebels, drug cartels and smugglers, controlled by paramilitary groups—Los Rastrojos and Los Urabeños, subsidised by 50 million litres of contraband Venezuelan gasoline every month, sold on the streets of the border town of Cucuta by poor pimpineros.

Colombia's president, Ivan Duque, responded by ordering 2,500 troops to the region, rekindling the embers of war, the kind that had been fought against the guerrillas of Farc.

After the end of the long confrontation with the Farc, the production of cocaine continued in Colombia. The agreement to 52 year long civil war, in which a quarter of a million died, included provisions to help peasant farmers switch coca crops and produce coffee and cacao.

However, small farmers in Putumayo and Caqueta cultivated tens of thousands of hectares of land to grow coca, the leaves of which contained cocaine, which was extracted by a crude process of mulching with diesel oil and chemicals and turned into a paste by the addition of cement.

It took about a ton of coca leaves to make a kilo of the paste that a family could sell to traffickers for about a thousand dollars. Such cottage businesses prospered often deep in the Amazon jungle.

As before refined cocaine was illegally shipped to markets in the US and Europe to meet an ever growing demand, transported by every means from containers to sailing boats, motor yachts and even submarines, not forgetting an army of drug mules on commercial flights.

Donald Trump berated Ivan Duque, accusing Colombia of shipping more drugs than before Duque became president. It was easy for Trump, he was not a poor farmer, and at the same time his country was the biggest consumer of cocaine, where addicts and dealers could be seen in full view on street corners of great citis in the US, as Pat O'Connelly had seen in downtown San Francisco

Populations grew elsewhere in the world, their vital needs grew with them, the unabated demand for fossil fuels to meet the needs of the teeming masses of men and women in India, China, the Middle East and Africa.

The efforts of a few well intentioned countries would have little effect and as temperatures rose so would extreme weather conditions with droughts, fires and floods, devastating agriculture and disrupting the production of food.

DECEMBER

1

TROUBLE IN HONG KONG

ALMOST THREE MILLION PEOPLE had voted, more than 71% of the electorate, nearly half of Hong Kong's population. Many had never voted before and the result was an extraordinary victory for the people.

'The trouble is,' Lili warned Pat, 'Beijing will never accept a loss of face.'

Totalitarian regimes never bowed to the people and whatever its projected image, Beijing was an authoritarian regime, one that vaguely reminded Pat of the Catholic Church, which had ruled the minds of Irish men and women when he was a boy, like it had for generations, a theocratic ideology imposed, on occasions, by evil old men.

Hong Kong was hit by the worst recession in a decade and the threat of its trading status being downgraded by Washington would only go to worsening the situation with Congress poised to pass the Hong Kong Human Rights and Democracy Act, giving authorities power to levy sanctions for human rights violations in the city.

Already two pillars of the territory's economy, the retail and tourist industries, were suffering as the holiday season was approaching and tourist arrivals were dropping leaving hotels and attractions struggling.

Pat feared the former colony would be finished as an international business hub if the Chinese army intervened. The Peoples Liberation Army, a strange name for oppressors, he thought, would not hesitate to crush the demonstrators—with tanks, like Tiananmen.

Who would trust Hong Kong's currency, who would be willing to buckle under the rule of law set by the men in Beijing. In the best case there would be a deep recession, but if things went really very wrong there would be a headlong flight of business and money from Hong Kong, spelling disaster for INI.

Pat as head of a vast financial business empire—as his duty demanded, followed every event of any importance across the globe. Every day decisions were left to his executives and analysts, whilst the Fitzwilliams Foundation, headed by his trusted friend John Francis, analysed geopolitical trends and key events.

He himself had, in a manner of speaking, like many of the two billion owners of smartphones, become addicted to information, prey in a mediatic battle for attention, if not minds, and it was evident to Pat, that the increasing flood of information and news had reached overload, exemplified by Trumpian fake news.

Lili's family argued, banks like HSBC and Standard Chartered had been present in Hong Kong for more than 150 years, they had survived the Japanese occupation, the civil war and the Communist Revolution. Hong Kong was China's financial window on the world, and in the long run INI would overcome any changes, it was not the moment to waver. However, that did not prevent the bank from taking measures to reinforce its position in its other markets, especially in relatively nearby Singapore.

Even if Hong Kong was beginning to look like a war zone, threatened by the shadow of the People's Liberation Army, the Hang Seng, the world's fifth most important stock market by value, remained steady, as did the Hong Kong property market—a good indicator of sentiment. Nevertheless, anticipation was a golden rule for investors, and now was the time to take action. Pat started by moving his family to London, ostensibly for the Christmas season and year end holidays.

His timing couldn't have been better, a week later an unforeseen shadow appeared on the horizon.

In the meantime, the Hong Kong elections, which had at first glance seemed positive, had in fact increased the pressure on the two sides. The Legislative Council refused to budge, and the students, now a full-blown pro-democracy movement, encouraged by the massive electoral victory, retrenched, and another week of violence shook the city, many people could not work, shops were shuttered, schools and universities closed, the MTR and bus routes were paralysed, children and the elderly we're too frightened to venture out in many districts.

What at first had seemed like a student movement was beginning to take on serious political and financial overtones, and Pat like many Hongkongers, could no longer ignore the possibility of a dramatic end to the crisis.

It was a situation he could never have imagined, a reality, and with all the consequences it brought. The crisis that had broke some months earlier, when protests were organised to fight an extradition bill that would have seen Hongkongers being sent for trial in China, now metamorphosed into an increasingly anti-authoritarian government movement with no possible good ending.

The Legislative Council, the Hong Kong governing body, was stacked against the pro-democracy camp since its head, Carrie Lam, appointed by the Central People's Government in Beijing, was looking more and more like one of those stone faced hard-line authoritarian party hacks, answerable to the faceless men in Zhongnanhai.

As the shadow cast by Beijing over the frontier darkened, fear grew, and those who could started to make plans to quit Hong Kong in the knowledge they were without means to fight. A glance at what was happening to the Uighurs in Xinjiang was a terrifying vision of what could happen to the young protesters—camps and re-education.

There was no end in sight.

The cost of intervention would be high, Beijing could not afford to pussyfoot around with Hong Kong, there was too much at stake with the Uighurs, or Taiwan, to give in to the rebels in the former British colony, the turbulent south, where Sun Yat-sen had joined the movement that overthrew last dynasty of the Middle Kingdom.

Even though Hong Kong accounted for 3% of the mainland's economy, much less than in 1997, there was no way it could prevent a forceful intervention, if Beijing moved.

ECONOMY

CAMILLE'S VISION OF SOCIETY was coloured by her education and the relatively straitened finances of her otherwise very privileged family. She was what could be described as an open-minded progressive socialist, and none of those ideas had changed since her family fortunes had been revived by the fabulous Sommières Collection and her marriage to Liam Clancy. In fact, the story of Liam's modest family background and the difficulties he had experienced during the crisis that hit Ireland in 2008, had gone to reinforce certain of her ideas and her vision of the world.

Both she and Liam, in spite of their considerable wealth, were liberals, supporting social justice and an equitable economy, militating against discrimination of all kinds, against climate change and the destruction of the natural environment, though they were not blind to the harsh realities of life.

Ekaterina shrugged when Camille asked her about Art Basel Miami, where bananas were making headlines. An artwork, which was said to be worth 120,000 dollars, consisted of a banana taped to a wall, which in an act of defiance was eaten by the artist himself, who then promptly replaced it with another banana.

'Perhaps it's a sign of the times,' said Dee, 'throw away art, or an act of desperation on the part of its creator in search of new expression?'

Ekaterina looked blank. She didn't get that kind of reasoning.

'I don't know,' said Dee bifurcating, 'all I know is things are not going well in the US, like in so many other places, when a banana taped to a wall is

said to be worth so much, and when 40% of Americans would have difficulty to pay a 500 dollar repair bill if their car broke down.'

Pat 'Dee' O'Connelly had witnessed severe poverty in the streets of San Francisco, as for Art Basel Miami it was synonymous with wealth in a country where such a large proportion of the nation's income enriched those already rich, a situation not seen since the pre-Great Depression days of Scott Fitzgerald's Great Gatsby.

The US evolving was into a science fiction writer's futuristic dystopian society, an economy and democracy of the 1%, for the 1% and by the 1%, when its richest citizens, Jeff Bezos of Amazon, Bill Gates of Microsoft and Warren Buffet of Berkshire Hathaway, controlled more wealth than the entire bottom half of the US population.

It was staggering when Bill Gates—who presented himself as a philanthropist, could order a yacht priced at 640 million dollars, when tens of thousands of down-and-outs shuffled through the streets of downtown San Francisco like a zombie invasion, just a few miles away from Microsoft's vast new Mountain View Campus in Silicon Valley, or its new AI site across the Bay in Berkeley.

One could confuse the wealth of a country with the wealth of certain successful individuals in that country. Amongst these individuals were those who invented new products and developed new ideas that fulfilled consumers needs, building new wealth through creativity and productivity. Others, however, succeeded by exploiting consumers, or their own workers, which did not increase their country's overall wealth. It was necessary to distinguish wealth creation from wealth extraction. The latter, exploiting consumers or workers, was a process whereby one individual took wealth from others.

John Francis, as an economist, liked to explain the growth of wealth, that is achieving higher standards of living, was the result of greater productivity, which was greatest when it came from the pursuit of knowledge. Wealth creation, he insisted, came from growing the economic pie, rather than trying to get a larger share of the existing pie.

The belief of conservatives, in the power of markets—the idea that unfettered markets could run the economy, had been proven to be wrong,

John believed politicians had failed to manage the transition from a manufacturing economy to a service economy, to regulate the financial sector, to control globalisation and modulate its punishing effect on weaker industries.

The other factor stemmed from Ronald Reagan and Margaret Thatcher, both of whom believed deregulation and tax cuts would open up the economy by providing incentives which would stimulate the supply of goods and services and consequently wages.

As a result, Keynesian economics, based on maintaining full employment through managing demand through monetary and fiscal policy, was replaced with supply-side economics, which argued economic growth could best be created by lowering taxes and less regulation, as opposed to demand-side economics.

Now, Trump opted for a supply-side policy with tax cuts designed to boost the economy, which seen in the light of Reagan's experience produced a long period of huge fiscal deficits, slower growth, and to boot greater inequality.

George Bush Senior called Reagan's supply-side economics 'voodoo economics'. Which prompted Joseph Stiglitz to call Trump's policy 'voodoo economics on steroids'. Trumponomics combined low taxes for the rich, financial and environmental deregulation, against a backdrop of nativism and protectionism.

Boris Johnson promised more of the same policies, it was like a contagion as populists including Le Pen in France, Morawiecki in Poland, Orban in Hungary, Erdogan in Turkey, Duterte in the Philippines, and Bolsonaro in Brazil, jumped on the bandwagon. These leaders and would-be leaders had one thing in common in that they all sought to blame outsiders for their country's problems, as nativist nationalists promoted the innate virtues of their people through so-called wolf whistle tactics.

The consequence of Trump's U-turn on the Paris Agreement would be huge social costs linked to carbon emissions. Costs so high that no single business, however large, or country however rich, could bear. Only government regulations enforced by international institutions on a planetary scale could have an impact on the reduction of carbon emissions and their existential threat to humanity.

Politics and economics were inseparable, evidenced by laws, which over the previous two decades, allowed many business heads to abuse their power, enabling CEOs and their cohorts to corner large shares of their firm's income through remuneration packages that included salaries, bonuses, pension plans and perks that included the use of private jets. It was a trend which inevitably lead to greater inequality and lower growth, making the theory of trickle-down economics risible, an erroneous supposition that suggested when the economy grows, all would benefit, even the most lowly.

The promise of a middle-class life for all following World War II was beginning to seem more and more utopian in spite of the fact Western societies were considerable better off than then. The fact was the main beneficiaries of the growth of the last quarter century were those at the very top. Whatever sector of society was examined: politics, business, industry, showbiz, even health and education, those at the top were raking it in, whilst the toiling masses worked for less.

Populist movements raised questions about the wisdom of democratic electorates when politicians set-up their nativism nationalistic platforms to attract naïve voters, who were blind to the fact that the same politicians and their banker friends had brought the global economy to the brink of ruin and were responsible for the global financial crisis of 2008. Not one banker was jailed for lack of due diligence or misdeeds, instead, their banks were rescued, directors rewarded with mega-bonuses, whilst the man in the street paid the bill and suffered in silence.

John Francis had yet to see an elite government leader serve any but his own kind, starting with his or her own ambitions.

THE IMPACT OF AI

ALL CIVILISATIONS, AFTER REACHING their apogee of power and glory, faded and died, victims of strife in the form of war, conquest, tyranny and slavery. That's what our history books teach us. What has been less described were the effects of economic and social collapse caused by environmental and technological change.

Of course we were taught about the impact of the Bronze Age and how it gave way to the Iron Age. Then there were the wars and famines, recurring dramas, from biblical times until the present. The first of those two spectres was still present—war, which had consistently brought technological progress, even if it was initially in the form of better weapons, as can be seen today, when Artificial Intelligence is employed to guide missiles and fly jet fighters.

Many global leaders, political, industrial and scientific, amongst them the late Stephen Hawking, followed by Elon Musk and Bill Gates, have warned of the dangers of AI.

Some feared humanity was heading towards singularity, a point, a singular moment in time, when the ability of thinking machines outgrows that of those who created them, and progress accelerates with unforeseeable consequences for humanity.

The former president of Google China, Kai-Fu Lee, predicted 40% of jobs would eventually disappear as AI took over, the effect of which would be massive in terms of unemployment, and the subsequent transformation of society. However, if John Francis was right, it would not necessarily be a bad

thing, his vision was of a Cornucopian society, where an abundance of all material things was produced by machines and where work became obsolete, replaced by the vocation of dedicated men and women, a privilege, perhaps a reward, and where each and everyone enjoyed a universal income, with recompenses for contributions to society and civic well-being.

Evolution had created men, Homo sapiens sapiens—after three and a half billion years of trial and error, and contrary to what our religions and philosophers told us, we are not the ultimate creation as written in the Bible—when God created mankind in his own image.

Now, humanity is about to give birth to AI, which will not only surpass human intelligence, but succeed it, dominate mankind the way men now dominate apes, or exterminate humanity, after all what use would AI have for men?

What billionaire venture capitalist Peter Thiel and Tesla founder Elon Musk foundation have in common? Both were extremely rich. Both had invested in the future of AI, the former funded the Machine Intelligence Research Institute, the latter in the Future of Life Institute. Both believed AI would be the next step in evolution, either for the benefit of humanity, or destroy it.

One of the Pat's compatriots, a certain Seán Ó hÉigeartaigh, an AI researcher, studied the philosophical questions linked to the future of AI. At the centre of his reflections was the conundrum, would AI dominate us, or vice versa? Which raised the questions of AI and consciousness, shared values and the future of humanity.

It was a common fallacy to assume that AI would always be at the service of humanity, like a dependent and respectful servant, on the contrary, could it turn against its masters?

The shadow of super-intelligent machines now hung over the humanity, accompanied by multiple dangers, the most frightening of which was the idea it could harm humanity, and that was not science fiction.

The question society had to ask itself was whether its leaders were sufficiently enlightened to understand the changes AI would bring, which would require a plan on the scale of the Manhattan Project to avoid its dangers

DIRTY MONEY

BORIS JOHNSON PREACHED A POST-BREXIT vision of the UK attracting investment by lowering taxes and fewer regulations. The question was what kind of investment? Already the City of London was a magnet for dirty money, channelled through the numerous tax havens controlled by the UK, in the Caribbean, or more indirectly via feeders such as its former colonies, including Hong Kong and Singapore.

Most people saw dirty money as bundles or container loads of cash from drug syndicates, Colombian and Mexican cartels, gangs and small time dealers, collected and laundered in an opaque offshore banking system, or through the gold markets of Dubai.

But that was was a mere cottage industry compared to the offshore network operated and controlled by the City of London, the world's largest hub for channelling dirty money, estimated at 400 billion dollars, derived from every kind of crookery invented by man, from rigged procurement to bribery, from embezzlement to the unlawful acquisition of state assets, not forgetting plain theft, by individuals and their vehicles scattered across the planet, often in poor countries, or those that were ruled by crooked oligarchies.

The idea that the City and its clients could clean up their game, open their books, was a pipe-dream, an impossible task. The honey pot was too tempting, the habit too difficult to kick for the innumerable accomplices who provided the services and means: private banks, big accounting firms, real estate agents, international banks, builders of private jets and yachts,

businesses, think-tanks, newspapers, even schools, universities, and political parties.

A vast network of vested interests working in symbiosis with the crooked beneficiaries, a network now seeking independence, freeing itself of the constraints of the EU, to make more money.

A system that drained talent away from science and industry by offering highly paid jobs in the City as wealth managers for corrupt oligarchs and their families who extorted the wealth of their fellow citizens. They distorted asset prices to the detriment of productive industry and home owners, and by doing so impoverished whole regions in the UK.

But could the UK carry out reforms alone when other candidates to replace the City looked on, lining up to fill the vacuum when it came.

As the Brits stumbled along the path to Brexit, the economy of one of the much vaunted models, Hong Kong, slumped more than three 3% in the quarter, not a good omen for Pat Kennedy.

Nothing lasts for ever, changes come and go. Hong Kong, a city that had been a growth reference for decades was looking at negative growth for the whole year as China was hit by the Trump effect.

Tourist numbers, year on year, plunged nearly 35%. Those absent were non-mainland Chinese from Taiwan, South Koreans, Japanese, Malaysians and Singaporeans, frightened off by the disorder caused by the mass protests that were wracking the city.

As the year end approached, previsions for INI's two main poles, London and Hong Kong, were not looking good for 2020, the Year of the Rat, an animal considered a protector and a bringer of prosperity in Chinese culture.

Suddenly Latin America was in ebullition, a couple of countries down from Camille Clancy's expedition demonstrators were building barricades on the streets of La Paz, the Bolivian capital, where strikers protested against election fraud, one that gave Evo Morales, Latin America's longest-serving head of state, a fourth term with just over 47% of votes, conveniently avoiding the peril of a run-off.

* * *

'The UK was the best place in the world to launder your money, if you're thinking about that,' John told Kyril with a knowing smile. 'But perhaps you should wait until after Brexit, it will be a thousand times easier.'

The City of London was the favourite hunting ground for kleptocrats, fraudsters and crooks, where they stole or hid hundreds of billions of pounds, dollars and euros every year, and the latest in that long list of criminals was Isabel dos Santos, Africa's richest woman, daughter of Angola's former president, José Eduardo dos Santos, who ruled that country for 38 years.

After having stolen money from their victims, often poor underdeveloped countries with autocratic rulers, the main task of the criminals and their intermediaries was to launder it, use it on the open market, for their own enjoyment.

It was where the City's many banks came in. London, Europe's most important money laundering hub, with readily available corporate structures registered in the UK, served as an opaque screen to dissimulate the identities of criminals and their accomplices, a national scandal deliberately brushed under the carpet by the UK's complaisant authorities.

It was child's play, any enterprising crook could go to the Companies House web site and set up a company using fraudulent information with a few key strokes from his laptop.

Until 2011, only registered firms could access the Companies House web site, firms that bore the legal responsibility for verification of the data supplied by their clients for the incorporation of new companies.

Then, the UK government, in its wisdom, decided to open Companies House to any would-be entrepreneur, allowing all and sundry to access its services via internet, from anywhere in the world, giving them freedom to create a new UK company for a modest sum with a couple of clicks and a valid credit card

Gone were the controls, suddenly it was as easy to create a company as it was to open a Facebook account. The idea was wannabe entrepreneurs would rush out to set up businesses and by doing so would boost the UK economy. That didn't happen, but what did happen was a lot of fast thinking crooks jumped in to take advantage of the new loophole to set up furtive businesses, enabling all kinds of crooks, fraudsters and bent politicians to hide their identities behind a labyrinth of screen companies.

John le Carré summed up the British position in his book, *Agent Running in the Field*, where in the words of his protagonist, former agent, Arkady, derisively speaking of the British said, 'We're special. We're British. We don't need Europe. We won all our wars alone. No Americans, no Russians, no anyone. We're supermen.'

And of Trump: 'He's Putin's shithouse cleaner. He does everything for little Vladi that little Vladi can't do for himself: pisses on European unity, pisses on human rights, pisses on NATO. Assures us that Crimea and Ukraine belong to the Holy Russian Empire, the Middle East belongs to the Jews and the Saudis, and to hell with the world order. And you Brits, what do you do? You suck his dick and invite him to tea with your Queen. You take our black money and wash it for us. You welcome us if we're big enough crooks. You sell us half London. You wring your hands when we poison our traitors and you say please, please, dear Russian friends, trade with us.'

* * *

It was early afternoon when the news came in over their satellite link that Boris Johnson had won a grand slam victory, trouncing the opposition led by that out of touch old school radical, Jeremy Corbyn. Pat Kennedy shrugged his shoulders, the markets shot up, the promise of a less regulated City would certainly do no harm to his bank, in any case the bank's unit in Amsterdam, now its EU continental base, and its historic structure in Dublin, ensured its

ability to pursue its business in both economic spheres. The idea that Johnson's victory would open the door to a Nirvana-like, anything goes, free-market, offshore base that could compete with the EU, was anything but certain

Camille, Liam and John were glum, the thought of the UK leaving the EU in a little over a month was a sad event, reversing the course of the 75 years of European integration that followed WWII, in exchange for a free marketeer vision of the United Kingdom with its possible disintegration.

Brexit came when, for the first time in centuries, a European could travel unhindered from Crete to Lapland, from Lisbon to Warsaw, crossing the culturally richest and densest collection of civilisations on earth, a kaleidoscope of languages, architecture, colourful traditions, rich tables, and peoples living together in peace and harmony, unopressed by Brussels.

Compared to the uniformity of the US, its cultural monotony, marked by the same outlets and brands wherever one looked.

Rising from the ashes of two terrible wars, Europeans had rebuilt their cities, created a union of common aspirations, open borders, prosperity, shaking of the Soviet yoke of Communism, building a new society based on cooperation, friendship, exchange and tolerance.

The United Kingdom was seduced by a loud-mouthed demagogue in the form of the beer swilling Farage, 'rhymes with garage', he told the media between guffaws and dragging deeply and morbidly on his ever-present cigarette.

* * *

As Hong Kong plunged into a deeper state of turmoil many of its residents looked for a safe haven, a place they, their family, and their money would be safe when the crunch came as it surely would.

The world was on a new path as leaders and governments became more and more authoritarian in their effort to control their more and more uncontrollable populations, empowered by the knowledge and freedom internet had given them.

It was not easy to move to a freer land as doors closed under the growing pressure caused by immigration, an age old human option when pressures became too great.

Perhaps the world had been the oyster of ancient man as he set out in search of new territories, 'empty' or to seize, a long history that changed when Europeans discovery of lands unknown to them at the end of the 15th century, starting with the coasts of Africa and the Cape, followed by the Americas, then Australia and New Zealand, and finally at the beginning of the 19th century when they began their march into the heart of Africa.

In the centuries that followed the discoveries, tens of thousands, hundreds of thousands, and millions of Europeans and others set out for those lands in search of a better life, mostly to the detriment of those who already lived in those 'empty' lands.

But there can be no denying there was space.

Today, there are no new lands to be discovered, not only that, both, the new and old, were nearing saturation point.

Now the hope of reaching a land of opportunities, already developed, rich, where a new future could be built for the lucky arrivals, faded, as pressures in those lands rose and barriers came down

As the future dimmed in less favoured nations, their rich bypassed the barriers by opting for citizenship of small countries that saw a source of revenue in selling passports in exchange for cash and investment.

It was why a strange event was organised in London, at a five-star hotel, where ministers of a number of countries gathered to promote their programmes. They were strange bedfellows, coming from the Caribbean island of St Lucia, Albania, Montenegro, Malta, Antigua and Barbuda, and Cyprus.

There so-called golden passports not only offered citizenship of the host country, but also visa-free travel to the UK, the European Union's Schengen Area, Hong Kong, Singapore and many other countries.

It was something that displeased the EU, not happy at the idea of the EU becoming a safe haven for criminals and a dirty money destination.

The event was organised by Henley & Partners, a London-based firm that promoted citizenship-by-investment programmes, offering those with deep pockets the possibility of owning a second passport, a good business that had made tens of millions of dollars for Henley in commissions gained from selling citizenship.

John Francis was not happy at the publicity attracted by certain of the bank's clients, amongst them were firms in the British Virgin Islands, where the Malaysian crook Jho Low had set up a company to buy the mega-yacht paid in part from the billions he stole from MDB1 and the money borrowed from Pat Kennedy's bank.

Low, now a fugitive from justice, held a Cyprus passport, obtained in exchange for a two million dollar investment. Cyprus, as a member of the EU, bestowed on its new citizens the freedom of movement throughout the rest of the Union. It was a lucrative business, and Cyprus had made six billion dollars in issuing several thousand passports as since it launched the scheme in 2013

A newcomer was Albania, a country with a troubled past, which was not yet a member of the EU, but hopefully soon would be and was already cashing in on the fact that Albanian citizens would have the right to live and work across the bloc once it entered the Union. The same went for Montenegro.

It was a doubtful practice that opened the door to all sorts of shady candidates, especially those to whom money was no object.

* * *

Far away from the forests of the Amazon, other human beings seemed bent on Armageddon as the sky darkened over the Middle East, the cradle of human civilisation, where the risk of a new war rose to a most dangerous level.

An attack on Saudi oilfields left dense black clouds rising above the burning oil pumping facilities of Abqaiq, the world's largest oil processing centre, after multiple strikes by unidentified missiles.

Who was behind the attack that saw oil prices leap 15%?

The world held its breath as fingers pointed to Iran. If the suspicions were confirmed the attack was insane, a provocation that would precipitate the region in a new and dangerous large scale war and just as Washington pondered a meeting with the Iranian leader to defuse tensions. The attack on Saudi Arabia's oil facilities threatened global oil supplies with more than 5% of global oil supplies knocked out.

A massive series of explosions at the huge oil processing plant which sent flames high into the sky from nineteen points of impact at Saudi Arabia's most important oil producing facilities. Evidence pointed to a concerted cruise missile attack from a direction north-west of the targets, that is the direction of Iraq and Iran, an information that contradicted claims by Yemeni rebels to the south who pointed to an attack by drones.

Whatever the geopolitical consequences it should have underlined not only the world's addiction to oil, but its concentration in one of the planet's most dangerously volatile regions, with a history of 5,000 years of conflict, where the tectonic plates of antagonistic civilisations met.

It was the underside of fossil fuels and the vast profits they brought, profits that had built palaces in the sands, profligate spending on luxuries, crumbs thrown to immigrant workers, dollars that enriched arms dealers and builders of fighter jets, smart bombs, helicopters and missiles.

Where the US, Russia, China, the UK and Israel queued up at the trough, when they weren't shooting at each other, to get their share.

RUSSIAN PALS

EKATERINA AND JOHN WERE surprised to see Boris Johnson, following his landslide election victory, accompanied by his girlfriend Carrie Symonds, turn up at a lavish birthday party thrown by the Russian billionaire Alexander Lebedev at his mansion overlooking Regent's Park.

Amongst the guests at Lebedev's vodka and caviar birthday party were former prime minister David Cameron and his wife Samantha, George Osborne, Peter Mandelson—the strange lord, Mick Jagger, Princess Eugenie, actors Matt Smith and Rosamund Pike, the model Lily Cole, comedians Eddie Izzard and David Baddiel, the artist Grayson Perry, sculptor Antony Gormley and many others.

Galling for the Britain's poor and gullible, to whom Bojo promised a better post-Brexit life, of course those who read the press were not surprised by his presence at the party, their newly elected prime minister was not a newcomer to Lebedev's bashes. As foreign secretary in Theresa May's government, he was famously photographed looking a little worse for wear on his way back from Lebedev's palazzo near Perugia, after the kind of party where gossip, intelligence and information, flowed as freely as the vodka.

Whatever else the latest bash was, it was an extraordinary demonstration of the influence of the Lebedev family on the cream of British society following Johnson's election win.

'Zdravstvuyte,' the leader of a 'people's government'.

The latest fling must have been a heart warming scene for Vladimir Putin with whom the Russian exile maintained cordial relations, in spite of past differences, when his bank was raided at a time when Lebedev backed the independent Novaya Gazeta. The fact that he maintained good relations with the Kremlin should have been a warning, especially after going as far as publicly supporting Putin's annexation of Crimea, where Lebedev owned a hotel complex in the seaside resort of Alushta at which he staged a media symposium, telling Russian state TV that biased Western media had put out a false impression of the situation in the Crimea.

Ekaterina reminded John she had spotted Maria Zakharova, Russia's foreign ministry spokesperson at Lebedev's book launch in Moscow. Zakharova's demure looks hid her reputation as a Kremlin hardliner, who had denied any Russian involvement in the poisoning of Sergei Skripal in Salisbury, even going as far as suggesting spies had kidnapped Skripal.

Johnson had refused to publish the Russia Report, prepared by the previous parliament's intelligence and security committee, which examined Moscow's influence on British politics and how the Russian elite has established a powerful lobby in the UK, jetting politicians and celebrities around on private planes to lavish parties where Champagne and vodka flowed and caviar was ladled out. When Mayor of London, Johnson had made many trips to the Lebedevs' luxurious palazzo in Ronti, Italy, as well as to their parties in London.

Amongst Lebedev's regular guests were luvvies like Keira Knightley, her husband James Righton, and Ralph Fiennes, George Osborne, recent UK finance minister under David Cameron, now editor of the London Evening Standard—owned by the Russian, Sarah Sands, who also edited the Standard and is now editor of BBC Radio 4's Today programme, as well as Amol Rajan, the former editor of the Independent—also owned by Lebedev, now the BBC's media editor.

Lebedev, the KGB-man turned banking oligarch, aka 'the spy who came in for the gold', had during the Cold War worked at the Soviet embassy in London, not far from the offices of the Independent, situated on Kensington

High Street, which he acquired in 2010, after taking a controlling interest in the London Evening Standard in 2009.

'Apropos Brexit,' John Francis cynically remarked, 'I suppose Bojo will join up with the US and Russia to invade Europe, free it from Brussels, then divide it in two occupied zones, we with the west and the Russians with the east.'

Ekaterina flashed him daggers.

Johnson, who had been expected to approve the publication of the Russia Report, compiled by a cross-party intelligence and security committee, on Russian activities in the UK, before parliament was dissolved, was suddenly in no hurry with sources saying it was vetoed with the excuse it could embarrass Donald Trump.

Curiously, as if to confirm his bias, the newly elected PM insisted there was no evidence of Russian interference in the UK democratic process.

Perhaps Johnson's presence was a way of paying back the Lebedevs, since the Evening Standard had endorsed Johnson as successor to Theresa May. But John Francis saw it differently—for a newly elected British prime minister to be seen celebrating with a former Russian intelligence officer, a graduate of the KGB's Red Banner Institute, who'd held the rank of lieutenant colonel, seemed to say the least, incongruous.

Boris Johnson was many things, an epicurean fun lover and Lothario, and why not. He did not hide the fact he enjoyed gregarity, including weekend trips to Italy, even if it meant flying as an anonymous economy class passenger, rubbing shoulders with the plebs. He was a familiar figure at the Palazzo Terranove in Perugia, guest of Evgeny Lebedev, a Russian media billionaire and socialite.

It was a strange sortie for a British foreign secretary, the third most important minister in the government, a weekend with a Russian oligarch, a celebrity bash, where well-known personalities were present, including Katie Price and actress Joan Collins, and without a security detail for Bojo.

Partying at Lebedev's restored palazzo at a time when the Kremlin was still under scrutiny wasn't exactly recommendable, soon after the Novichoc affair in Salisbury, when a former spy and his daughter were targeted by Russian FSB hitmen with the deadly nerve-agent.

Returning to London, Johnson, the foreign secretary of Her Britannic Majesty's government, had caught the attention of the tabloid press when he was seen boarding a flight at Perugia San Francesco d'Assisi Airport, in Umbria, looking very much worse for wear, dishevelled as though he had slept in his clothes, shuffling his way to the waiting aircraft. One passenger even described Bojo as weaving his way to the steps of the waiting plane 'as though he was about to throw up on the tarmac.'

It was rumoured Lebedev, the owner of the London Evening Standard and the Independent newspapers, liked to invite people who would create a spectacle at his bacchanalian parties with very important people reduced to doing very foolish stunts.

Lebedev had been a friend of Johnson's since Bojo's days as Mayor of London, at which time Boris had visit his Italian Palazzo, all expenses paid and it came as no surprise Lebedev's dog was called Boris.

Johnson could count on a certain number of Russian friends, including Alexander Temerko, an important donor to the Conservative Party, who had held senior posts at the Russian Defence Ministry and had been a top executive and director at the Russian oil and gas company Yukos.

Temerko backed Johnson's Brexit position, an event that could only favour the Kremlin, one that weakened the EU, which inevitably led to questions of Russian influence in Downing Street, considering Temerko had donated more than one million pounds to Conservative Party funds.

Temerko had risen to prominence in the Russia arms industry in the Wild West days that followed the collapse of the Soviet Union. At that time he was close to the Russian security services, as head of a state committee for military affairs, heading a strategic Russian state arms company, the now defunct Russkoye Oruzhie.

His links with Yukos went back to the time when the now dissident billionaire Mikhail Khodorkovsky owned the oil company. Things went bad for Khodorkovsky after he attempted to build a political power base for himself and was arrested and jailed on trumped up fraud charges, leaving Temerko as the only remaining Yukos shareholder, and as such he negotiated its take over by the Kremlin.

Khodorkovsky spent 10 years in jail whilst Temerko headed for London in 2005, where a Russian request for his extradition was debooted by the High Court.

Temerko had first come into public eye during David Cameron's premiership, hitting the headlines of the tabloid press after paying 90,000 pounds for a bronze bust of his prime minister friend after a successful bid at a Conservative Party fundraising event.

CHRISTMAS EVE

WANGSHU CALLED HENRIQUE almost every day, soon she would be joining him in Brazil. Leaving Hong Kong and China would be hard and that Christmas she joined her family for what would perhaps be one of the last they would spend together for a long time to come.

Wangshu's family were Christians, part of a growing minority that counted according to some estimates more than 100 million faithful followers. Their local Anglican church was founded in the latter half of the 19th century which Wangshu and her parents attended for the Christmas service.

Her three day break with her parents in Hangkou commenced with a latenight celebratory dinner at their favourite restaurant not far from the local seafood market, a guarantee of quality her father often repeated.

Christmas was celebrated by many Chinese, not especially for religious reasons, but as a time for giving and enjoying themselves. It did not compete with their traditional Lunar New Year, but was a kind of foretaste of family reunions to come when hundreds of millions of Chinese would return home, for many their sole visit to their loved ones in the year .

As Wangshu and her family enjoyed their festive Christmas Eve dinner, unknown to them, in another part of the city, a young woman was feeling unwell and running a low fever. She was one of the first persons to be infected by an unknown virus that had appeared in the conglomeration of Wuhan, of which Hankou was one of its three constituent parts.

Five days later the city authorities put out a warning, an unknown form of pneumonia had been detected in the city's hospitals, shortly after the first report concerning an outbreak of disease was transmitted to the World Health Organisation.

When Wangshu's condition showed no improvement she reported to her local hospital. After a summary examination she was told to rest and was sent home with an over-the-counter medication.

But that was to no avail, her condition worsened, not only did she start to experience respiratory difficulties, but eating drinking became painful.

By January 9, the media was broadcasting news about the appearance of a Sars-like virus, the Severe Acute Respiratory Syndrome that killed 774 people a few years earlier, which was believed to have originated in an animal and scientists were racing to discover the source of the new virus.

The first death was reported the next day along with the news the source was possibly a seafood where game—meat from different wild animals, was also sold, in the centre of Wuhan.

Wangshu was finally admitted to hospital where, despite her symptoms and the fact she had been present in a restaurant adjacent to the seafood market, she was not tested for the virus.

It was understandable, the hospital was understaffed and overflowing with panicking patients, many of whom complained of symptoms similar to those infected by the Coronavirus.

After 12 days, her condition somewhat improved and she was discharged—without being tested and without any special precautions. The same day it was announced to the media the disease could be spread between humans and the numbers of those infected exploded.

Wuhan, a city of 11 million souls, was placed under quarantine, under lockdown, all transport in and out of the city: trains, planes and buses were suspended and private cars banished from the streets.

The lockdown impacted businesses, large and small, shops, restaurants, entertainment establishments, and individuals from all walks of life

preventing them from going about their daily lives and meeting with their friends and relatives

To Wangshu the streets of Wuhan resembled a scene from a Hollywood pandemic movie with a few furtive shadows ducking into doorways when a rare vehicle passed.

At the same time frenetic work commenced on the building of a new 1,000 bed hospital to handle those infected by the disease, a week the authorities announced, and a second within two weeks.

The seriousness of the situation was underlined when the New Year festivities were cancelled across the vast country and government declared a full scale health emergency, the most serious, one which allowed quarantines and other strict measures.

Wuhan was an important transport hub where the country's four cardinal points crossed, a few hours by high-speed train to most major cities, and the gateway to nine provinces.

Pat feared the window for controlling the spread of the virus had already have closed when Hong Kong's leading figure in infectious diseases declared after a visit to Wuhan: 'I've never felt scared. This time I'm scared.' What he found was shocking, instead of finding the city on a war footing he discovered chaos and incompetence.

Streets, malls and restaurants were empty, worse still supermarket shelves were not restocked.

Five million people had quit the city before the quarantine came into effect. Fear provoked the spread of wild rumours and emergency services were overwhelmed

Pat Kennedy feared the worse was yet to come, he knew a small fraction of a very large number is still a very large number, and decided to head for London with Lili and their children whilst there was time There was no cure, no vaccine, only intensive care and antibiotics could help the seriously ill, reducing the side effects such as pneumonia

In the meantime Wangshu reassured Henrique she was slowly recovering though she was still coughing heavily and spitting blood.

Her faith in her country's authorities, already shaken by the events in Hong Kong, was in tatters. Her only thought was to join Henrique in Brazil.

2020

JANUARY

1

SHANGHAI

INI WAS A PRIVATE MULTINATIONAL investment and financial services banking group, though some of its holdings were historically over the counter banks—serving the public in Ireland, the Caribbean, and to a lesser extent the UK. Its headquarters were based in three cities: Hong Kong, London and Moscow, again for historical reasons, giving it a flexible structure compared to other similar banking institutions of the same size. Its diversified structure offered its customers a broad portfolio of services that ensured bank—client confidentiality in conformity with its century old tradition of banking secrecy via its offshore holdings.

Pat Kennedy stood at the head of INI and its 50,000 employees who worked in its branches and subsidiaries based in more than two dozen different jurisdictions.

Sitting area table in a relatively quiet corner of the M1NT Bar, on Fuzhou Road in Shanghai, Liam Clancy stared at the shark tank as he waited for Pat Kennedy. The bar was one of the top end night spots in Shanghai, situated on the roof of the M1NT Tower, 24 floors up, overlooking the Bund and Nanjing Road with a spectacular 360 degree view of the lights of the city and the kitsch skyscrapers of Pudong across the river.

The clubbers were mixed, Chinese and foreign, the younger crowd on the dance floor with the older watching from their tables.

Liam spotted Pat and waved to him.

'So this is how the younger generation spends their evenings,' Pat said, forcing his voice above the music.

Liam smiled sheepishly, it wasn't his first time in the bar, but since he was now a married man, he kept his visits strictly to business, when he joined the younger members of investment and banking world for drinks

In any case, this time around, it was Pat who had suggested the spot, which was strange as it wasn't exactly his thing.

They ordered drinks, Liam a cocktail and Pat a fruit juice mix, it was rare he drank alcohol.

They talked, admiring the panoramic view and the dance floor where a few attractive girls danced together. It was still early in the evening.

'So how is Paris Liam, and Camille, she's back from Colombia?'

'Yes Camille sends you her love, I spoke to her a short while ago, she's in Sommières, a long weekend with her parents.'

'They're well?'

'The work on the museum is almost completed Ollie tells me.'

'That's right, everything seems to be going well and Ekaterina has been keeping behind the architects and the restorers.'

Pat paused as he to stared at the shark tank.

'I suppose you wonder why I asked we meet here?'

Liam smiled politely, that was true, it was not Pat's kind of hangout.

'Well, I suppose it's discrete, here. At least people can't hear what we're talking about,' he said smiling.

Liam concurred with a smile. Sometimes the ways of Pat Kennedy were mysterious, not to say incomprehensible.

'I've been thinking Liam, you're what now, nearing forty. You're married, well-married if I may say so, a fine wife, and your business is successful.'

Liam nodded wondering what he was coming to.

'You see the bank has now become something much bigger than could have been imagined in 2007, when you were in the trading room in Dublin.'

'A lot has changed,' Liam said wincing a little as he thought back to those days when he was a young anything goes trader.

'Time has come to look ahead, we've become a world class corporate bank, and I cannot be everywhere at once. In addition to that London, the UK, is leaving the EU and there will be a lot of changes,' he paused looking at Liam intensely.

'The plan was Angus would takeover in the City, he's got a lot of experience internationally, he has spent a good many years in Hong Kong. But now London out of the EU, Brussels will be restructuring it's financial sector and we shall be expanding our base in Amsterdam making it our new European headquarters which I have decided will be better headed by Angus.'

Liam nodded

'As you know I'm CEO in London, but the reality is I can't be everywhere at once, not only that, it's time I dedicated my life to something other than making money...,' he said, then vaguely added, 'philanthropy.'

Pat had already pulled back from the forefront of decision making over the past twelve months, turning his attention to more existential questions.

Pat paused in a moment of reflection. 'That's why I want one of us to take over London—not one of those dyed in the wool Brit bankers.'

Liam instinctively sat upright.

'By us I mean one of our Clan,' he said wryly, 'someone in whom I have absolute trust'

This was something entirely new.

'That person is you Liam.'

It was cut and dry.

Pat explained Liam would have to delegate his own business for the moment, from INI he would have a vast pool of talent to take care of his business in Paris. His main task would be to lead INI's emblematic City of London bank as the UK forged a new and uncharted future alone.

It would be a daunting task making him one of the youngest CEOs of a major London bank. Pat would announce his position as CEO designate forthwith. Liam would take full control mid-year once Angus left for Amsterdam as head of INI's new European headquarters.

* * *

From his suite at the Peace Hotel on the Bund, Pat Kennedy wearily watched a morning summary of the nights events on the TV news, another night filled with scenes of violence followed by images of the city's workers clearing debris and removing graffiti.

His troubles piled up as Hong Kong entered a new and violent phase. Hundreds of demonstrators had gathered outside Hong Kong's international airport intent on provoking havoc in an effort to draw international attention to their fight following violent down-town protests.

The protests, sparked by Hong Kong's Beijing-backed government's refusal to back down on its extradition bill, had spread, to the great ire of Beijing, into a wider pro-democracy movement.

At the same moment hundreds demonstrators gathered in the city centre outside the British Consulate, bizarrely waving Union Jack flags and chanting God save the Queen.

In the city's commercial district fire fighters struggled with a huge fire that burned for more than an hour as the city, previously reputed for its easygoing lifestyle and prosperity, descended into chaos with mob rule replacing the tourists and shoppers on its streets.

Hardcore demonstrators had hurled molotov cocktails at government buildings. Police riposted with tear gas, aimed high powered jets of water mixed with dye from water cannons at the rioters, pursuing them into the city's MTR, where they pepper sprayed travellers and demonstrators alike.

The violence was racked up a degree when police fired two warning shots into the sky. More than 30 people were admitted into hospital with injuries following the night's clashes.

Beijing held its breath and in an attempt to strike fear into the demonstrators, its state news agency, Xinhua, posted a video on Twitter of armed Chinese riot-police holding anti-riot drills in Shenzhen just across the border from Hong Kong.

THE ROAD TO RICHES

FOR SOME PEOPLE MAKING THEIR first billion took a whole lifetime, but Liam Clancy made his in just a few years. He had been a slow starter, his curve long and flat before it went ballistic.

He, like a few others, had made it to the bottom rung of a very exclusive club, that of the very rich, which counted amongst its members household names such as Jeff Bezos with Amazon, Bill Gates with Microsoft, Larry Ellison with Oracle, and Mark Zuckerberg of Facebook. Lesser high profile figures included Liam's friend and mentor Pat Kennedy along with the members of their Clan.

The Clan members were part of a new class of billionaires who had made it inside a decade, in contrast to Gates and Ellison, who during the personal computing boom of 1990s, had taken much longer in relative terms to make their first billion.

As for old school investors like Warren Buffet, Zara founder Amancio Ortega, Mexican telecoms tycoon Carlos Slim Helu and casino baron Sheldon Adelson, it had taken them decades to accumulate their respective fortunes.

The total number of billionaires worldwide exceeded two thousand with a combined wealth that would soon hit the one trillion dollar figure.

What had changed a club long dominated by Westerners was the arrival of newcomers from Asia, amongst them were Jack Ma of Alibaba—worth near on 40 billion, Ma Huateng from Tencent—also worth 40 billion, and the

Indian business magnate Mukesh Ambani who had recently toppled Jack Ma as Asia's richest man.

France's Bernard Arnault, joined Bezos and Gates at the top of the list, each with a fortune of 100 billion dollars, which could be measured, in more human terms, as the life time's earnings of 3,000,000 average Americans. In Arnault's case, his fortune was worth more than 3% of France's economy.

Just or unjust, whatever, there had always been pharaohs.

Pat Kennedy's fortune was now approaching 30 billion dollars, which was more due to the recent explosion of asset values and financial markets than his own efforts. He was no Donald Trump, Pat studiously avoided upsetting the apple cart, as he liked to say, in fact the less he interfered, or the more he was absent, the faster the worth of his bank and its investments grew.

Money attracted money as every member of the Clan could testify, and the same rule was valid for most of the two thousand plus billionaires spread across the planet.

There were not only men in that exclusive club, there was also China's richest woman, Yang Huiyan, not yet forty years old, vice-chairman of China's largest property developer, Country Garden Holdings, who over the course of the first 96 hours of 2018 had seen her fortune rise two billion dollars, thanks to a surge in the value of her company's shares recently introduced on Hong Kong's Hang Seng Index, which had incidentally earned Pat Kennedy's bank, INI, a tidy commission.

Yang's younger sister was a friend of Lili's. Yang, the daughter of self-made Cantonese property developer, who like many of the rich was mediashy, became China's richest person in 2007, when she was just 25, when her father had transferred 70% of his holdings to her before taking Country Garden public in Hong.

A NEW EMPEROR

THERE WAS LITTLE DOUBT ABOUT the accuracy of Pat Kennedy's analysts. The report that had lain on his desks for some weeks was a constant reminder, that whatever else happened, or momentarily turned his attention, at the end of the new decade China was set to become the world's number one economic power, which explained many things, starting with Donald Trump's trade war designed to put a brake on the Middle Kingdom's ambitions.

Over the previous four decades, China's economy jumped from 2% to 15% of the global wealth, dwarfing countries like the UK and France, making Boris Johnson's post-Brexit ambitions puny.

Xi Jinping's target was no less than world leadership by the middle of the century, its arbiter. And not only in economic affairs, but also militarily, leading the conquest of space, and in science and technology.

Xi's New Silk Roads project was conceived to meet all of China's huge needs, in one direction a continuous supply of natural resources, in the other access to the world's markets, a network of maritime, rail and energy routes, a trillion dollar investment.

It seemed that only an unforeseen event could stop China, a proverbial black swan, and as things stood there was nothing on the horizon. But by definition a black swan did not exist, until it appeared.

There were few obstacles to Xi's ambition, at least at home, the recently amended constitution ensured his power indefinitely. In addition technology gave the age old dream of total control a new meaning—thanks to artificial

intelligence and surveillance techniques, including facial recognition, which would have each individual citizen under quasi permanent observation, the realisation of George Orwell's 1984, each person watched by *Big Brother*, from birth to death, every detail recorded, from payment of taxes, to credit and reimbursement of debt, respect of law and public order, and family and leisure activities.

Strangely it recalled to John's vision Cornucopia, a workless society, a system of privileges, rewards and punishments, and one that would ensure social adhesion

In short a totalitarian system.

The question, as always, was what came first, the individual or collective interest, where should the line be drawn.

Pat's deep interest in history told him there were many roads to the future, many models of society. In the past the human ant heap had adapted to change and had done so since the dawn of civilisation.

He looked across the ocean to the world that had existed before Columbus, nothing was more striking than the difference between the civilisations that clashed in that confrontation between two worlds that changed history.

Even though Xi's China was intolerant of deviation, it was not that different to that of the West, after all it had brought prosperity to hundreds of millions of its citizens, forceably dragging them from the misery of a dying sclerotic imperial system, which was more than the USSR had done for its citizens in the dystopian world invented by Lenin, Stalin and their henchmen.

China's leaders were now turning their attention to the problem of their country's environment, which had been deeply degraded in the race to industrialisation and modernisation. Already the country had become the world's largest market for electric battery powered vehicles, and was now planning its transformation towards hydrogen with a plan to put one million low emission hydrogen powered cars on its road by 2030.

TROUBLE AFOOT

PAT KENNEDY WAS BEGINNING TO seriously worry about what was happening in his adopted home, as television flashed Hong Kong street scenes worthy of a Bruce Lee gangster film, images of hundreds of white-shirted triad members rampaged through the city's MTR transport stations, brutally attacking all those who had the misfortune to cross their path with bamboo poles and metal pipes.

It reminded him of recent scenes he had witnessed in Paris, when Yellow Jacket protesters had sackaged the Champs Elysée, which in appearance seemed dangerous, in reality more impressive than anything else, the usual French reaction to unpleasant political decisions.

Hong Kong was however different, and Zhongnanhai, the official residence of Xi Jinping, General Secretary of the Communist Party of China, situated in the Forbidden City at the heart of the state apparatus, was not very happy with the development of the situation, and its reaction could be violent as seen by its obvious instrumentation of Triad-like mobs, attacking innocent passers-by in downtown Hong Kong.

China's great power stance was embarrassed by the events in the former British colony, coming just as Beijing was flexing its muscles in the South China Sea and the Straits of Taiwan

Strangely enough Hong Kong's police were mysteriously absent and emergency services nonresponsive to the thousand of calls from the public as frightened and injured Hongkongers sought help and the usual calm of the city shattered.

The cause of the riots was as usual the complaisance of the Special Region's governing body, the Legislative Council, LegCo, vis-à-vis Beijing, dominated by the pro-Beijing camp, under the leadership of Carrie Lam, LegCo's chief executive,

To outsiders the reaction to the new laws could have seemed exaggerated, after all Hong Kong was now a Chinese territory, even if it was a Special Administrative Region according to the agreement signed in 1997 between Beijing and London, which foresaw a 50 year transition period, of which nearly half had passed.

To Pat it was an illustration of not only how small events could have great political impact, but was also indicative of the incapacity of the system and its law enforcement agencies to control events without resorting to violence.

Pat soon got a taste of the impact a large scale urgency could have on the vast country when a new broke of a viral infection in Wuhan, 1,500 kilometres to the north on the Eve of the Chinese New Year.

Carrie Lam's reaction was to announce the government would raise its response to its highest level, emergency, closing schools for two weeks, in the hope of preventing an epidemic of the deadly coronavirus.

The reaction to the threat was a contrast to Hong Kong's other drama some weeks earlier when determined demonstrators broke into the Legislative Council building and tore down portraits of leaders, sprayed slogans on walls and draped a British flag across the desk of Andrew Leung, President of the Legislative Council.

The images from Wuhan showed another kind of reaction as the contagion spread, fear and helplessness, as the government in Beijing raised the state of emergency to its highest level, isolating Wuhan, cutting road, rail and air links with the rest of the country, at a moment that should have been a period of happiness and rejoicing to celebrate the Year of the Rat.

News that China suspended all tours, domestic and overseas, increased anxiety and people quit the streets as the virus started to spread.

Pat looked up the meaning of the new virus, one that infected animals and people, an RNA Coronavirus that broke into cells of its host and used them to reproduce itself.

It sounded like something from a zombies movie.

GOODBYE EUROPE

AS UK PARTIES FOUGHT OVER BREXIT or not to Brexit the reasons for the crisis were overlooked as was the meaning of the European Union and the extraordinary benefits it had brought to post-Cold War Europe which was enjoying one of the greatest periods of peace and prosperity in its long history.

That said many Europeans and Britons had missed the boat for a number of complex reasons, and amongst them were those who voted to in favour of the UK quitting the EU, including factory workers, pensioners and those nostalgic for a past, which if examined was much grubbier, thought Pat Wolfe. He knew, he'd lived in those days, in soot begrimed smoggy London, in a class ridden society where few, very few, working class kids ever got to university, where continental holidays were reserved for the privileged, where news was broadcast by a small number of radio and TV channels, where hundreds of thousands of men worked in coal mines, where few working class families owned cars. Yes, that was the UK under Harold Wilson and his predecessors of all political leanings.

On January 1, 1973, Pat Wolfe had already taken advantage of Britain's new membership of the EU by moving to France, to take up a new job as an ambitious young engineer who had already visited the four corners of the planet in the course of his work. Today that seemed banal, but then it was an extraordinary exploit for a 32 year old from a very ordinary not especially privileged London family.

It was thanks to a series of chances linked to bring in the right place and at the right time, including meeting the president of the high-tech American firm who hired him to set up an office for them in Europe.

In the 40 years that followed he watched the transformation of Europe, from Helsinki to Lisbon and from Dublin to Moscow. It was impossible to deny that almost everyone benefited from those years. He witnessed the fall of the Soviet Union and the rise of China in the course of his many travels in the pursuit of business.

So what made those who voted for Brexit do that? Why were the divisions so deep?

Was it the fault of globalisation, deindustrialisation, immigration, austerity, or post-imperial depression?

The UK emerged from WWII victorious with its industrial capacity relatively intact. The postwar economic miracle and full employment had heightened expectations for a long period of prosperity.

It contrasted with the rest of Europe which was harder hit by war, suffered defeat, occupation and large scale destruction.

The British Empire was transformed into the Commonwealth, over which Queen Elizabeth II stood as a symbolic figurehead, giving the UK aura of greatness. The West won the Cold War, and Francis Fukuyama published his book The End of History.

At the same time globalisation commenced slowly as low cost labour attracted manufacturing to Asia.

In 1997, Tony Blair, as leader of New Labour was elected and Cool Britannia was born. That came crashing to an end in 2008 with the Financial Crisis and the quasi collapse of the British banking system.

From the ashes rose platform capitalism and it's variants in the shape of Amazon, Uber and Deliveroo, and if that was not enough there was China,

which attained maturity, casting its long shadow over manufacturing, from iPhones to just about everything else.

If it hadn't been for its voice in the European Union, Britain would have become a second rate power. The only trouble was they did not know it

The leaders of the six founding nations—West Germany, France, Italy, the Netherlands, Belgium and Luxembourg, signed the Europe Declaration in 1951, leading to the foundation of the European Community. It stated that the signatories 'give proof of their determination to create the first supranational institution and that thus they are laying the true foundation of an organised Europe', in which the institutions of the embryonic EU would operate over and above national politics.

Of course the UK didn't need Europe in 1951, it was still bathed in the glow of victory and the sense of empire, even if The Jewel in the Crown had just gained its independence.

Europe had failed to convince, not only Britain, but also the rest of its members, that together they formed the most powerful economic force on the face of the planet.

Disillusioned voters, for the most part older, ill-informed and less educated, blamed the EU for all their ills, decided by referendum, to quit the Union in 2016.

Four years later, after a hard fought rearguard action by the Remain camp, Boris Johnson led the UK out of the EU at the end of January 2020.

Boris Johnson planned a trade deal with the US to compensate for the loss of the EU market, blindly ignoring the fact that 45% of British exports went to the EU and 53% of its imports, compared to 18% and 11% with the US.

Changing that would at best be a very uphill if not impossible task, one that would cost the UK dearly.

A QUESTION OF MORALITY

FASTER THAN COULD BE IMAGINED society was being transformed into 'us and them'. Camille explained, 'us' were people like her family, who had been used to their role, in Sommières, where for generations they had been the ruling class, at the top of the heap in their château, their family home surrounded by hundreds of hectares of rich land worked by 'them' who lived the houses owned by the châtelain that dotted his land and those in the nearby village. No one questioned the distribution of roles, 'us', the curé, local notables like the doctor, lawyer, merchants, shopkeepers, school teachers, tradesmen, craftsmen and farmworkers. It was a system that had functioned, in the case of Camille's family, for near on one thousand years.

Liam remarked the Revolution had probably changed that, but not as much as history would like us to believe. After the Revolution, Napoleon introduced a great many reforms, and life continued more or less as before.

Camille's family was almost untouched in their daily life by the industrial revolution in the North, though the railways and then steamships brought new prosperity to her family, as did France's colonies, especially Indochina.

In more recent times her family fortunes faded, slowly. 'Don't get me wrong,' she told Liam, 'with our château and estate we were not about to become homeless, but the world was changing fast and we had not moved with it.'

When Liam came into her life everything changed. How that happened is a long story, but the important thing was the contrast between Liam's background and her's.

It was said that 30,000 middle to old aged white men ruled the UK, 0.1% of the population. It was no doubt the same in France and most other countries of the world, though they were certainly not all white, they owned more than the tens or hundreds of millions of their fellow citizens all together, enjoyed more privileges, and probably had more fun than the other 99.9%.

Nothing had changed since George Orwell wrote, 'We have got to fight against privilege, against the notion that a half-witted public schoolboy is better for command than an intelligent mechanic.' He argued that England was governed by an 'unteachable' ruling class that too frequently escaped into 'stupidity'.

He was wrong, however, when he said only a socialist revolution could unleash the 'native genius' of the English people. Where, 'the bankers and the larger businessmen, the landowners and dividend-drawers, the officials with their prehensile bottoms, will obstruct for all they are worth'.

After all he was a Communist at a time when Stalin was Britain's ally in the terrible struggle against Hitler. He misguidedly imagined the emergence of a new middle-class, one that blended in with the old working class, bringing forth 'new blood, new men, new ideas', it was a pity that the Labour Party, led by Jeremy Corbyn, an old time Marxist, not learnt the lesson.

Orwell saw England as a 'rich man's paradise', it was and still is the best part of a century later, still entrenched in privilege and class, a land where inequality and poverty continues to reign, obsessed by enforcing codes of behaviour calculated to create a sense of overpowering deference. At the summit of the structure the royals, flaunting their extraordinary privilege and wealth, lauded by the media, fawned upon by the people, a family that had done absolutely nothing to be where they were, one with more than its fair share of dead beats, from, in recent times, the Duke of Windsor to Margaret, Anne, Andrew and a confused Harry.

The UK lurched towards a pre-Christmas election and the climax of its badly thought out Brexit, led by one of the strangest prime ministers it ever had, in the form of Boris Johnson, a public schoolboy camping the role of Winston Churchill, playing with the future of millions people, those whose future had been put in jeopardy by another of his Johnson's class, David Cameron

The memories of empire, the vestige of which was a very loosely knit group of former colonies and possessions, grandly named the Commonwealth, which threatened to submerge the former seat of the empire with its teeming millions, often portrayed by writers born in its lands as a replication of the British class system, writers who lamented over their personal miseries as students in bedsitters, ignoring the fact that countless other students lived like them, forgetting the days when millions of miners and steelworkers slaved in pits or before furnaces to provide their electricity and comforts, minimal though they were. They were not just 'poor wog(s), literally starving, and very cold', they were like many millions of Britons slaving in their class ridden society.

The utopian society offered by Johnson was a pipe dream invented by his fertile mind, who with his slogan 'Get Brexit Done', imagined he would transform the UK into a Singapore-on-Thames, in the forlorn belief he could make Britain great again. Highly improbable given so many other populist leaders had failed, given the mountain of difficulties and competition facing modern societies.

ANOTHER OLIGARCH

THE ROYAL COUPLE STAYED AT the Mille Fleurs estate in North Saanich in British Columbia, Canada, an idyllic retreat with breathtaking views and private beaches, owned by Frank Giustra, or his friend, Yuri Borisovich Milner, a Russian oligarch, or perhaps both.

The story interested at least three of the Clan members, firstly Pat Kennedy, who had been dubbed Knight of the Realm by the Queen of England herself; Liam, now the son-in-law of a French nobleman; and Ekaterina, John's Russian wife, who, if they had anything in common with the royals and the oligarch, it was their considerable wealth and the link to Yuri Milner.

The arrangement at Mille Fleurs was set up by the Canadian music producer David Foster, a friend of the oligarch. But what was the link between the couple and Foster? Well it's not complicated, Camille told them, Foster, aged 69, five times married, the fourth was top model Yolanda Hadid, mother of Gigi Hadid and Bella Hadid. His fifth wife, Hollywood actress Katharine McPhee, aged 35, went to high school with Meghan in Los Angeles. The couple were married at Saint Yeghiche an Armenian church in London's Kensington district.

The 18 million dollar house lay on a point of Vancouver Island, about 100 kilometres south of the city of Vancouver itself, just a few kilometres from the dividing line between Canada and the US in Swartz Bay.

Foster's links to the world of showbiz were considerable. Himself, he started out as a pop musician, before graduating to businessman in a joint

venture with Warner Brothers and his own record company. In 2010, he was nominated to the Songwriters Hall of Fame, and then Hollywood's Walk of Fame.

The stars Foster produced for included: Alice Cooper, Christina Aguilera, Celine Dion, Whitney Houston, Jennifer Lopez, Kenny Rogers, Rod Stewart, Madonna, Olivia Newton-John, Michael Jackson and Barbara Streisand.

Yuri Borisovich Milner's history was not unlike that of Ekaterina's, the son of privileged intellectuals, though he was older and his parents were Jewish, he studied at Moscow State University, then went on to work at the Lebedev Physical Institute, one of the institutes of the Russian Academy of Sciences.

Milner then quit Russia for the Wharton School after which he embarked on a business career when he was made CEO of Alliance-Menatep, an investment brokerage company belonging to then oligarch Mikhail Khodorkovsky, during the days of Boris Yeltsin, when Russia resembled the Wild West. By 1997, Milner was the deputy chairman and the head of the investment division of Menatep Bank, around which time John remembered Menatep was perceived by the international banking community crime linked.

In 1999, he set up an Internet company, a trajectory on which ten years later with his Mail.ru Group, he succeeded in launching an initial public offering on the London Stock Exchange with market valuation of 5.6 billion dollars.

As co-founder of the Breakthrough Prize, which awarded top scientists in a glitzy ceremony, each laureate receiving three million dollars, Miller's worth hovered around four billion dollars. His DST Global private investment fund held an 8% stake in Facebook and 5% of Twitter, which he sold at a substantial profit. Other investments included: Alibaba, WhatsApp and Spotify.

Milner as Russia's most powerful tech investor enjoyed close ties to Vladimir Putin and the backing of the VTB, state-controlled bank, and that of Gazprom's Investholding in his projects.

Thus indirectly, Russia had a toehold on Britain's royalty, in addition to its presence in the City of London, and its links to the Conservative Party, now led by Boris Johnson.

Milner's reach could be measured by the star-studded guest list on his mega-yacht, the Andromeda, which was registered in the British Cayman Islands, to a company called Proxima Y Ltd, which shared a PO Box with his investment fund DST Global.

Ekaterina first noticed Milner's wife, Yulia, when she held exhibitions around the world and, in 2007, participated in the prestigious Venice Biennale, at which she was the youngest artist present with her digital and multimedia art works.

'They live in California, in a one hundred million dollar mansion in Los Altos,' remarked Ekaterina.

'Jealous?' said John.

'No, are you?' she replied haughtily.

'Badminton players,' noted John ignoring her with a smile.

A BLACK SWAN

IT WAS WORSE THAN A HOLLYWOOD zombie movie. The virus spread like lighting. On January 7, the World Health Organisation announced a new virus had been identified. The first death occurred in China January 11

The WHO said the Coronavirus could be the 'Disease X', a pandemic that wreak havoc across the world, one that could kill tens of millions.

The same day the number of cases in Italy rocketed and financial markets panicked, the country's MIB Index dropped a whopping 6%, the VIX shot up 8% the following day, gold rose to a seven-year high, and oil prices plunged. By the time Wall Street closed that same evening the Dow Jones marked its third worse point drop in history.

The crash came after Wall Street's main stock indexes had risen to record highs on a wave of optimism that the global economy would continue on its upward path after an initial hit.

More than one trillion dollars had been wiped off world stock markets in the space of 24 hours after Italy's industrial heartlands Lombardy and Veneto went into lockdown with the announcement top club football matches would be played to empty stadiums and Juventus shares falling 11% before trading was suspended.

The rest of Europe followed suit with Frankfurt and Madrid falling by 4%, Paris 3.9% and London 3.3%.

Technology companies were hard hit by the sell-off that Monday with Apple down 4.8%. Airlines and cruise ship operators also slumped with American Airlines losing 8.5%, Carnival 9.4% and Royal Caribbean Cruises 9%.

Over the next four days the markets continued to fall as the disease spread and by the time markets closed in New York, Friday evening, the rout had reached epic proportions with the Dow marking up its biggest points loss in history, bringing its losses to 12% and the end wasn't in sight.

It was the worst fall since 2008 at the onset of the financial crisis.

If that isn't a feekin black swan event, then I don't feekin know what is, Pat mumbled to himself as he watched the Wall Street closing bell on Bloomberg television, at his home on Cheney Walk in London where he and his family had taken precautionary refuge.

It was one of those events that marked a generation, like the 2001 attack on the World Trade Center in New York, or Lehmann Brothers in 2008, but in slow motion.

Suddenly Brexit wasn't looking like such a good idea thought Pat with a grim smile, as fears of the global economic impact would hit the City of London as more and more cases of the virus were reported from the Middle East as it spreads to Iran, Iraq, and Kuwait, raising fears the global economic impact would be more severe than initially envisaged.

Already warnings were coming in from big businesses with Jaguar Land Rover having to fly components out of China in suitcases as factory shutdowns brought production lines to a standstill.

* * *

Pat setup a temporary base in London when the news from Hong Kong worsened, the virus spread and the economy had ground to a standstill transforming Hollywoodian images of Contagion into reality.

The offices at the Gould Tower had been INI's headquarters before he moved to Hong Kong and it seemed like nothing had changed as his chauffeur drove him into the City from Cheyne Walk each morning.

Panic had broken out in Hong Kong as rumours galloped with consumers buying staple goods, border crossing points with the Mainland were closed, airlines slashed flights in and out of the territory, port authorities closed terminals and cruise ships were quarantined.

Cathay, Virgin, American, United, British and Air France joined the list of companies that suspended links to Hong Kong and China.

Supermarket shelves were empty as as not only masks disappeared, but foodstuffs like rice and packet noodles were running out.

Hotels emptied as tourist arrivals came to a stop, shopping malls were deserted, and trade dived making it the worse crisis since 2003 when the city was hit by the Sars epidemic.

It couldn't have been worse coming hot on the heels of the demonstrations, a full scale recession was descending on the city as economists slashed their growth forecasts as consumer spending and tourism went into free fall.

Fears that it could get much worse grew if the spread of the virus was not brought under control and a Wuhan type situation, capital of Hubei Province, the home to 60 million people, developed with a full scale lockdown.

Soon the whole region was impacted as the flow of Chinese tourists to Thailand dried up, a country whose tourist arrivals had grown to 2.7% of GDP from China alone.

According to Fu Yu of the University of Macau, there were striking differences between the Sars virus of 2003 and the Wuhan Coronavirus: 'The first case in both incidents appeared around December; both local governments involved (Guangzhou and Wuhan) concealed information on the epidemic for a long while; both governments falsely claimed the viruses were not infectious or claimed there was no human-to-human transmission; both government held large gatherings with tens of thousands people

involved during the critical early transmission period; both incidents concerned the illegal sale of live wildlife, but both local governments had turned a blind eye to that illegal trade.'

The first case reported in Wuhan on December 31. Within a week 60 suspected cases were declared and one person had died.

By January 16, two were dead and 41 cases confirmed. At the end of the month, more than 23,000 were infected and over 80 dead, a full scale epidemic had taken hold of the city and its surroundings.

The death rate was in the order of 2%, comparable to the Spanish Flu pandemic in 1918, which swept the world killing tens of millions.

Yes it's a fucking blood bath, Pat mumbled to himself as he dragged himself off to bed, and it's just the beginning, maybe it's time to head for South America.

9 PANDEMIC

THE KENNEDYS HAD SPENT SATURDAY evening at John's place, a few houses down the road, where Ekaterina had organised a buffet dinner for Padraig and Anna who were in London for the weekend, to forget the Coronavirus and politics, talking about their different projects.

Anna bubbled over as she informed them Spain and Mexico had at long last signed a memorandum of understanding concerning the search for the *Nuestra Señora del Juncal*, a treasure ship that had sunk in a storm in October 1631 on its return voyage to Spain loaded with more than one hundred tons of gold and jewellery.

She told the story of how just 39 of the 300 persons aboard survived the storm to tell the story of the tragedy.

Anna, as an underwater archaeologist, had been invited to join the team of Spanish experts who would participate in search for the *Juncal*, a project that had been the object of two decades of research and discussion, finalised after Spain and Mexico had concluded an agreement on their common underwater cultural heritage.

As a consultant for Spain's National Underwater Archaeology Museum, Anna had worked closely with its equivalent, Mexico's National Institute of Anthropology and History. Her experience with the excavation and recovery of the *Espiritu Santo* would be invaluable plus the fact and Pat Kennedy had offered the use of *Las Indias* in the salvage operations.

It was then the turn of Scott Fitznorman who had just returned from Cairo. He enthused about the new billion dollar Grand Egyptian Museum, scheduled to open later in the year with nearly 100,000 objects on display, including some 5,000 from Tutankhamen's tomb.

He told them that more than 90% of the construction work was completed and a great many artefact had been transferred to the new site at Giza.

It was late when Pat and Lili returned to their place on Cheney Walk, just a few doors from John's home. As Pat opened the door his phone buzzed. It was Angus calling from Hong Kong.

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'Have you see the news Pat?'

'No,' he replied.

'The shits hit the fan Pat.'

'What,' exclaimed Pat wondering what he was talking about.

'Switch on Bloomberg. The markets gone wild, selling everything.'

'How come?'
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'The Saudis have started a price war with Russia, the Crown Prince will to flood the markets.'

'They want to strangle shale oil.'

'Right.'

'I'll speak to Sergei.'

Pat went to his office, zapped his Bloomberg. Red was flashing everywhere. Oil had plunged 34.54%, TOCOM oil down 32.49%, markets were by a frenzy of panic selling with Footsie futures down 8,63%, Dax 8.05% and Nasdaq futures -4.82%. Gold was up to 1700 dollars.

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'Okay Angus, have you spoken to Liam?'
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'Not yet.'

'I've just left him. I'll call him. He won't be home yet.'

'Fine'

'Don't panic. I'll get into the bank early with Liam. Collect all the info you can and we'll set up a video conference to decide what's next.'

It was nearly three in the morning when Pat turned in setting the alarm for six when he would head into the bank's HQ at the Gould Tower in the City.

He had difficulty sleeping as he feared the tipping point was at hand, with a market crash added to a pandemic what happened next was anyone's guess.

He had difficulty sleeping, the market was in uncharted territory, was this the tipping point he feared, he had planned for but hoped would never happen.

As he fell into a restless sleep Vincent van Gogh's Wheatfield with Crows drifted into his dreams, the crows reassembled black swans, it was the artists last painting before he shot himself, feekin black swans he said speaking to himself looking up at the dark sky, above a wind swept cornfield, cut by a road leading to nowhere. The swans—a market crash, a pandemic, he tried to figure out what the others were—the bankruptcy of American shale oil producers, transport disrupted, factories closed, stalled consumption, economic collapse, what happened then was anyone's guess.

Saudi Arabia and Russia could weather the storm as demand dropped vertiginous and prices collapse. Some ecologists said it would change the way we consume fossil fuels, but what about the small oil producing nations, their revenues would collapse tens, hundreds of thousands would lose their jobs when oil exports halted. Those countries like Nigeria and Angola would be strangled and social order would collapse.

There was a rush to liquidity from fear, to cover margin calls and dump travel linked stocks. It was strange there was no rush to gold and government debt, instead the rush was into cash. They were facing what John warned was extreme market dislocation.

John feared a total lockdown, he consoled himself by remembering Shakespeare had to quarantine himself during plague outbreaks whilst he wrote *King Lear*.

FEBRUARY

1

BUNKER MENTALITY

WHEN THAT PERENNIAL ECONOMIST Nouriel Roubini, who came to fame after predicting the 2008 crisis, suddenly popped up, John was comforted in his belief that something extremely serious was in the making.

It was evident this time around few needed or even heeded Roubini's dramatic new warnings. It was clear to even the most obtuse that the shock to the global economy by the Coronavirus would have deeper and longer lasting effects than the 2008 global financial crisis or the Great Depression, both of which had taken time to impact the world economy, whereas the effect of new crisis resonated almost instantaneously, auguring the collapsed of world GDP and the frightening prospect of unemployment reaching 20%, as the US Treasury secretary, Steve Mnuchin, had warned.

It came at a bad moment in the run up to the US presidential elections which could encourage America's enemies to attempt new adventures, not to speak of the troubles it could engender for Boris Johnson's Brexit.

It was a fatalistic moment spurring certain to pull out their plans for the collapse they had feared and predicted they included Cold War bunkers in South Dakota or in Eastern Europe that had been a long-standing attraction for tourists, and which had more recently found a new life, refuges for collapsonauts of all ilks, preparing themselves for the coming apocalypse, the breakdown of law and order, that until so very recently was the theme of

Hollywood disaster movies featuring imaginary pandemics and zombie invasions

Perhaps the spectre of all out nuclear war had receded, though there was still the risk of local war or accident with people like Kim Jong-un and Ayatollahs of all shades. The real risk lay in civil disorder provoked by climate change, economic collapse, pandemics or natural risks, and there were plenty of high-net-worth individuals willing to invest in high-security shelters to protect themselves and their families from the multiple risks taking form on the horizon.

All of a sudden it was happening, and it wasn't difficult to imagine looters if not zombies roaming the streets. a new real estate market for enterprising individuals catering for the seemingly unwarranted fears of survivalists. But were they unwarranted?

Scattered across isolated regions of the US were the vestiges of past wars, army bases, strategic control centres, rocket silos, weapons storage facilities, vast underground structures in reinforced concrete with huge steel doors designed to resist the explosion of tactical nuclear weapons.

Amongst the many companies in INI's Panama portfolio was Salvos Holdings and as the name suggested it was a holding company specialised in the construction of community retreats where the rich could weather the storm in the style and comfort they were used to.

Their sites in Colombia and Ireland offered the protection of the mines cut deep into the mountains protected with automatic airlocks and blast doors. The ultimate protection.

But what was the use of protection if after the apocalypse there was nothing to permit the survivors to resume their lives. The itself was a bunker, a bomb shelter, where the community could survive the initial impact and the fallout of the collapse. It was why the campuses, Salvator Mundi Ganay and Salvator Mundi Titian, seats of knowledge and learning, stood at the centre of Pat Kennedy's plans, the foundations around which

future cities would be built. Arks that would save all that was valuable of human civilisation

Pat did have time for conspiracies, Nostradamus, biblical predictions or little green men, but he did believe in the reality of economic crises, disease, natural disasters and above all human folly, it was why he saw planning and anticipation as the fundamental tenets of survival.

History was riddled with the collapse of empires and dynasties, and not only in the distant past, the most recent was the USSR, after the British Empire, the Third Reich, the Austro-Hungarian Empire, the Russian Imperial Empire.

The first death occurred in China January 11, three months later nearly 2,000,000 people had been infected and over 100,000 dead.

And when the lights went out, when the economy crashed for good, gold, paper money would be worthless. What was the use of a bank account when civilisation hit the wall. Arms would be of more use, to fight off Mad Max and his horde of desperadoes, have-nots, losers, pillagers, rapists and murderers. When the collapse came, the breakdown of the state, the end of civilisation as we know it, the only law would be that of the strong, as in the Bronze Age collapse thought Pat Kennedy as he boarded his jet with his wife and children—destination Bogota.

OIL & MAN

MICHAEL MOORE'S NEW DOCUMENTARY film Planet of the Humans posed an existential question—what if green energy could not save the planet?

It was becoming evident that the world could not exist without fossil fuels in the foreseeable future, the pandemic showed what would happen if those fuels were not readily available, when governments put their country's into confinement, which was in a sense an exercise that illustrated what happens when the transport stops—the environment is cleaner but at what cost, economies stop, tens of millions of jobs are lost, commodity values collapse.

How could wind farms, solar panels and other green energy sources replace oil, gas and coal?

Life would quickly collapse, fast backwards, humanity could maintain life as we know it?

In Moore's own words, 'It seems like we have been losing the battle. We are in deep, deep trouble.'

Planet of the Humans argues that the environmental movement's hypothesis that solar and wind energy components and electric cars depend not electricity generated from coal and natural gas to produce them, and in addition to drive electric vehicles and all the other systems that depend on electricity from computers to lighting and the things on which our way of life depends.

It completes the circle with ZPG or better still reduced population growth. 'Infinite growth on a finite planet is suicide,' he said.

Moore explained that he, like many people, thought electric cars were a good idea, 'but I didn't really think about where is the electricity coming from?'

He assumed solar panels would last for ever, but he didn't know what went into the making of them, the raw materials, including quartz, and the fossil fuels needed to manufacture the panels.

In the case of the oil bust, it was like Jurassic Park when the power was switched off, the electrified fencing shut down and the dinosaurs escaped and all hell was let loose.

More technically it was the functioning of catastrophes, once the system broke the return to the prior situation was almost impossible.

It was the same with oil, when the dinosaurs were out all hell broke loose. Prices plunged into the negative zone for the first time in history.

Oil was the most important commodity on international markets since crude oil is vital to the functioning of developed economies and the driver of emerging economies.

There were several different types of crude oil, in Europe there is Brent Crude, in the US West Texas, in Russia Urals and in the Middle East Saudia Arabian light and heavy, in addition there are three or four dozen grades produced by a whole range of countries from Libya to Angola, Venezuela to Mexico, Iran to Algeria, and many others. The prices of each very from one to two and the cost of extracting the oil from the ground varying from three dollars a barrel in Saudi Arabia to ten to twenty times as much for American shale oil and Siberian oil, which led to the saying 'Siberia is rich in oil, but not oil rich'.

many producer countries depended almost entirely on fossil fuel revenues to balance their state budgets, like Russia and Saudi Arabia, even more so o small countries like Gabon and Angola.

Not only is crude oil our most important energy source, crude oil is also an essential raw material for a vast range of products and its demand constantly growing. Goldman Sachs estimated the proportion of crude oil used for primary materials production was 45%.

The collapse of oil, stock markets and economic activity in general was certainly momentary, but the damage was great in terms of human suffering would be felt for many years, in terms of unemployment, underdevelopment and hunger.

In immediate terms the financial losses were huge as demand fizzled out in a cloud of acrid black smoke, but in the long term there was not enough green energy to make the world turn.

How soon it would before oil industry was pumping out 100 millions of barrels a day of crude again was difficult to say, but as soon as the pandemic was past it would be business as usual. How to replace oil was an impossible conundrum, man's affair with fossil fuels would certainly end badly.

MARCH

1

SNAKES

PAT SWATTED A MOSQUITO AS HE surveyed the jungle around him. He couldn't help thinking of all the wild creatures that lived in the rainforest, especially snakes and scorpions. Alfonso had warned them there were hundreds species in Amazonia, though few were poisonous. It was the same with the bats, they were everywhere once the sun went down

It was not that Pat was afraid of them as such, he was used to seeing wild animals in Chinese markets, not pets, but to be eaten, bearers of disease, like the Coronavirus epidemic back home, where the news spoke of a new virus spreading from the city of Wuhan, which was believed to have been transmitted to humans through snakes and bats.

The story told of a horseshoe bat eaten by a krait—a highly poisonous snake, which was then trapped, sold in the Wuhan fresh fish market, cooked and eaten, transmitting the virus to at least one of the diners who had consumed it.

There were a great many amateurs of game in China, and a great variety of wild animals ended up in food markets and in Chinese kitchens, both in restaurants and homes.

The Wuhan fresh fish market not only sold sea food but also, illegally and openly, a broad variety of wild and domesticated animals, dead and alive, including reptiles, rats, hedgehogs, porcupines, badgers, bears, donkeys and even camels, to name just a few, all of which were highly prized as

delicacies by Chinese gourmets. It was like the bushmeat sold in African markets—the source of Ebola and other diseases, when wild animal were poached and slaughtered for meat, from mammals to reptiles, amphibians, birds, bats, monkeys, rats, snakes, and even protected species like gorillas—smoked, dried, or cooked.

Scientists believed that chimpanzees, and other primates had spread the HIV virus to the people hunting or butchering them. The fact was wild animals were reservoirs for pathogens, and those in contact with them risked infection from zoonotic disease, diseases that jumped from animals to humans. Ebola outbreaks, between 2014 and 2016, killed more than 11,000 people in western Africa.

When the Pandemic had run its course there would be winners and losers.

China would be one of the winners.

His banking empire was built on three independent pillars—Hong Kong, London and Moscow, soon to be four after the UK quit the EU when Amsterdam would represent INI's interests in Europe.

However, the fact that he, as CEO, was married to a Chinese wife, living in Hong Kong, bound his destiny to that of China's.

As China emerged from the pandemic many said it would become the world's pre-eminent nation, which boded well for the bank's future, a Faustian pact, and Pat Kennedy by choosing Hong Kong as his home had made a pact with the devil,. If China prospered so would he as business found a sense of normality. INI, like HSBC, would lick its wounds, absorb its losses, and continue its helter-skelter dash to whatever future lay ahead.

In 2014, when Pat met Lili, Xi Jinping, had been in power a more than a year, after succeeding Hu Jintao.

After Mao's death in 1976, Deng Xiaoping was effective leader until his death in 1988. Deng introduced the reforms that transformed Mao's bankrupt peasant society into modern China. He was followed by Jiang Zemin and the Xi Jinping.

Deng Xiaoping opened China to the West, which helped lift 800 million people out of poverty, thanks to his reforms. The West embraced this path in the belief China would continue to liberalize its economy, and ultimately would liberalize its political system.

Unfortunately the reforms started to stall under Hu Jintao, who saw the Western world as 'threatening to divide us' and that 'the international culture of the West is strong while we are weak', this wasn't evident until Xi Jinping took over, and Pat who knew nothing of this at the time was dazzled by the advances of China, and mesmerised by Lili's beauty and strength of character.

By 2018, growth in the Chinese private sector stopped and the state-driven economy grew as Xi Jinping tightened his authoritarian capitalist model as essential to maintaining its grip on power.

The West had been taken in over the course of the last two or three decades. Suddenly it was waking up to China's ambitions, its vast Belt and Road project, China had grown thanks to Western markets and technology to the point the West with the Coronavirus realised many of its vital needs were manufactured by China.

At the same time AI and surveillance was taking control as China's young generation was brainwashed and repressed by the state's censorship and control of information. Books disappeared from shops and libraries. Students, professors, scientists, writers, artists and businessmen were arrested or simply disappeared.

The Chinese Communist Party wanted total obedience and respect even from its neighbours in the South China Sea as the Peoples Liberation Army occupied and militarised many of the islands claimed by Vietnam, Malaysia and the Philippines.

What drives this authoritarian society John Francis asked, was it a Cornucopian end game to ensure the well-being of a vast population?

Did Cornucopian society go hand in hand with authoritarianism, or would a smaller population offer the advantages of abundance with more individual freedom, or would human society always derive towards domination and oppression.

Authoritarian regimes, autocratic or oligarchic, based upon the rule of a party or the military.

In China's case there was no turmoil but an underlying historical nationalism, a vengeance for 19th and 20th century wro GS inflicted by the West and Japan.

This is linked with a long history of passivism, paternalism, authoritarianism and oppression from the very origins of Chinese society.

There is also traditional Confucianism and the respect of law and order that has given birth, thanks to technology, to the social credit system which could turn China into an Orwellian dystopia.

It is also seen by China's leaders as an alternative to liberal democracy through a mix of a market economy and authoritarian government along Chinese lines.

In any case the perpetuation of the 100 year old Communist Party and its rule with its privileges was underpinned by its 90 million strong membership, the roots of which lay in democratic centralism, a principle based on Marxist theories as developed by Lenin.

In any case civilisation, whether it be liberal democracy or Chinese communism, until this point in history, has demonstrated itself as being self-consuming and blind to change, as in historic change on a planet with finite resources, where nature does not obey party rules.

At that moment one of the Indians returned to the maloca, he was carrying his day's bag—three monkeys and a small peccary.

Pat felt his stomach turn as he wondered what he was doing in the jungle. Against the advice of Matt and the others he had decided he would be interviewed in a maloca for the closing scene for *Indians*, before he returned to the relative safety of Barichara.

He should have listened to Matt, let Kyril take care of that, instead of setting off into Amazonas with just a guide and a couple cameramen to make his ephemeral mark, but Kyril was locked down in Paris.

Pat's only consolation was that he felt far from the Coronavirus in the jungle.

And the Indians? Well, after decades of political struggles to assert claims to what was left of their traditional homelands, a scattered archipelago of fragments belonging to different tribes speaking different languages with different customs and traditions, certain specialists thought they should be asking themselves: What next?

There were certainly multiple answers, but it was unrealistic to think national autonomy could exist in a culturally fragmented and widely scattered human community, one that had never known nationhood.

There was one other possibility—if they in their forest home could survive the pressures of predatory civilisation long enough, till the hands of the Doomsday Clock reach midnight, when human civilisation collapses, as it surely will, the peoples of the rainforest could retake control of their realm, a world to which they were perfectly adapted, and continue a way of life they had known since time immemorial.

Then one day, in perhaps one hundred or one thousand years, when nature has returned to its primeval state of climax equilibrium, men will again emerge from the rainforest onto the western slopes of the Andes, to start a new experiment in civilisation ... and maybe they won't.

POSTSCRIPT

On April 18, 2020, while Western democracies were plunged into the global Coronavirus pandemic, Hong Kong police arrested at least 14 veteran pro-democracy politicians, activists and a media tycoon on charges of joining unlawful protests in 2019

They included 81-year-old activist and former parliamentarian Martin Lee, and democracy advocates Albert Ho, Lee Cheuk-yan and Au Nok-hin, media tycoon Jimmy Lai, who founded the local newspaper Apple Daily.

Lai, Lee Cheuk-yan and Yeung Sum, a former MP from the Democratic Party, were charged in February over their involvement in a mass antigovernment demonstration on August 31 last year.

The protests were against proposed extradition legislation exposed deep divisions between pro-democracy Hongkongers and the Communist Party-ruled central government in Beijing.

The bill which would have allowed Hong Kong residents to be sent to mainland China to stand trial was withdrawn, but the protests continued for more than seven months, centered around demands for voting rights and an independent inquiry into police conduct.

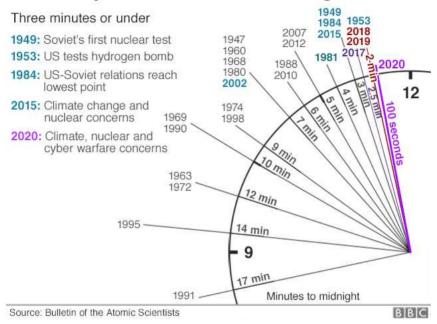
While the protests began peacefully, they increasingly descended into violence after demonstrators became frustrated with the government's response.

The League of Social Democrats in a Facebook post announced its leaders were among those arrested, including chairman Raphael Wong.

Zhenbao received the backing of Henrique who set up a cell in Rio to aid the members of the resistance who were forced to flee Beijing's puppet government in Hong Kong and the Ministry of State Security that was taking advantage of the turmoil caused by the Coronavirus with a vicious crackdown on all dissenters by MSS agents, arresting 7,000 men and women and placing others under house arrest on charges relating to the protest rallies.

Pat Kennedy looked on helplessly from afar as China flexed its muscles and the slogan of Deng Xiaoping China's paramount leader at the time of Britain's negotiations with Beijing, *One country, two systems*, became *One country, one system*.

Doomsday Clock - Minutes to midnight



APOLOGIES

I hope you my reader will forgive me for my endless mistakes: grammar, spelling, syntax, facts and omissions. These I fear would take another lifetime to rectify, which I don't have given my advancing years, that plus the fact I have so many other stories to tell and observations to make on our world. Perhaps one day Google and AI will find a way to remove this burden from story tellers, who like me are not sufficiently applied, as my headmaster once told me.

ACKNOWLEDGMENTS

This book could not have been written without the data and information published on the Internet and in the world press collected over a period of years, starting in 2000, when I wrote Offshore Islands, and Pat Kennedy was launched on his initially precarious international career.

I have trawled numerous British, Irish, US, Russian, French, Spanish, Chinese, Israeli, Colombian newspapers, news blogs and specialist Internet sites, and books (authors' cited). And of course Wikipedia.

During this period I have collected information during my visits to the USA, China, Hong Kong, Macau, Indonesia, India, Dubai, Thailand, Cambodia, Libya, Egypt, Kenya, Tanzania, Senegal, Mali, Morocco, Mexico, Colombia, Panama, Brazil, Guatemala, Belize, Honduras, the Philippines, the UK, Germany, Belgium, France, Spain and Italy. To this I have added my experience in other parts of the world, notably Ireland, Australia, New Zealand, South Africa, Malaysia, Singapore, Brunei, Taiwan, Japan, Burma, Switzerland, Algeria, Russia, Scandinavia, the Baltic Countries, Poland, Hungary, the countries of ex-Yugoslavia, Greece, Turkey, Russia, Turkmenistan, Jordan, Syria, Israel, Egypt, the Caribbean, Central and South America

I present my thanks and excuses to all the willing and unwilling contributors to the information included in this book, I am not the first to tread in the footsteps of Jack London, using the information supplied to us from those who convey it. I have tried to verify all the facts, but this is an impossible task. In my humble opinion most data reflects real events and the opinions of the vast majority of persons affected, directly or indirectly, by the multiple events and crises that constitute our collective existence.

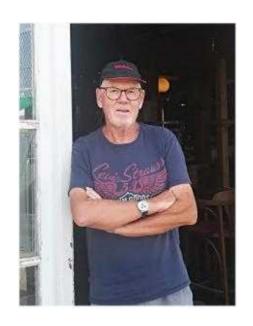
This is a story, a novelised account of events, real or not, where the fictitious characters are fictitious, and where the real characters, such as

Vladimir Putin, Nicolas Maduro, Donald Trump, Boris Johnson and Emanuel Macron, are real.

The story of 2000, and its sequels in 2010-2012, 2013, 2015, 2017 and 2018, are recounted in my other tales.

With my very sincere thanks to all contributors, direct and indirect, knowing and unknowing, willing and unwilling.

John Francis Kinsella
Earth Day, Paris, April 22, 2020



Other books by John Francis Kinsella

Fiction

Borneo Pulp

Offshore Islands

The Legacy of Solomon

The Plan

The Prism 2049

The Lost Forest

Death of a Financier

The Turning Point 2007-2008

The Collection

A Redhead at the Pushkin

The Last Ancestor

Cornucopia

A Weekend in Brussels

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Non-fiction

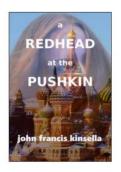
An Introduction to Early Twentieth Century Chinese Literature

Translations

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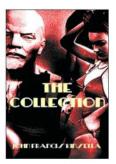
In the works

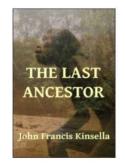
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