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## **Rising Waters**

By James R. Gilbert



century, when climate change and rising sea levels have dramatically altered Earth's surface. This excerpt from The "Admiral" contains an edited narrative of how the Earth changed during the 21st century,

as experienced by one extremely wealthy visionary who saw the

Editor's Note: "The Admiral" by James R. Gilbert was published in 2014. The novel portrays what Earth may be like at the end of the 21st

coming collapse of human civilization and created Akkadia, a floating, remote, and reclusive mid-Atlantic community of aging yachts to safeguard his family and preserve much of mankind's accumulated art and knowledge. Jim Gilbert is the retired founding Editor-in-Chief of ShowBoats International, considered by many to be the "bible" of the luxury yacht industry. In his role as editor and later as owner and president of the magazine, Jim was able to meet many wealthy and famous people around whom many of his characters are formed. Jim has a life-long connection to the ocean as a journalist, surfer, sailor, and fly fisherman. Much of "The Admiral" was written and edited at his waterfront home on the tip of a peninsula in the town of Tavernier on Key Largo, where he was able to witness the effects of climate change and a rising sea on a daily basis. He is also the co-founder of the International SeaKeepers Society and sits on the Dean's Council at the Graduate School of Oceanography at the University of Rhode Island. The narrative opens as Katia, the daughter of The Admiral, Akkadia's founder, looks at a video he had given her with instructions not to must begin by saying I am nothing but a common man who lived in uncommon times with the great fortune to have inherited a

Energy. The second law of thermodynamics says no energy is ever lost, just changed into different forms. This is the secret of life, the underlying foundation of all history, all science, even of happiness. Every atom, inert or alive, contains energy. It sat under the ground

transform the very face of the world. We took the energy of past ages, the sun-fueled plants and algae from hundreds of millions

of years ago and turned it into the power we required to become supermen. That energy, of course, was not lost. It simply did its job, returning to the atmosphere as heat, and helping recreate the very conditions in which the original plants and algae were formed. What few understood as we used and transformed all this energy, was that the world we were unintentionally rushing towards was not the paradise we thought we were creating, but a planet potentially devoid of complex life—a land of windless desert, its seas endless carpets of sulphuric algae falling to the bottom as the same sludge that in past ages became the energy for mankind's heedless ascension to false godhood. In our addiction to energy from fossil fuels we began to distance ourselves from the most important forms of energy: love and friendships, music, science and art, forms that once created beget more of the same: more love, more intimacy, more eagerness to work and create. Unfortunately, we also have the capacity to

no Akkadia." In a way, Akkadia has always existed in the spirit of man's endless and ageless struggle to wrestle food, shelter, and security from the unfeeling maws of nature. For most of mankind's history on Earth, this meant believing we could conquer the natural world by lighting our fires, building our dams and irrigation ditches, felling forests and plowing the fields, raising vast herds of domesticated beasts, worshipping medicine more than good health, and plundering and polluting the lush coastal oceans—the very birthplace of life on earth. In the end we learned, far too late, that nature always wins, that nothing guarantees our survival—not wealth, not religion, and certainly not political beliefs. Nature, you see, shuns the individual and cares only for collective life. Most of you only know the old world from what you have read and seen in our archives from old films and videos. The world around you is still beautiful, I hope. But in your isolation and relative youth

and exposed necks in the slowest of motions? As bad as our losses have been, they are made even worse by knowing we had every chance to avoid the fate that befell us. That is the legacy of my generation. And while I was able to bring to you Akkadia, for all its beauty and magic, our island home is but a mere whisper, the tiniest passing shadow of the glory that was once the planet earth. The question. Always the same question, just as relevant for you today, as it was for us in the years when we were in the throes of the change, when calamity after calamity befell us. Why? The worst of it, what we must grasp in our minds and never forget, is that the changes didn't just happen: we let them happen.

it was already too late. When the truth became unavoidable, the only wisdom we were left with, ironically, was the profound depth of our ignorance. imilar to the law of energy is the law of motion, that for every action there is an equal and opposite reaction. They are corollaries to each other because Newton's law applies to more than merely the fall of his apple or the movements of planets. When you combine the two laws, you understand that ideas have

The irony was that even without the inconceivably profound changes we wrought in our climate, we were on a path of self-destruction by our sheer numbers alone. Our booming population fueled our economic growth, but it also led to the clearing of our forests and the emptying of our oceans. In name of growth we polluted the air, soil, and sea beyond repair, and thus ultimately doomed ourselves. In our addiction to the God of Growth we developed large and insupportable urban areas and vast plantations of crops whose seeds could never germinate. We worshipped cars and trucks and jet-skis more than our physical and environmental health. And in the name of Almighty Growth we staked our very souls on the creation of a massive—and massively inefficient—electrical grid that ensured when our civilization collapsed it would do so, along

with all our other unintended consequences, with equally perfect

Our population explosion fueled our unprecedented economic expansion but eventually robbed us of the very basic ingredients of life—clean air, clean water, productive land, and oceans. Even as we began running out of fossil fuels, even as the glaciers

efficiency.

of my life. We live on but only under the suffocating memory of a billions-strong horde of angry ghosts. Akkadians had strength and ingenuity and physical courage in great abundance. But I know for you, as surely as I did during my life, that the future holds the same, if not greater challenges. The change is still happening. Just because we survived what I hope was the worst of the past, it might be easy for you to assume you are immune to what still lies ahead. Complacency is what killed those many billions—those countless, self-protective voices that said: "It can't happen to me." 🐧 o at the start of my story I have a question for you: Today, tomorrow, or five centuries from now will you and your fellow Akkadians still have the confidence and courage to make the same hard choices that led to our creation? Or will you deny the obvious truth, as my generation did, and fail to take the difficult steps necessary to avoid

When alive, I was often asked what turned on the light bulb in my head, what started the process that eventually resulted in my

I remember the morning quite clearly. I was having breakfast on the terrace of my parents' villa in Aquiltane—a lovely, fertile valley with rolling hills and vineyards between Rome and Ancona. I was eating alone watching the farmers in the valley below me take their cows to pasture. It was late September of 2018 and the fields were gold with grain and the vines heavy with grapes ready for harvest.

such sad and needless suffering?

decision to create Akkadia.

tended to our gardens and property. I was getting ready to return for my second year of university. My only care in the world was a constant, nagging loneliness for my parents, who were so infrequently around. I'm sure everyone has experienced a moment so important, so unexpected, that you remember every nuance of that instant for the rest of your life, as if it had just happened yesterday.

I was sipping a cup of tea, after just having finished eating two things you have never seen, a fresh, crispy baguette stuffed with soft, salty sheep's cheese and thin slices of aged ham. My mouth is watering as I speak these words. I was savoring the moment and wondering what Alexandra, my dearest friend in the world and

I was smiling, thinking of the upcoming holidays our families were planning to spend together, when our cook, Victoria, came in and whispered in the ear of my maid, Octavia. I watched Octavia gasp and drop a small tray she was carrying. They spoke for a few minutes, not even bothering to clean up the broken teapot and the apricot marmalade I had just asked for. I knew instantly from

the woman I wanted to marry, was doing.

are ... are ... gone!"

as a child.

before in my life.

Octavia's blanched, contorted face as she came over to my table that something horrible had happened. "Master Antonio," Octavia said, face drawn and hands shaking. "We have just learned on the television news that a horrible storm has hit Holland and is now moving inland to Germany. The dikes

financial grounds, and Holland was one of only a small number of countries that had remained solvent during the ten-year financial crisis that had started when I was a young boy in the early years of the century. I knew my father would understand the implications so much better than I, but my instincts told me this was something that would change my world and thus in some as-yet-unknown way, my life. I thanked Octavia for the news, and wished her family

well, and said my family would help however we could. After she left, I remember feeling more alone and abandoned than ever

Raymond Elman: Card Table with Rose, 2011, 40 x 30 inches, oil & digital collage on canvas. [courtesy Williams McCall Gallery, Miami Beach.]

create negative energy and this, too, is contagious, generating instead more anger, hatred, and destructiveness. Energy, like the electrons spinning around every molecule of matter, like every cell in every living organism, is both positive and negative and the essence of our knowledge, our intelligence and our sensory

apparatus, is designed for only one thing, and that is to sense energy, understand its nature, and know how to use it best. All of our knowledge, all of the information available to us, all of our instincts, and all of our experience ultimately is only useful in helping us to read the energy around us, both the positive over

can say there is no real beginning to the story of Akkadia, no place in space and time before which it could be said, "There was

the negative.

to each other.

you cannot know the enormity of what happened to our world. We lost not just wealth and tangible beauty, but also the ease in which we lived our lives—the jets that flew us anywhere we wanted to be in just a few hours' time; the markets filled with food from every

corner of the world; the medical care that allowed us to replace body parts, and perform surgery without breaking the skin, the satellites that connected nearly everyone—all seven billion of us—

As one who lived through the change, I'm not ashamed to admit that the loss still overwhelms me. How could we have risen to such lofty heights, only to fall so far? We had paradise in our grasp. Even as the world teetered on the precipice of disaster, we still had the chance to change, to alter the course of history, to regain control. We had such magnificent technology, such profound knowledge and surplus of resources. How could we have ignored the sword before our very eyes, even as it was swinging toward our naked

The reasons, of course, were the worst manifestations of negative energy: ignorance and arrogance. Our wealth and prosperity, especially among those who had the power to make different choices, left the old world blind and dumb. Mine was the last of

many generations of ignorant, raging narcissists who were unable to appreciate their vulnerability, to look clearly at themselves in the mirror of history. "What is good for me today must of course be good for everyone," they thought and said. Eventually, our egotism was displaced at the start of the current century by a growing terror about the terrible transformation we had set in motion. But by then

energy, mass and inertia, no different from a moving piece of wood or steel. The most catastrophic part of our ignorance was thinking that by using math, science, econometrics, and votes, we could calculate all the consequences of our actions. We learned the very hardest way possible that we can never understand the consequences of everything we set in motion, especially when the energy behind the motion is greed, fear, hatred, and—especially—the belief in our ultimate mastery of the world. Nobody considered the full impact of our tampering and manipulations, how killing the salmon also ruined our forests and impoverished the sea; how our industrial ways of irrigating and nourishing our fields, and engineering new plants eventually turned our best farmlands into deserts; or how the oil wells and coal mines that fueled our extraordinary growth ultimately altered the fundamental chemistry of our planet.

receded, even as the great fertile plains of North America, China, and Europe were turning into vast dust bowls, the politicians were still chanting the mantra of economic growth. For a brief, golden century mankind—at least the wealthiest of us—tasted prosperity. But it couldn't have come at a steeper and more brutal cost. No one really knows how many perished because of our greedy madness, how many died of the starvation, violence, and disease that followed the global collapse. Perhaps a tenth of the world's population still survives, but I would be surprised if even that number still remains in your world. But the body count is but a small measurement of the toll we ultimately paid. How do you calculate the fear, the pain, the hunger, the deprivation, the sheer misery of constant uncertainty, the sum total of suffering that we brought upon ourselves and our fellow humans? That, really, is at the heart of the sadness and anger that so often falls upon me at the end

Eating alone was common for me in those days, as my parents were always on a trip of some sort, though my father sometimes brought me along on his business trips. We would fly in our private jets and helicopters to his far-flung companies in North and South America, Africa, the Far East. We stayed in the best of hotels, of course, but what I enjoyed most was when we visited more remote locations and I could see how people really lived. But most times when I wasn't in school my only company were the maids and cooks, and the friendly men with hard hands that

have broken and many thousands have died. Too many to count right now, they are saying, and the water is still rising. More than a third of Holland is under water and even Amsterdam and Rotterdam

I knew this was a particular horror for Octavia, as she had many family members and friends in Holland, where she had spent time

While the horror of the news was obvious—this kind of tragedy had never happened in Europe, not on this scale, since World War II—it took a minute for the consequences to sink in: Holland was, after all, behind Germany the most economically stable of the European nations. The European Union was on terribly shaky

open it until ten years after his death: great fortune. So whoever you future Akkadians are—and I hope you are many—I offer my deep thanks for listening to my story. As you do, you will be feeling my energy, the only part of my life worth carrying forward. in vast pools of oil and gas and mountains of coal. We transformed these atoms—into heat, electricity, and propulsive power. It made mere mortals into supermen, able to soar into the heaven and

n retrospect, the world should have seen this coming. The Dutch themselves had seen the possibility. Sixty-five years earlier they had suffered a similar tragedy on a much smaller scale when 6,000 had died after a North Sea gale had breached the dikes and flooded the lowlands. With their usual industry and ingenuity, they initiated a 40-year-plan to raise their dikes another five meters, build new seawalls and more efficient drainage systems, and completely enclose the Isylmeer, the old inland sea that had flooded. They had just finished this massive rebuilding when scientists first began talking seriously about sea level rise. Even though much of the world was still in denial about the consequences of global warming, as we called it back then, the hard-headed Dutch looked at the research, crunched their own numbers, and embarked on yet another massive dike rebuilding plan.

Ironically, even for one of the most environmentally progressive countries in the world it was too little, too late. What hit them was not just another North Sea storm, but the first major Atlantic hurricane

to traverse the English Channel into the North Sea. The late-season hurricane, named Miriam, had formed off the coast of Africa, crossed the Atlantic almost to Bermuda, and then began racing towards Europe. Just as it reached the Solent, it combined with an early-season North Sea gale sweeping down from Scandinavia to form a storm of historic proportions, eclipsing even Superstorm Sandy, the first such land-falling system. Miriam's winds topped 120 miles an hour, but it was her gigantic size, and the moisture from the system, which dumped more than 24 inches of rain in 36 hours over Holland, Germany, and France,

that did the worst damage. Like the famous Hurricane Katrina that leveled New Orleans 18 years before, dikes and seawalls were broached by the wind and tides, but the real catastrophe came from the land, not from the sea, when raging floodwaters from the Rhein and Elbe overwhelmed the Dutch drainage system and combined their volume to the water entering from the North

Sea. Amsterdam was covered with eight feet of water, causing enormous physical damage. But the loss of life, more than 150,000 souls when all were counted, came in the countryside, where the rapidly rising sea and rivers cut off entire towns and villages. It should have come as no surprise that a hurricane was possible in the North Sea. The weather records, after all, had been completely rewritten in the previous decade or so, including the first tropical storms to ever form in the South Atlantic and three hurricanes that had formed in the Mediterranean, two of which had struck Spain and Southern France. The first was in 2011. The next two, larger storms, flooded Marseilles and devastated the Balearic Islands. In early October of 2005 another first in weather annals had occurred

when a late-season hurricane had hit Portugal accompanied by several more in the next decade that had slammed into the Iberian Peninsula following the same Atlantic trajectory Miriam had taken.

While a monumental catastrophe by any measure, the damage was not simply the measure of property destroyed and lives lost. The major insurance underwriters had been methodically calculating the rising risks from the rapidly escalating climate crisis. The insurance industry used the Great Dutch Superstorm, as

the event came to be called, to stop writing wind or flood policies for properties within 25 miles of any shoreline. They knew, in many cases more accurately than many government or university climate scientists, what the real odds were from ongoing climate change. While the immediate effects in Holland were death and damage on an unprecedented scale, far overreaching was the financial catastrophe that soon followed the rapid deflation of waterfront property values around the world. Without insurance protection, banks refused to write loans for most coastal homes and businesses, a devastating development considering that at the time of the storm more than 75 percent of the world's population was living within 50 miles of the sea. The collapse of the enormous coastal real estate market was terrible, especially in first-world economies, whose phantom growth had long been fueled by rising home and commercial real estate values. Strong governments tried to shore up the

loss of private insurance, but everyone realized there was not enough money in any institution to adequately protect property owners or lenders. Banks began refusing to provide mortgages for homes and businesses that just a year earlier had been worth small fortunes. Without a tax base large enough to support schools, police, fire, and other services, hundreds of thousand of cities, towns, and neighborhoods disintegrated. Small banks

collapsed, innumerable small businesses failed, and then the larger banks began to implode as well. The real consequences of climate change coalesced in the public consciousness just as global "decopression," as the pundits called it, made largescale remediation projects to protect people and society virtually impossible. f course, I couldn't foresee all this from the terrace of my parents' villa that sunny September morning. All I knew was that a momentous thing had happened. But as the weeks and months went by, and equally momentous private storms came to pass in my life, I came to view the Dutch superstorm as the beginning of the end, or in the case of Akkadia, the beginning of our beginning. All this happened long before the seas had risen appreciably. By the time most everyone in the world was finally convinced that the ocean would rise far faster and far higher than anyone had predicted, the world's economies were already shattered. There was no money for new roads, new power systems, new ports and

airports, to move and rebuild hospitals. More than 150 nuclear power stations, built at the ocean's edge to provide a steady flow of cooling water, were simply shut down and abandoned, left to contaminate the ground, and later the sea, with their lethal

Even before the world's coastal cities had drowned, tens of millions were forced to move inland. Long before the grids failed urban areas became uninhabitable. With every passing rainstorm, sewage and centuries of pollution—now floating above the rising salt groundwater—bubbled up into basements, through street

Rural and inland areas were not spared, either. Long before the sea covered the lowlands of Bangladesh, for example, the southern third of the country's once-productive fields were left

radiation. There simply was no money for proper demolition.

grates, and into every low-lying building or district.

uninhabitable by the rising salt beneath their feet. It only took a sea level rise of two feet to displace more than 40 million souls, who found themselves without land, crops, or fresh water. With the Himalayan glaciers and snow pack all but disappeared, Bangladesh, India, Pakistan, and China all shared the same fate: winter snows now fell as rain, with raging floods as a consequence. Without slowly melting snowpack and glaciers to provide water for the growing seasons, fertile valleys and plains became dustblown deserts. People starved as more and more refugees from the flooding seas came to share what little food and water was left. The Indian subcontinent became the site of the first Climate Change Wars, and the loss of life simply dwarfed any previous

warfare in history. Those not killed by the hand of fellow man in battle were just as readily killed by hunger, and its equally horrible

All this, of course, happened over the course of 25 years. But even as the trickle of refugees turned into a torrent, even as hurricanes and tornados increased in number and intensity, as floods and droughts turned once-fertile farmlands into vast wastelands, and fires raged across mountain ranges and plains, people kept

companion, disease.

ignoring what scientists were whispering, then screaming, and finally begging for people to understand. Yet, until the aftermath of the Great Dutch Superstorm, the deniers of the change remained steadfast in their beliefs. Politicians with business and law degrees thought they knew far more than scientists. Unlike them, of course, scientists were just out to make an easy living from public funds. For the deniers, at stake was not the health and welfare of humanity, but their narrow political beliefs, their greedy worship of Growth, and their own religious narcissism. Christians, Islamists, Jews, each believed themselves to be the chosen people, that their deities would never let such terrible things happen to them. It wasn't as if there wasn't a large group of people who saw the changes for what they were. Enough so that many companies and political groups embraced what was then called "green" corporate images and products. Even the coal and fuel companies promoted themselves as eco-friendly. But these were just marketing campaigns solely intended to sell even more oil and gas, more cars, more products nobody really needed. Even environmental organizations were

part of the don't-rock-the-boat club. While their members clamored for real, meaningful change, their leaders were more concerned

his was the backdrop, the grand tableau from which Akkadia emerged. In our former world nobody was willing to take responsibility for more than themselves, or even to objectively

about fundraising than they were in truly making a difference.

look at the facts and make the really tough decisions the facts demanded. In the early part of the 21st Century the leading scientists were already warning about the changes we had set in motion by pumping billions of tons of carbon dioxide into our atmosphere. They were telling us even then if the world stopped using fossil fuels that very instant that the glaciers would still keep melting, the floods and droughts and storms would keep intensifying, and the seas would continue to rise for another 150 years. As we all know now, humanity never stopped its destructive ways until economies faltered, infrastructures collapsed, and governments We never weaned ourselves from the teat of easy, inexpensive hydrocarbon energy. It simply stopped when we had sucked Mother Earth to death. I had just turned twenty and was driving through the Italian countryside with the top down on my convertible on the way to start my third year of university at The Sorbonne when I received the call. I answered, thinking my father's secretary was calling to remind me of something I had forgotten. I knew right away it was serious. He asked me to pull my car to the side of the road before informing me that my parents had died in the crash of their airplane in Russia. I sat, dazed by the news, teetering between overwhelming sadness and disemboweling despair. I felt alone,

"What do I do now?" I asked myself. I felt paralyzed. Paris was suddenly no place to be, school now seeming pointless and irrelevant. Drive back to Aquitane? To sulk with our staff? Be

I started the car and returned to the road. I suddenly remembered my happiness in the times my mother, father, and I had driven on this same road, through the same fields, on the way to spend time aboard Princess Grace. I felt, no, I knew in my heart that this is where I needed to be, snug in the tiny harbor, in a familiar place. Those next weeks were a blur of sudden fits of uncontrollable sadness, of lawyers and accountants, of an endless stream of calls

suffocated by the constant reminder of what I had just lost?

deserted, and too deep in shock to even cry.

and emails from countless family friends and, of course, business associates, most of whom I had never met. But these were now my business associates and I quickly grew used to the fact that I was no longer a carefree university student dabbling in philosophy and economics, but the head of one of the largest, and most powerful business empires in the world. Suddenly I controlled hundreds of billions of dollars and business interests in every corner of the planet. hen he was in town, Prince Albert often invited me to the Palace for dinner. I had always known of his intense interest in the environment, particularly the sea, and with his encour-

seum just below the Palace overlooking the Mediterranean, which had been founded by his great-grandfather and namesake, Prince Albert I. When I could no longer bear the company of even one more attorney or accountant, when my head was filled to overflowing with numbers, balance sheets and quarterly reports, I would take the tender across the harbor from the Monaco Yacht Club where Princess Grace was docked, and walk up the steep paths to the Musée Océanographique. On the way I could look down over the Mediterranean's most glittering jewel,

packed with pretty white-sided yachts and tall silvery masts.

agement I also spent time in the great oceanographic mu-

called, I knew that every inch of the harbor was man-made. As the winter storms began to roll in from the south I watched the huge, tightlyspaced swells coming in from the Mediterranean and marveled at the way the floating sections of the port's huge outer seawalls absorbed the waves and left the inner harbor peaceful no matter how strong or from what direction the winds were blowing. It was incredible engineering, and I think it was on those long walks up to the Museum overlooking the port where the first glimmer of Akkadia was conceived. I had started one afternoon at the museum talking with Professor Jean Journage, the museum's illustrious director, about the research he was overseeing on the collapse of the Mediterranean fisheries. The giant

tuna were pretty much gone, as were the swordfish. When one was caught—always unintentionally for there were too few left for any sport or commercial fishery—it was always tiny and often malnourished. By then, approaching the end of the first quarter of the 21st Century, the Mediterranean was already turning from a temperate to a subtropical

From old pictures of Port Hercules, as the ancient cove of Monaco was

sea. The North Atlantic lobsters had gone, and the water had become so polluted—jellyfish now far outnumbered any other living creature in the Mediterranean—the emerging warm-water species didn't have a chance of successfully establishing themselves. "The Mediterranean Sea is just a microcosm of the rest of the oceans," he had told me. "It is smaller and more contained, and surrounded by countries using it as their cesspool. But because it is small and surrounded by neighbors who can talk to each other and share information it is also the ocean that should be the easiest to save." He had shaken his

head then, for the first time looking anything but the pleasant, smiling man I had always known him to be. "Unfortunately, we still can't agree on what we must do or who must pay for it. The rich countries don't want the burden of paying to clean up the poor countries' rivers and shores, and the poor countries can't afford to tell their impoverished citizens they must stop over-harvesting the sea or pouring their wastes into the waters. The rich countries pass their tough environmental laws, which only results in the big companies sending their dirty factories and polluting industries to the poor

Before I left that day, I had asked him what was the point of all the research they were conducting, if there was no hope?

countries, who welcome them with open arms and lax regulations."

"We humans are good at polishing the door knob while the house is burning down around us," he said. "It helps us to move forward day by day under the delusion we are making some sort of progress. After all, without hope, there is nothing."