A History of the Twentieth Century, with Illustrations a novelette by Kim Stanley Robinson

"If truth is not to be found on the shelves of the British Museum, where, I asked myself, picking up a notebook and a pencil, is truth?" - VIRGINIA WOOLF

Daily doses of bright light markedly improve the mood of people suffering

from depression, so every day at eight in the evening Frank Churchill went

to the clinic on Park Avenue, and sat for three hours in a room illuminated with sixteen hundred watts of white light. This was not exactly like having the sun in the room, but it was bright, about the

as if sixteen bare lightbulbs hung from the ceiling. In this case the bulbs were probably long tubes, and they were hidden behind a sheet of white plastic, so it was the whole ceiling that glowed.

He sat at a table and doodled with a purple pen on a pad of pink paper. And then it was eleven and he was out on the windy streets, blinking as traffic lights swam in the gloom. He walked home to a hotel room in the west Eighties. He would return to the clinic at five the next morning

for

same

a predawn treatment, but now it was time to sleep. He looked forward to that. He'd been on the treatment for three weeks, and he was tired. Though

the treatment did seem to be working - as far as he could tell; improvement was supposed to average twenty percent a week, and he wasn't

sure what that would feel like.

In his room the answering machine was blinking. There was a message from $% \left(1\right) =\left(1\right) +\left(1\right) =\left(1\right) =\left(1\right) +\left(1\right) =\left(1\right) =\left$

his agent, asking him to call immediately. It was now nearly midnight, but

he pushbuttoned the number and his agent answered on the first ring.

"You have DSPS," Frank said to him.

"What? What?"

"Delayed sleep phase syndrome. I know how to get rid of it."

"Frank! Look, Frank, I've got a good offer for you."

"Do you have a lot of lights on?"

"What? Oh, yeah, say, how's that going?"

"I'm probably sixty percent better."

"Good, good. Keep at it. Listen, I've got something should help you a hundred percent. A publisher in London wants you to go over there and write a book on the twentieth century."

"What kind of book?"

"Your usual thing, Frank, but this time putting together the big picture.

Reflecting on all the rest of your books, so to speak. They want to bring

it out in time for the turn of the century, and go oversize, use lots of

illustrations, big print run-"

"A coffee table book?"

"People'll want it on their coffee tables, sure, but it's not-"

"I don't want to write a coffee table book."

"Frank-"

"What do they want, ten thousand words?"

"They want thirty thousand words, Frank. And they'll pay a hundred thousand pound advance."

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That gave him pause.
      "Why so much?"
      "They're new to publishing, they come from computers and this is the
kind
      of numbers they're used to. It's a different scale."
      "That's for sure. I still don't want to do it."
      "Frank, come on, you're the one for this! The only successor to Barbara
      Tuchman!" That was a blurb found on paperback editions of his work.
"They
      want you in particular - I mean, Churchill on the twentieth century, ha
      ha. It's a natural."
      "I don't want to do it."
      "Come on, Frank. You could use the money, I thought you were having
      trouble with the payments-"
      "Yeah yeah." Time for a different tack. "I'll think it over."
      "They're in a hurry, Frank."
      "I thought you said turn of the century!"
      "I did, but there's going to be a lot of this kind of book then, and
they
      want to beat the rush. Set the standard and then keep it in print for a
      few years. It'll be great."
      "It'll be remaindered within a year. Remaindered before it even comes
out,
      if I know coffee table books."
      His agent sighed. "Come on, Frank. You can use the money. As for the
book.
      it'll be as good as you make it, right? You've been working on this
stuff
      your whole career, and here's your chance to sum up. And you've got a
1ot
      of readers, people will listen to you." Concern made him shrill: "Don't
      let what's happened get you so down that you miss an opportunity like
      this! Work is the best cure for depression anyway. And this is your
chance
      to influence how we think about what's happened!"
      "With a coffee table book?"
      "God damn it, don't think of it that way!"
      "How should I think of it."
      His agent took a deep breath, let it out, spoke very slowly. 'Think of
it
      as a hundred thousand pounds, Frank."
      His agent did not understand.
      Nevertheless, the next morning as he sat under the bright white
ceiling,
      doodling with a green pen on yellow paper, he decided to go to England.
Не
      didn't want to sit in that room anymore; it scared him, because he
      suspected it might not be working. He was not sixty percent better. And
he
      didn't want to shift to drug therapy. They had found nothing wrong with
      his brain, no physical problems at all, and though that meant little,
it
      did make him resistant to the idea of drugs. He had his reasons and he
      wanted his feelings!
      The light room technician thought that this attitude was a good sign in
      itself. "Your serotonin level is normal, right? So it's not that bad.
      Besides London's a lot farther north than New York, so you'll pick up
the
      light you lose here. And if you need more you can always head north
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again,

right?"

He called Charles and Rya Dowland to ask if he could stay with them. It turned out they were leaving for Florida the next day, but they invited him to stay anyway; they liked having their flat occupied while they

were

gone. Frank had done that before, he still had the key on his key-ring. "Thanks," he said. It would be better this way, actually. He didn't

feel

like talking.

So he packed his backpack, including camping gear with the clothes, and the next morning flew to London. It was strange how one traveled these days: he got into a moving chamber outside his hotel, then shifted from one chamber to the next for several hours, only stepping outdoors again when he emerged from the Camden tube station, some hundred yards from Charles and Rya's flat.

The ghost of his old pleasure brushed him as he crossed Camden High Street

and walked by the cinema, listening to London's voices. This had been his

method for years: come to London, stay with Charles and Rya until he found

digs, do his research and writing at the British Museum, visit the used bookstores at Charing Cross, spend the evenings at Charles and Rya's, watching TV and talking. It had been that way for four books, over the course of twenty years.

The flat was located above a butcher shop. Every wall in it was covered with stuffed bookshelves, and there were shelves nailed up over the toilet, the bath, and the head of the guest bed. In the unlikely event

of

day.

an earthquake the guest would be buried in a hundred histories of London.

Frank threw his pack on the guest bed and went past the English poets downstairs. The living room was nearly filled by a table stacked with papers and books. The side street below was an open-air produce market, and he could hear the voices of the vendors as they packed up for the

The sun hadn't set, though it was past nine; these late May days were already long. It was almost like still being in therapy.

He went downstairs and bought vegetables and rice, then went back up and

cooked them. The kitchen windows were the color of sunset, and the little

flat glowed, evoking its owners so strongly that it was almost as if they

were there. Suddenly he wished they were.

After eating he turned on the CD player and put on some Handel. He opened

the living room drapes and settled into Charles's armchair, a glass of Bulgarian wine in his hand, an open notebook on his knee. He watched salmon light leak out of the clouds to the north, and tried to think

the causes of the First World War.

In the morning he woke to the dull thump thump of frozen slabs of meat being rendered by an axe. He went downstairs and ate cereal while leafing through the Guardian, then took the tube to Tottenham Court

Road

about

and walked to the British Museum.

Because of The Belle Epoque he had already done his research on the pre-war period, but writing in the British Library was a ritual he

want to break; it made him part of a tradition, back to Marx and beyond.

 $\mbox{\ensuremath{\mbox{He}}}$ showed his still-valid reader's ticket to a librarian and then found an

empty seat in his usual row; in fact he had written much of Entre Deux Guerres in that very carrel, under the frontal lobes of the great skull dome. He opened a notebook and stared at the page. Slowly he wrote,

1900

to 1914. Then he stared at the page.

His earlier book had tended to focus on the sumptuous excesses of the pre-war European ruling class, as a young and clearly leftist reviewer

in

the Guardian had rather sharply pointed out. To the extent that he had delved into the causes of the Great War, he had subscribed to the usual theory; that it had been the result of rising nationalism, diplomatic brinksmanship, and several deceptive precedents in the previous two decades. The Spanish-American War, the Russo-Japanese War, and the two Balkan wars had all remained localized and non-catastrophic; and there

had

been several "incidents," the Moroccan affair and the like, that had brought the two great alliances to the brink, but not toppled them over.

So when Austria-Hungary made impossible demands to Serbia after the assassination of Ferdinand, no one could have known that the situation would domino into the trenches and their slaughter.

History as accident. Well, no doubt there was a lot of truth in that.

But

now he found himself thinking of the crowds in the streets of all the major cities, cheering the news of the war's outbreak; of the disappearance of pacifism, which had seemed such a force; of, in short, the apparently unanimous support for war among the prosperous citizens

of

the European powers. Support for a war that had no real reason to be! There was something irreducibly mysterious about that, and this time he decided he would admit it, and discuss it. That would require a consideration of the preceding century, the Pax Europeana; which in

fact

had been a century of bloody subjugation, the high point of imperialism,

with most of the world falling to the great powers. These powers had prospered at the expense of their colonies, who had suffered in abject misery. Then the powers had spent their profits building weapons, and used

the weapons on each other, and destroyed themselves. There was something

weirdly just about that development, as when a mass murderer finally turns

the gun on himself. Punishment, an end to guilt, an end to pain. Could that really explain it? While staying in Washington with his dying father.

Frank had visited the Lincoln Memorial, and there on the right hand wall

had been Lincoln's Second Inaugural Address, carved in capital letters with the commas omitted, an oddity which somehow added to the speech's Biblical massiveness, as when it spoke of the ongoing war: "YET IF GOD WILLS THAT IT CONTINUE UNTIL ALL THE WEALTH PILED BY THE BONDSMAN'S TWO HUNDRED AND FIFTY YEARS OF UNREQUITED TOIL SHALL BE SUNK AND UNTIL

EVERY

DROP OF BLOOD DRAWN WITH THE LASH SHALL BE PAID BY ANOTHER DRAWN WITH THE

SWORD AS WAS SAID THREE THOUSAND YEARS AGO SO STILL IT MUST BE SAID 'THE

JUDGMENTS OF THE LORD ARE TRUE AND RIGHTEOUS ALTOGETHER.'"

A frightening thought, from that dark part of Lincoln that was never far

from the surface. But as a theory of the Great War's origin it still struck him as inadequate. It was possible to believe it of the kings and

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world; they had known what they were doing, and so might have been impelled by unconscious guilt to mass suicide. But the common citizen at

home, ecstatic in the streets at the outbreak of general war? That seemed $% \left(1\right) =\left(1\right) +\left(1\right) +$

more likely to be just another manifestation of the hatred of the other.

All my problems are your fault! He and Andrea had said that to each other $% \left(1\right) =\left(1\right) +\left(1\right) +$

a lot. Everyone did.

And yet... it still seemed to him that the causes were eluding him, as they had everyone else. Perhaps it was a simple pleasure in destruction.

What is the primal response to an edifice? Knock it down. What is the primal response to a stranger? Attack him.

nature." That would be a constant problem in an essay of this length. And

whatever the causes, there stood the year 1914, irreducible, inexplicable, $% \frac{1}{2}\left(\frac{1}{2}\right) =\frac{1}{2}\left(\frac{1}{2}\right) +\frac{1}{2}\left(\frac{1}$

unchangeable. "AND THE WAR CAME."

In his previous books he had never written about the wars. He was among those who believed that real history occurred in peacetime, and that in war you might as well roll dice or skip ahead to the peace treaty. For anyone but a military historian, what was interesting would begin again only when the war ended.

Now he wasn't so sure. Current views of the Belle Epoque were distorted because one only saw it through the lens of the war that ended it; which

meant that the Great War was somehow more powerful than the Belle Epoque.

or at least more powerful than he had thought. It seemed he would have to

write about it, this time, to make sense of the century. And so he would

have to research it.

He walked up to the central catalogue tables. The room darkened as the \sup

went behind clouds, and he felt a chill.

For a long time the numbers alone staggered him. To overwhelm trench defenses, artillery bombardments of the most astonishing size were brought

to bear: on the Somme the British put a gun every twenty yards along a fourteen-mile front, and fired a million and a half shells. In April

1917

 $\circ f$

far.

the French fired six million shells. The Germans' Big Bertha shot shells

seventy-five miles high, essentially into space. Verdun was a "battle" that lasted ten months, and killed almost a million men.

The British section of the front was ninety miles long. Every day of the

war, about seven thousand men along that front were killed or wounded - not in any battle in particular, but just as the result of incidental sniper fire or bombardment. It was called "wastage."

Frank stopped reading, his mind suddenly filled with the image of the Vietnam Memorial. He had visited it right after leaving the Lincoln Memorial, and the sight of all those names engraved on the black granite

plates had powerfully affected him. For a moment it had seemed possible to

imagine all those people, a little white line for each.

But at the end of every month or two of the Great War, the British had had

a whole Vietnam Memorial's worth of dead. Every month or two, for fifty-one months.

He filled out book request slips and gave them to the librarians in the central ring of desks, then picked up the books he had requested the day

before, and took them back to his carrel. He skimmed the books and took notes, mostly writing down figures and statistics. British factories produced two hundred and fifty million shells. The major battles all killed a half million or more. About ten million men died on the field

baffle, ten million more by revolution, disease, and starvation. Occasionally he would stop reading and try to write; but he never got

Once he wrote several pages on the economy of the war. The organization of

agriculture and business, especially in Germany under Rathenau and ${\tt England}$

under Lloyd George, reminded him very strongly of the postmodern

now running things. One could trace the roots of late capitalism to $\ensuremath{\mathsf{Great}}$

 $\label{thm:cond} \mbox{War innovations found in Rathenau's Kriegsrohstoffabteilung (the "War Raw")} \\$

Stuff Department"), or in his Zentral Einkaufs-Gesellschaft. All business

had been organized to fight the enemy; but when the war was over and the

enemy vanquished, the organization remained. People continued to sacrifice

the fruits of their work, but now they did it for the corporations that had taken the wartime governments' positions in the system.

So much of the twentieth century, there already in the Great War. And then

the Armistice was signed, at eleven A.M. on November 11th, 1918. That morning at the front the two sides exchanged bombardments as usual, so that by eleven A.M. many people had died.

That evening Frank hurried home, just beating a thundershower. The air was

as dark as smoky glass.

And the war never ended

This idea, that the two world wars were actually one, was not original to

him. Winston Churchill said it at the time, as did the Nazi Alfred Rosenburg. They saw the twenties and thirties as an interregnum, a pause

to regroup in the middle of a two-part conflict. The eye of a hurricane.

Nine o'clock one morning and Frank was still at the Dowlands', lingering

over cereal and paging through the Guardian, and then through his notebooks. Every morning he seemed to get a later start, and although it

was May, the days didn't seem to be getting any longer. Rather the reverse.

There were arguments against the view that it was a single war. The twenties did not seem very ominous, at least after the Treaty of

in 1925: Germany had survived its financial collapse, and everywhere economic recovery seemed strong. But the thirties showed the real state of

things: the depression, the new democracies falling to fascism, the brutal

Spanish Civil War; the starvation of the kulaks; the terrible sense of fatality in the air. The sense of slipping on a slope, falling helplessly

back into war.

But this time it was different. Total War. German military strategists had

coined the phrase in the 1890s, while analyzing Sherman's campaign in Georgia. And they felt they were waging total war when they torpedoed neutral ships in 1915. But they were wrong; the Great War was not total war. In 1914 the rumor that German soldiers had killed eight Belgian

was enough to shock all civilization, and later when the Lusitania was sunk, objections were so fierce that the Germans agreed to leave passenger

ships alone. This could only happen in a world where people still held the

notion that in war armies fought armies and soldiers killed soldiers, while civilians suffered privation and perhaps got killed accidentally, but were never deliberately targeted. This was how European wars had

fought for centuries: diplomacy by other means.

In 1939, this changed. Perhaps it changed only because the capability for

total war had emerged from the technological base, in the form of mass long-range aerial bombardment. Perhaps on the other hand it was a matter

of learning the lessons of the Great War, digesting its implications. Stalin's murder of the kulaks, for instance: five million Ukrainian peasants, killed because Stalin wanted to collectivize agriculture.

Food

war.

nuns

been

was deliberately shipped out of that breadbasket region, emergency supplies withheld, hidden stockpiles destroyed; and several thousand villages disappeared as all their occupants starved. This was total

Every morning Frank leafed around in the big catalogue volumes, as if

he

war,

the

might find some other twentieth century. He filled out his slips, picked

 $% \left(1\right) =\left(1\right) +\left(1\right) +\left($

spent more time reading than writing. The days were cloudy, and it was $\mathop{\text{\rm dim}}\nolimits$

under the great dome. His notes were getting scrambled. He had stopped working in chronological order, and kept returning compulsively to the Great War, even though the front wave of his reading was well into World

War Two.

Twenty million had died in the first war, fifty million in the second. Civilian deaths made the bulk of the difference. Near the end of the

thousands of bombs were dropped on cities in the hope of starting firestorms, in which the atmosphere itself was in effect ignited, as in Dresden, Berlin, Tokyo. Civilians were the target now, and strategic bombing made them easy to hit. Hiroshima and Nagasaki were in that sense

 $\,$ kind of exclamation point, at the end of a sentence which the war had been

saying all along: we will kill your families at home. War is war, as Sherman said; if you want peace, surrender. And they did.

After two bombs. Nagasaki was bombed three days after Hiroshima, before the Japanese had time to understand the damage and respond. Dropping

 $\,$ bomb on Hiroshima was endlessly debated in the literature, but Frank found

 $\,$ few who even attempted a defense of Nagasaki. Truman and his advisors $\,$ did $\,$

it, people said, to a) show Stalin they had more than one bomb, and b) show Stalin that they would use the bomb even as a threat or warning only,

as Nagasaki demonstrated. A Vietnam Memorial's worth of civilians in an instantaneous flash, just so Stalin would take Truman seriously. Which he

did.

When the crew of the Enola Gay landed, they celebrated with a barbeque.

In the evenings Frank sat in the Dowland flat in silence. He did not read,

but watched the evening summer light leak out of the sky to the north. The

days were getting shorter. He needed the therapy, he could feel it. More

light! Someone had said that on their deathbed - Newton, Galileo, Spinoza,

someone like that. No doubt they had been depressed at the time. He missed Charles and Rya. He would feel better, he was sure, if he had them there to talk with. That was the thing about friends, after all: they

lasted and you could talk. That was the definition of friendship. But Charles and Rya were in Florida. And in the dusk he saw that the walls

of books in the flat functioned like lead lining in a radioactive environment, all those recorded thoughts forming a kind of shield against

poisonous reality. The best shield available, perhaps. But now it was failing, at least for him; the books appeared to be nothing more than

their spines.

 $\,$ And then one evening in a premature blue sunset it seemed that the whole

flat had gone transparent, and that he was sitting in an armchair, suspended over a vast and shadowy city.

The Holocaust, like Hiroshima and Nagasaki, had precedents. Russians with

Ukrainians, Turks with Armenians, white settlers with native Americans.

But the mechanized efficiency of the Germans' murder of the Jews was something new and horrible. There was a book in his stack on the signers

of the death camps, the architects, engineers, builders. Were these functionaries less or more obscene than the mad doctors, the sadistic guards? He couldn't decide.

And then there was the sheer number of them, the six million. It was hard

to comprehend it. He read that there was a library in Jerusalem where they $\ensuremath{\mathsf{T}}$

had taken on the task of recording all they could find about every one of

the six million. Walking up Charing Cross Road that afternoon he thought

of that and stopped short. All those names in one library, another transparent room, another memorial. For a second he caught a glimpse of how many people that was, a whole London's worth. Then it faded and he

left on a street corner, looking both ways to make sure he didn't get run

over.

was

As he continued walking he tried to calculate how many Vietnam Memorials

it would take to list the six million. Roughly two per hundred thousand;

thus twenty per million. So, one hundred and twenty. Count them one by one, step by step.

 $\,$ He took to hanging out through the evenings in pubs. The Wellington was as

good as any, and was frequented occasionally by some acquaintances he had

met through Charles and Rya. He sat with them and listened to them talk,

but often he found himself distracted by his day's reading. So the conversations tumbled along without him, and the Brits, slightly more tolerant than Americans of eccentricity, did not make him feel unwelcome.

The pubs were noisy and filled with light. Scores of people moved about in

them, talking, smoking, drinking. A different kind of lead-lined room. He

didn't drink beer, and so at first remained sober; but then he
discovered

the hard cider that pubs carried. He liked it and drank it like the others

drank their beer, and got quite drunk. After that he sometimes became very

talkative, telling the rest things about the twentieth century that they

already knew, and they would nod and contribute some other bit of

information, to be polite, then change the subject back to whatever they had been discussing before, gently and without snubbing him. But most of the time when he drank he only got more remote from their talk, which jumped about faster than he could follow. And each morning after, he would wake late and slow, head pounding, the day already there and a lot of the morning light missed in sleep. Depressives were not supposed to drink at all. So finally he quit going to the Wellington, and instead ate at the pubs closest to the Dowlands'. One was called The Halfway House, the other World's End, a poor choice as far as names were concerned, but he ate at World's End anyway, and afterwards would sit at а corner table and nurse a whisky and stare at page after page of notes, chewing the end of a pen to plastic shrapnel. The Fighting Never Stopped, as one book's title put it. But the atomic bomb meant that the second half of the century looked different than the first. Some, Americans for the most part, called it the Pax Americana. But. most called it the Cold War, 1945-1989. And not that cold, either. Under the umbrella of the superpower stalemate local conflicts flared everywhere, wars which compared to the two big ones looked small; but there had been over a hundred of them all told, killing about 350,000 people a year, for a total of around fifteen million, some said twenty; it was hard to count. Most occurred in the big ten: the two Vietnam wars, the two Indo-Pakistan wars, the Korean war, the Algerian war, the civil war in Sudan, the massacres in Indonesia in 1965, the Biafran war, and the Iran-Iraq war. Then another ten million civilians had been starved by deliberate military action; so that the total for the period was about the equal of the Great War itself. Though it had taken ten times as long to compile. Improvement of a sort. And thus perhaps the rise of atrocity war, as if the horror of individualized murders could compensate for the lack of sheer number. And maybe it could; because now his research consisted of a succession of accounts and color photos of rape, dismemberment, torture - bodies of individual people, in their own clothes, scattered on the ground in pools of blood. Vietnamese villages, erupting in napalm. Cambodia, Uganda, Tibet - Tibet was genocide again, paced to escape the world's notice, a few villages destroyed every year in a process called thamzing or reeducation: the villages seized by the Chinese and the villagers killed by a variety of methods, "burying alive, hanging, beheading, disemboweling, scalding,

crucifixion, quartering, stoning, small children forced to shoot their parents; pregnant women given forced abortions, the fetuses piled in

mounds on the village squares."

Meanwhile power on the planet continued to shift into fewer hands. The Second World War had been the only thing to successfully end the Depression, a fact leaders remembered; so the economic consolidation begun

in the First War continued through the Second War and the Cold War, yoking

the whole world into a war economy.

At first 1989 had looked like a break away from that. But now, just seven

years later, the Cold War losers all looked like Germany in 1922, their money worthless, their shelves empty, their democracies crumbling to juntas. Except this time the juntas had corporate sponsors; multinational

banks ran the old Soviet bloc just as they did the Third World, with "austerity measures" enforced in the name of "the free market," meaning half the world went to sleep hungry every night to pay off debts to millionaires. While temperatures still rose, populations still soared, "local conflicts" still burned in twenty different places.

One morning Frank lingered over cereal, reluctant to leave the flat. He opened the Guardian and read that the year's defense budgets worldwide would total around a trillion dollars. "More light," he said,

swallowing

west

hard. It was a dark, rainy day. He could feel his pupils enlarging, making

the effort. The days were surely getting shorter, even though it was May;

and the air was getting darker, as if London's Victorian fogs had returned, coal smoke in the fabric of reality.

He flipped the page and started an article on the conflict in Sri Lanka.

Singhalese and Tamils had been fighting for a generation now, and some time in the previous week, a husband and wife had emerged from their house

in the morning to find the heads of their six sons arranged on their lawn.

He threw the paper aside and walked through soot down the streets.

He got to the British Museum on automatic pilot. Waiting for him at the top of the stack was a book containing estimates of total war deaths for

the century. About a hundred million people.

He found himself on the dark streets of London again, thinking of numbers.

All day he walked, unable to gather his thoughts. And that night as he fell asleep the calculations returned, in a dream or a hypnogogic vision:

it would take two thousand Vietnam Memorials to list the century's war dead. From above he saw himself walking the Mall in Washington, D.C., and

the whole park from the Capitol to the Lincoln Memorial was dotted with the black Vs of Vietnam Memorials, as if a flock of giant stealth birds had landed on it. All night he walked past black wing walls, moving

toward the white tomb on the river.

The next day the first book on the stack concerned the war between China

and Japan, 1931-1945. Like most of Asian history this war was poorly remembered in the West, but it had been huge. The whole Korean nation became in effect a slave labor camp in the Japanese war effort, and the

Japanese concentration camps in Manchuria had killed as many Chinese as the Germans had killed Jews. These deaths included thousands in the style

of Mengele and the Nazi doctors, caused by "scientific" medical torture.

Japanese experimenters had for instance performed transfusions in which they drained Chinese prisoners of their blood and replaced it with horses'

blood, to see how long the prisoners would live. Survival rates varied from twenty minutes to six hours, with the subjects in agony throughout.

Frank closed that book and put it down. He picked the next one out of the $\ensuremath{\mathsf{E}}$

gloom and peered at it. A heavy old thing, bound in dark green leather, with a dull gold pattern inlaid on the spine and boards. A History of the

Nineteenth Century, with Illustrations - the latter tinted photos, their

colors faded and dim. Published in 1902 by George Newnes Ltd; last century's equivalent of his own project, apparently. Curiosity about that

had caused him to request the tide. He opened it and thumbed through, and

on the last page the text caught his eye: "I believe that Man is good.

believe that we stand at the dawn of a century that will be more peaceful $% \left(1\right) =\left(1\right) +\left(1\right) +$

and prosperous than any in history."

He

and

He put down the book and left the British Museum. In a red phone box he located the nearest car rental agency, an Avis outlet near Westminster.

took the Tube and walked to this agency, and there he rented a blue \mbox{Ford}

Sierra station wagon. The steering wheel was on the right, of course. Frank had never driven in Great Britain before, and he sat behind the wheel trying to hide his uneasiness from the agent. The clutch, brake,

gas pedal were left-to-right as usual, thank God. And the gear shift was

arranged the same, though one did have to operate it with the left hand.

Awkwardly he shoved the gearshift into first and drove out of the garage,

turning left and driving down the left side of the street. It was weird.

But the oddity of sitting on the right insured that he wouldn't forget the

necessity of driving on the left. He pulled to the curb and perused the Avis street map of London, plotted a course, got back in traffic, and drove to Camden High Street. He parked below the Dowlands' and went upstairs and packed, then took his backpack down to the car. He

to leave a note: Gone to the land of the midnight sun. Then he went down

to the car and drove north, onto the highways and out of London.

It was a wet day, and low full clouds brushed over the land, dropping here $% \left(1\right) =\left(1\right) \left(1\right) +\left(1\right) \left(1\right) \left(1\right) +\left(1\right) \left(1$

a black broom of rain, there a Blakean shaft of sunlight. The hills

were

green, and the fields yellow or brown or lighter green. At first there were a lot of hills, a lot of fields. Then the highway swung by Birmingham

and Manchester, and he drove by fields of rowhouses, line after line after

line of them, on narrow treeless streets - all orderly and neat, and yet $% \left(1\right) =\left(1\right) \left(1\right) +\left(1\right) \left(1\right) \left(1\right) +\left(1\right) \left(1\right)$

still among the bleakest human landscapes he had ever seen. Streets like $% \left(1\right) =\left(1\right) +\left(1\right) +\left$

trenches. Certainly the world was being overrun. Population densities $\ensuremath{\mathsf{must}}$

be near the levels set in those experiments on rats which had caused the $\ensuremath{\mathsf{I}}$

rats to go insane. It was as good an explanation as any. Mostly males affected, in both cases: territorial hunters, bred to kill for food,

trapped in little boxes. They had gone mad. "I believe that Man is this or

that," the Edwardian author had written, and why not; it couldn't be denied that it was mostly men's doing. The planning, the diplomacy, the fighting, the raping, the killing.

The obvious thing to do was to give the running of the world over to women. There was Thatcher in the Falklands and Indira Gandhi in Bangladesh, it was true; but still it would be worth trying, it could hardly get worse! And given the maternal instinct, it would probably be better. Give every first lady her husband's job. Perhaps every woman

her

or

now

man's job. Let the men care for the children, for five thousand years

fifty thousand, one for every year of murderous patriarchy.

North of Manchester he passed giant radio towers, and something that looked like nuclear reactor stacks. Fighter jets zoomed overhead. The twentieth century. Why hadn't that Edwardian author been able to see it coming? Perhaps the future was simply unimaginable, then and always. Or perhaps things hadn't looked so bad in 1902. The Edwardian, looking forward in a time of prosperity, saw more of the same; instead there

had

followed a century of horrors. Now one looked forward from a time of horrors; so that by analogy, what was implied for the next century was grim beyond measure. And with the new technologies of destruction, practically anything was possible: chemical warfare, nuclear terrorism, biological holocaust; victims killed by nano-assassins flying through them, or by viruses in their drinking supply, or by a particular

of their telephone; or reduced to zombies by drugs or brain implants, torture or nerve gas; or simply dispatched with bullets, or starved; hi tech, low tech, the methods were endless. And the motivations would be stronger than ever; with populations rising and resources depleted, people

were going to be fighting not to rule, but to survive. Some little country

threatened with defeat could unleash an epidemic against its rival and accidentally kill off a continent, or everyone, it was entirely possible.

The twenty-first century might make the twentieth look like nothing at all.

He would come to after reveries like that and realize that twenty or

thirty or even sixty miles had passed without him seeing a thing of the outside world. Automatic pilot, on roads that were reversed! He tried to

concentrate.

He was somewhere above Carlisle. The map showed two possible routes to Edinburgh: one left the highway just below Glasgow, while a smaller road

left sooner and was much more direct. He chose the direct route and $\ensuremath{\mathsf{took}}$

an exit into a roundabout and onto the A702, a two-lane road heading northeast. Its black asphalt was wet with rain, and the clouds rushing overhead were dark. After several miles he passed a sign that said "Scenic"

Route," which suggested he had chosen the wrong road, but he was unwilling

to backtrack. It was probably as fast to go this way by now, just more work: frequent roundabouts, villages with traffic lights, and narrow stretches where the road was hemmed by hedges or walls. Sunset was near,

he had been driving for hours; he was tired, and when black trucks rushed

at him out of the spray and shadows it looked like they were going to collide with him head-on. It became an effort to stay to the left rather

than the right where his instincts shrieked he should be. Right and left

had to be reversed on that level, but kept the same at foot level - reversed concerning which hand went on the gearshift, but not reversed for

what the gearshift did - and it all began to blur and mix, until finally

huge lorry rushed head first at him and he veered left, but hit the gas rather than the brakes. At the unexpected lurch forward he swerved farther

left to be safe, and that ran his left wheels off the asphalt and into \boldsymbol{a}

muddy gutter, causing the car to bounce back onto the road. He hit the brakes hard and the lorry roared by his ear. The car skidded over the wet

asphalt to a halt.

station

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car he saw that the driver's side mirror was gone. There was nothing there $% \left(1\right) =\left(1\right) +\left(1\right)$

but a rectangular depression in the metal, four rivet holes slightly flared to the rear, and one larger hole for the mirror adjustment mechanism, missing as well.

He went to the other side of the car to remind himself what the Sierra's $\,$

side mirrors looked like. A solid metal and plastic mounting. He walked a

hundred yards back down the road, looking through the dusk for the missing

one, but he couldn't find it anywhere. The mirror was gone.

Outside Edinburgh he stopped and called Alec, a friend from years past. "What? Frank Churchill? Hello! You're here? Come on by, then." Frank followed his directions into the city center, past the train

to a neighborhood of narrow streets. Reversed parallel parking was

almost. too much for him; it took four tries to get the car next to the curb. The Sierra bumped over paving stones to a halt. He killed the engine and got out of the car, but his whole body continued to vibrate, a big tuning fork humming in the twilight. Shops threw their illumination over passing cars. Butcher, baker, Indian deli. Alec lived on the third floor. "Come in, man, come in." He looked harried. "I thought you were in America! What brings you here?" "I don't know." Alec glanced sharply at him, then led him into the flat's kitchen and living area. The window had a view across rooftops to the castle. Alec stood in the kitchen, uncharacteristically silent. Frank put down his backpack and walked over to look out at the castle, feeling awkward. In the old days he and Andrea had trained up several times to visit Alec and Suzanne, a primatologist. At that time those two had lived in a huge three-storied flat in the New Town, and when Frank and Andrea had arrived the four of them would stay up late into the night, drinking brandy and talking in a high-ceilinged Georgian living room. During one stay they had all driven into the Highlands, and another time Frank and Andrea had stayed through a festival week, the four attending as many plays as they could. But now Suzanne and Alec had gone their ways, and Frank and Andrea were divorced, and Alec lived in a different flat; and that whole life had disappeared. "Did I come at a bad time?" "No, actually." A clatter of dishes as Alec worked at the sink. "I'm off to dinner with some friends, you'll join us - you haven't eaten?" "No. I won't be-" "No. You've met Peg and Rog before, I think. And we can use the distraction, I'm sure. We've all been to a funeral this morning. Friends of ours, their kid died. Crib death, you know." "Jesus. You mean it just... "Sudden infant death syndrome, yeah. Dropped him off at day care and he went off during his nap. Five months old." "Jesus." "Yeah." Alec went to the kitchen table and filled a glass from a bottle of Laphroaig. "Want a whisky?" "Yes, please." Alec poured another glass, drank his down. "I suppose the idea these days is that a proper funeral helps the parents deal with it. So Tom and Elyse came in carrying the coffin, and it was about this big." He held his hands a foot apart. "No."

"Yeah. Never seen anything like it."

They drank in silence.

The restaurant was a fashionably bohemian seafood place, set above a pub.

There Frank and Alec joined Peg and Rog, another couple, and a woman named

 $\mbox{\sc Karen.}$ All animal behaviorists, and all headed out to Africa in the next

couple of weeks - Rog and Peg to Tanzania, the rest to Rwanda. Despite their morning's event the talk was quick, spirited, wide-ranging; Frank drank wine and listened as they discussed African politics, the

of filming primates, rock music. Only once did the subject of the funeral $\ensuremath{\mathsf{I}}$

come up, and then they shook their heads; there wasn't much to say. Stiff

upper lip.

Frank said, "I suppose it's better it happened now than when the kid was

three or four."

They stared at him. "Oh no," Peg said. "I don't think so."

Acutely aware that he had said something stupid, Frank tried to recover:

"I mean, you know, they've more time to...." He shook his head, foundering.

"It's rather comparing absolutes, isn't it," Rog said gently.

"True," he said. "It is." And he drank his wine. He wanted to go on: True,

he wanted to say, any death is an absolute disaster, even that of an infant too young to know what was happening; but what if you had spent your life raising six such children and then went out one morning and found their heads on your lawn? Isn't the one more absolute than the other? He was drunk, his head hurt, his body still vibrated with the

drive, and the shock of the brush with the lorry; and it seemed likely that the dyslexia of exhaustion had invaded all his thinking, including his moral sense, making everything backward. So he clamped his teeth together and concentrated on the wine, his fork humming in his hand,

his

vour

day's

glass chattering against his teeth. The room was dark.

Afterwards Alec stopped at the door to his building and shook his head. "Not ready for that yet," he said. "Let's try Preservation Hall, it's

kind of thing on Wednesday nights. Traditional jazz."

Frank and Andrea had been fans of traditional jazz. "Any good?"

"Good enough for tonight, eh?"

The pub was within walking distance, down a wide cobblestone promenade called the Grassmarket, then up Victoria Street. At the door of the pub they were stopped; there was a cover charge, the usual band had been replaced by a buffet dinner and concert, featuring several different bands. Proceeds to go to the family of a Glasgow musician, recently

killed

in a car crash. "Jesus Christ," Frank exclaimed, feeling like a curse. He

turned to go.

"Might as well try it," Alec said, and pulled out his wallet. "I'll pay." $\,$

"But we've already eaten."

Alec ignored him and gave the man twenty pounds. "Come on."

Inside, a very large pub was jammed with people, and an enormous buffet table stacked with meats, breads, salads, seafood dishes. They got drinks

from the bar and sat at the end of a crowded picnic table. It was noisy,

the Scots accents so thick that Frank understood less than half of what he

heard. A succession of local acts took the stage: the traditional jazz band that usually played, a stand-up comedian, a singer of Forties' music

hall songs, a country-western group. Alec and Frank took turns going to the bar to get refills. Frank watched the bands and the crowd. All ages and types were represented. Each band said something about the late musician, who apparently had been well-known, a young rocker and quite

hellion from the sound of it. Crashed driving home drunk after a gig, and

no one a bit surprised.

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About midnight an obese young man seated at their table, who had been stealing food from all the plates around him, rose whalelike and surged to

the stage. People cheered as he joined the band setting up. He picked up a

guitar, leaned into the mike, and proceeded to rip into a selection of r&b

and early rock and roll. He and his band were the best group yet, and the

pub went wild. Most of the crowd got to their feet and danced in place.
Next to Frank a young punk had to lean over the table to answer a
gray-haired lady's questions about how he kept his hair spiked. A
Celtic

wake, Frank thought, and downed his cider and howled with the rest as the

fat man started up Chuck Berry's "Rock And Roll Music."

So he was feeling no pain when the band finished its last encore and he and Alec staggered off into the night, and made their way home. But it

gotten a lot colder while they were inside, and the streets were dark and $% \left(1\right) =\left(1\right) \left(1\right) +\left(1\right) \left(1\right) \left(1\right) +\left(1\right) \left(1\right$

empty. Preservation Hall was no more than a small wooden box of light, buried in a cold stone city. Frank looked back in its direction and saw that a streetlight reflected off the black cobblestones of the Grassmarket

in such a way that there were thousands of brief white squiggles underfoot, looking like names engraved on black granite, as if the whole

surface of the earth were paved by a single memorial.

The next day he drove north again, across the Forth Bridge and then west

along the shores of a loch to Fort William, and north from there through $% \left(1\right) =\left(1\right) \left(1\right) +\left(1\right) \left(1\right) \left(1\right) +\left(1\right) \left(1\right)$

the Highlands. Above Ullapool steep ridges burst like fins out of boggy treeless hillsides. There was water everywhere, from puddles to lochs, with the Atlantic itself visible from most high points. Out to sea the tall islands of the Inner Hebrides were just visible.

He continued north. He had his sleeping bag and foam pad with him, and

he parked in a scenic overlook, and cooked soup on his Bluet stove, and slept in the back of the car. He woke with the dawn and drove north. He

talked to nobody.

Eventually he reached the northwest tip of Scotland and was forced to turn $\ensuremath{\mathsf{E}}$

east, on a road bordering the North Sea. Early that evening he arrived in

Scrabster, at the northeast tip of Scotland. He drove to the docks, and found that a ferry was scheduled to leave for the Orkney Islands the next

day at noon. He decided to take it.

There was no secluded place to park, so he took a room in a hotel. He had

dinner in the restaurant next door, fresh shrimp in mayonnaise with chips,

and went to his room and slept. At six the next morning the ancient crone

who ran the hotel knocked on his door and told him an unscheduled ferry was leaving in forty minutes: did he want to go? He said he did. He got up

and dressed, then felt too exhausted to continue. He decided to take the $\,$

regular ferry after all, took off his clothes and returned to bed. Then he

realized that exhausted or not, he wasn't going to be able to fall back asleep. Cursing, almost crying, he got up and put his clothes back on. Downstairs the old woman had fried bacon and made him two thick bacon sandwiches, as he was going to miss her regular breakfast. He ate the sandwiches sitting in the Sierra, waiting to get the car into the ferry.

Once in the hold he locked the car and went up to the warm stuffy passenger cabin, and lay on padded vinyl seating and fell back asleep. He woke when they docked in Stromness. For a moment he didn't remember getting on the ferry, and he couldn't understand why he wasn't in his hotel bed in Scrabster. He stared through salt-stained windows at fishing

boats, amazed, and then it came to him. He was in the Orkneys.

Driving along the southern coast of the main island, he found that his mental image of the Orkneys had been entirely wrong. He had expected an extension of the Highlands; instead it was like eastern Scotland, low, rounded, and green. Most of it was cultivated or used for pasture.

Green

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fields, fences, farmhouses. He was a bit disappointed.

Then in the island's big town of Kirkwall he drove past a Gothic cathedral

- a very little Gothic cathedral, a kind of pocket cathedral. Frank had never seen anything like it. He stopped and got out to have a look. Cathedral of St. Magnus, begun in 1137. So early, and this far north!

wonder it was so small. Building it would have required craftsmen from the $\,$

continent, shipped up here to a rude fishing village of drywall and turf

roofs; a strange influx it must have been, a kind of cultural revolution.

The finished building must have stood out like something from another planet.

But as he walked around the bishop's palace next door, and then a little

 $\mbox{\sc museum},$ he learned that it might not have been such a shock for $\mbox{\sc Kirkwall}$

after all. In those days the Orkneys had been a crossroads of a sort, where Norse and Scots and English and Irish had met, infusing an indigenous culture that went right back to the Stone Age. The fields and

pastures he had driven by had been worked, some of them, for five thousand

years!

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And such faces walking the streets, so intent and vivid. His image of the

local culture had been as wrong as his image of the land. He had thought

he would find decrepit fishing villages, dwindling to nothing as people moved south to the cities. But it wasn't like that in Kirkwall, where teenagers roamed in self-absorbed talky gangs, and restaurants open to

street were packed for lunch. In the bookstores he found big sections on

local topics: nature guides, archaeological guides, histories, sea tales,

novels. Several writers, obviously popular, had as their entire subject the islands. To the locals, he realized, the Orkneys were the center of the world.

He bought a guidebook and drove north, up the east coast of Mainland to the Broch of Gurness, a ruined fort and village that had been occupied from the time of Christ to the Norse era. The broch itself was a round stone tower about twenty feet tall. Its wall was at least ten feet thick,

and was made of flat slabs, stacked so carefully that you couldn't have stuck a dime in the cracks. The walls in the surrounding village were much

thinner; if attacked, the villagers would have retired into the broch. Frank nodded at the explanatory sentence in the guidebook, reminded that

the twentieth century had had no monopoly on atrocities. Some had happened

right here, no doubt. Unless the broch had functioned as a deterrent. Gurness overlooked a narrow channel between Mainland and the smaller island of Rousay. Looking out at the channel, Frank noticed white ripples

in its blue water; waves and foam were pouring past. It was a tidal race,

apparently, and at the moment the entire contents of the channel were rushing north, as fast as any river he had ever seen.

Following suggestions in the guidebook, he drove across the island to the

neolithic site of Brodgar, Stenness, and Maes Howe. Brodgar and Stenness $\,$

were two rings of standing stones; Maes Howe was a nearby chambered tomb.

The Ring of Brodgar was a big one, three hundred and forty feet across. Over half of the original sixty stones were still standing, each one a block of roughly dressed sandstone, weathered over the millennia into shapes of great individuality and charisma, like Rodin figures.

Following

the arc they made, he watched the sunlight break on them. It was beautiful.

Stenness was less impressive, as there were only four stones left, each tremendously tall. It roused more curiosity than awe: how had they

stood

those monsters on end? No one knew for sure.

From the road, Maes Howe was just a conical grass mound. To see the inside

he had to wait for a guided tour, happily scheduled to start in fifteen minutes.

He was still the only person waiting when a short stout woman drove up in

a pickup truck. She was about twenty-five, and wore Levi's and a red windbreaker. She greeted him and unlocked a gate in the fence surrounding

the mound, then led him up a gravel path to the entrance on the southwest

slope. There they had to get on their knees and crawl, down a tunnel three

feet high and some thirty feet long. Midwinter sunsets shone directly down

this entryway, the woman looked over her shoulder to tell him. Her Levi's $\,$

were new.

The main chamber of the tomb was quite tall. "Wow," he said, standing up $\ensuremath{\mathsf{up}}$

and looking around.

"It's big isn't it," the guide said. She told him about it in a casual way. The walls were made of the ubiquitous sandstone slabs, with some monster monoliths bracketing the entryway. And something unexpected: a group of Norse sailors had broken into the tomb in the twelfth century (four thousand years after the tomb's construction!) and taken shelter

in

it through a three-day storm. This was known because they had passed the $\,$

time carving runes on the walls, which told their story. The woman pointed

to lines and translated: "'Happy is he who finds the great treasure.' $\mbox{\sc And}$

over here: 'Ingrid is the most beautiful woman in the world.'"
"You're kidding."

"That's what it says. And look here, you'll see they did some drawing as

well."

She pointed out three graceful line figures, cut presumably with axe blades: a walrus, a narwhale, and a dragon. He had seen all three in the

shops of Kirkwall, reproduced in silver for earrings and pendants. "They're beautiful," he said.

"A good eye, that Viking."

He looked at them for a long time, then walked around the chamber to look

at the runes again. It was a suggestive alphabet, harsh and angular. The $\,$

guide seemed in no hurry, she answered his questions at length. She was a $% \left(1\right) =\left(1\right) +\left(1\right) +$

guide in the summer, and sewed sweaters and quilts in the winter. Yes, the

winters were dark. But not very cold. Average temperature around thirty.

"That warm?"

"Aye it's the Gulf Stream you see. It's why Britain is so warm, and Norway $\ensuremath{\mathsf{Norway}}$

too for that matter."

Britain so warm. "I see," he said carefully.

Back outside he stood and blinked in the strong afternoon light. He had just emerged from a five-thousand-year-old tomb. Down by the loch the standing stones were visible, both rings. Ingrid is the most beautiful woman in the world. He looked at Brodgar, a circle of black dots next to

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silver sheen of water. It was a memorial too, although what it was supposed to make its viewers remember was no longer clear. A great chief;

the death of one year, birth of the next; the planets, moon and sun in their courses. Or something else, something simpler. Here we are.

It was still midafternoon judging by the sun, so he was surprised to look

at his watch and see it was six o'clock. Amazing. It was going to be just

like his therapy! Only better because outdoors, in the sunlight and the wind. Spend summer in the Orkneys, winter in the Falklands, which were said to be very similar.... He drove back to Kirkwall and had dinner in

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hotel restaurant. The waitress was tall, attractive, about forty. She asked him where he was from, and he asked her when it would get busy (July), what the population of Kirkwall was (about ten thousand, she guessed) and what she did in the winter (accounting). He had broiled scallops and a glass of white wine. Afterward he sat in the Sierra and looked at his map. He wanted to sleep in the car, but hadn't yet seen a good place to park for the night.

The northwest tip of Mainland looked promising, so he drove across the middle of the island again, passing Stenness and Brodgar once more. The stones of Brodgar stood silhouetted against a western sky banded orange and pink and white and red.

At the very northwest tip of the island, the Point of Buckquoy, there was

a small parking lot, empty this late in the evening. Perfect. Extending west from the point was a tidal causeway, now covered by the sea; a few hundred yards across the water was a small island called the Brough of Birsay, a flat loaf of sandstone tilted up to the west, so that one

could

see the whole grass top of it. There were ruins and a museum at the near $\,$

 $\,$ end, a small lighthouse on the west point. Clearly something to check out

the next day.

South of the point, the western shore of the island curved back in a broad, open bay. Behind its beach stood the well-preserved ruins of a sixteenth century palace. The bay ended in a tall sea cliff called Marwick

Head, which had a tower on its top that looked like another broch, but was, he discovered in his guidebook, the Kitchener Memorial. Offshore in

1916 the HMS Hampshire had hit a mine and sunk, and six hundred men, including Kitchener, had drowned.

 $\,$ Odd, to see that. A couple of weeks ago (it felt like years) he had read

that when the German front lines had been informed of Kitchener's death,

they had started ringing bells and banging pots and pans in celebration;

the noisemaking had spread up and down the German trenches, from the Belgian coast to the Swiss frontier.

He spread out his sleeping bag and foam pad in the back of the station wagon, and lay down. He had a candle for reading, but he did not want

to

read. The sound of the waves was loud. There was still a bit of light

in

the air, these northern summer twilights were really long. The sun had seemed to slide off to the right rather than descend, and suddenly he understood what it would be like to be above the Arctic Circle in midsummer: the sun would just keep sliding off to the right until it brushed the northern horizon, and then it would slide up again into the sky. He needed to live in Ultima Thule.

The car rocked slightly on a gust of wind. It had been windy all day; apparently it was windy all the time here, the main reason the islands were treeless. He lay back and looked at the roof of the car. A car made

a

it.

good tent: flat floor, no leaks.... As he fell asleep he thought, it was

party a mile wide and a thousand miles long.

shadow were flung out toward the brough, which was an island still, as the

tidal bar was covered again. Exposed for only two hours each side of low $% \left(1\right) =\left(1\right) +\left(1\right) +\left$

tide, apparently.

He ate breakfast by the car, and then rather than wait for the causeway

clear he drove south, around the Bay of Birsay and behind Marwick Head, to

the Bay of Skaill. It was a quiet morning, he had the one-lane track to himself. It cut through green pastures. Smoke rose from farmhouse chimneys

and flattened out to the east. The farmhouses were white, with slate $\ensuremath{\operatorname{roofs}}$

and two white chimneys, one at each end of the house. Ruins of farmhouses

built to the same design stood nearby, or in back pastures.

He came to another parking lot, containing five or six cars. A path had been cut through tall grass just behind the bay beach, and he followed

south. It ran nearly a mile around the curve of the bay, past a big nineteenth century manor house, apparently still occupied. Near the south

point of the bay stretched a low concrete seawall and a small modern building, and some interruptions in the turf above the beach. Holes, it looked like. The pace of his walk picked up. A few people were bunched around a man in a tweed coat. Another guide?

Yes. It was Skara Brae.

The holes in the ground were the missing roofs of Stone Age houses buried

in the sand; their floors were about twelve feet below the turf. The interior walls were made of the same slab as everything else on the island, stacked with the same precision. Stone hearths, stone frames

stone dressers: because of the islands' lack of wood, the guide was saying, and the ready availability of the slabs, most of the houses' furniture had been made of stone. And so it had endured. Stacks of slabs held up longer ones, making shelves in standard college student bricks-and-boards style. Cupboards were inset in the walls.

There

was a kind of stone kitchen cabinet, with mortar and pestle beneath. It was instantly obvious what everything was for; everything looked deeply familiar.

Narrow passageways ran between houses. These too had been covered; apparently driftwood or whale rib beams had supported turf roofs over

the

entire village, so that during bad storms they need never go out. The first mall, Frank thought. The driftwood had included pieces of spruce, which had to have come from North America. The Gulf Stream again. Frank stood at the back of a group of seven, listening to the guide as

he

the

looked down into the homes. The guide was bearded, stocky, fiftyish. Like $% \left(1\right) =\left(1\right) +\left(1\right) +$

the Maes Howe guide he was good at his work, wandering about with no obvious plan, sharing what he knew without memorized speeches. The village

had been occupied for about six hundred years, beginning around 3000 $\, \text{B.C.}$

Brodgar and Maes Howe had been built during those years, so probably people from here had helped in their construction. The bay had likely been

a fresh-water lagoon at that time, with a beach separating it from the sea. Population about fifty or sixty. A heavy dependence on cattle and sheep, with lots of seafood as well. Sand filled in the homes when the village was abandoned, and turf grew over it. In 1850 a big storm tore

turf off and exposed the homes, completely intact except for the roofs....

Water seepage had rounded away every edge, so that each slab looked sculpted, and caught at the light. Each house a luminous work of art. And

five thousand years old, yet so familiar: the same needs, the same thinking, the same solutions.... A shudder ran through him, and he noticed

that he was literally slack-jawed. He closed his mouth and almost laughed

aloud. Open-mouthed astonishment could be so natural sometimes, so physical, unconscious, genuine.

When the other tourists left, he continued to wander around. The guide, sensing another enthusiast, joined him.

"It's like the Flintstones," Frank said, and laughed.

"The what?"

"You expect to see stone TVs and the like."

"Oh aye. It's very contemporary, isn't it."

"It's marvelous."

Frank walked from house to house, and the guide followed, and they talked.

"Why is this one called the chief's house?"

"It's just a guess, actually. Everything in it is a bit bigger and better.

that's all. In our world a chief would have it."

Frank nodded. "Do you live out here?"

"Aye." The guide pointed at the little building beyond the site. He had owned a hotel in Kirkwall, but sold it; Kirkwall had been too hectic for

 $\,$ him. He had gotten the job here and moved out, and was very happy with it.

He was getting a degree in archaeology by correspondence. The more he

learned, the more amazed he was to be here; it was one of the most important archaeological sites in the world, after all. There wasn't a better one. No need to imagine furnishings and implements, "and to see

so

clearly how much they thought like we do."

Exactly. "Why did they leave, in the end?"

"No one knows."

"Ah."

They walked on.

"No sign of a fight, anyway."

"Good .

The guide asked Frank where he was staying, and Frank told \mbox{him} about the

Sierra.

"I see!" the man said. "Well, if you need the use of a bathroom, there's

one here at the back of the building. For a shave, perhaps. You look like

you haven't had the chance in a while."

Frank rubbed a hand over his stubble, blushing. In fact he hadn't thought

of shaving since well before leaving London. "Thanks," he said. "Maybe I'll take you up on that."

They talked about the ruins a while longer, and then the guide walked out

to the seawall, and let Frank wander in peace.

He looked down in the rooms, which still glowed as if lit from within. Six

hundred years of long summer days, long winter nights. Perhaps they had set sail for the Falklands. Five thousand years ago.

He called good-bye to the guide, who waved. On the way back to the car park he stopped once to look back. Under a carpet of cloud the wind was thrashing the tall beach grass, every waving stalk distinct, the clouds'

underside visibly scalloped; and all of it touched with a silvery edge of

light.

 $\mbox{\sc He}$ ate lunch in Stromness, down by the docks, watching the fishing boats

ride at anchor. A very practical-looking fleet, of metal and rubber and bright plastic buoys. In the afternoon he drove the Sierra around Scapa Flow and over a bridge at the east channel, the one Winston had ordered blocked with sunken ships. The smaller island to the south was covered with green fields and white farmhouses.

Late in the afternoon he drove slowly back to the Point of Buckquoy, stopping for a look in the nearby ruins of the sixteenth century earl's palace. Boys were playing soccer in the roofless main room.

The tide was out, revealing a concrete walkway set on a split bed of wet

brown sandstone. He parked and walked over in the face of a stiff wind, onto the Brough of Birsay.

Viking ruins began immediately, as erosion had dropped part of the old settlement into the sea. He climbed steps into a tight network of knee-high walls. Compared to Skara Brae, it was a big town. In the middle

of all the low foundations rose the shoulder-high walls of a church. Twelfth century, ambitious Romanesque design: and yet only fifty feet long, and twenty wide! Now this was a pocket cathedral. It had had a monastery connected to it, however; and some of the men who worshipped

in

it had traveled to Rome, Moscow, Newfoundland.

Picts had lived here before that; a few of their ruins lay below the Norse. Apparently they had left before the Norse arrived, though the record wasn't clear. What was clear was that people had been living

here

for a long, long time.

After a leisurely exploration of the site Frank walked west, up the slope

of the island. It was only a few hundred yards to the lighthouse on the cliff, a modern white building with a short fat tower.

Beyond it was the edge of the island. He walked toward it and emerged from

the wind shelter the island provided; a torrent of gusts almost knocked him back. He reached the edge and looked down.

At last something that looked like he thought it would! It was a long way

to the water, perhaps a hundred and fifty feet. The cliff was breaking off

in great stacks, which stood free and tilted out precariously, as if they

were going to fall at any moment. Great stone cliffs, with the sun glaring

directly out from them, and the surf crashing to smithereens on the rocks $% \left(1\right) =\left(1\right) +\left(1\right) +$

below: it was so obviously, grandiloquently the ${\tt End}$ of ${\tt Europe}$ that he had

to laugh. A place made to cast oneself from. End the pain and fear, do

Hart Crane off the stern of Europe ... except this looked like the bow, actually. The bow of a very big ship, crashing westward through the waves;

yes, he could feel it in the soles of his feet. And foundering, he could

feel that too, the shudders, the rolls, the last sluggish list. So jumping

overboard would be redundant at best. The end would come, one way or another. Leaning out against the gale, feeling like a Pict or Viking, he

knew he stood at the end - end of a continent, end of a century; end of
a
culture.

And yet there was a boat, coming around Marwick Head from the south, a little fishing tub from Stromness, rolling horribly in the swell. Heading

northwest, out to - out to where? There were no more islands out there, not until Iceland anyway, or Greenland, Spitsbergen ... where was it going

at this time of day, near sunset and the west wind tearing in?

He stared at the trawler for a long time, rapt at the sight, until it was

nothing but a black dot near the horizon. Whitecaps covered the sea, and $\ensuremath{\mathsf{A}}$

the wind was still rising, gusting really hard. Gulls skated around on the $\,$

blasts, landing on the cliffs below. The sun was very near the water, sliding off to the north, the boat no more than flotsam: and then he remembered the causeway and the tide.

He ran down the island and his heart leaped when he saw the concrete walkway washed by white water, surging up from the right. Stuck here, forced to break into the museum or huddle in a corner of the church ... but no; the concrete stood clear again. If he ran -

He pounded down the steps and ran over the rough concrete. There were scores of parallel sandstone ridges still exposed to the left, but the right side was submerged already, and as he ran a broken wave rolled up onto the walkway and drenched him to the knees, filling his shoes with seawater and scaring him much more than was reasonable. He ran on cursing.

Onto the rocks and up five steps. At his car he stopped, gasping for breath. He got in the passenger side and took off his boots, socks, and pants. Put on dry pants, socks, and running shoes. He got back out of the car.

The wind was now a constant gale, ripping over the car and the point and

the ocean all around. It was going to be tough to cook dinner on his stove; the car made a poor windbreak, wind rushing under it right at stove

level.

He got out the foam pad, and propped it with his boots against the lee side of the car. The pad and the car's bulk gave him just enough wind shelter to keep the little Bluet's gas flame alive. He sat on the asphalt

behind the stove, watching the flames and the sea. The wind was tremendous, the Bay of Birsay riven by whitecaps, more white than blue. The car rocked on its shock absorbers. The sun had finally slid sideways

into the sea, but clearly it was going to be a long blue dusk.

When the water was boiling he poured in a dried Knorr's soup and stirred

it, put it back on the flame for a few more minutes, then killed the flame

and ate, spooning split pea soup straight from the steaming pot into his

mouth. Soup, bit of cheese, bit of salami, red wine from a tin cup, more

soup. It was absurdly satisfying to make a meal in these conditions: the

wind was in a fury!

When he was done eating he opened the car door and put away his dinner gear, then got out his windbreaker and rain pants and put them on. He walked around the carpark, and then up and down the low cliffy edges of the point of Buckquoy, watching the North Atlantic get torn by a full force gale. People had done this for thousands of years. The rich twilight

blue looked like it would last forever.

Eventually he went to the car and got his notebooks. He returned to the very tip of the point, feeling the wind like slaps on the ear. He sat with

his legs hanging over the drop, the ocean on three sides of $\mathop{\text{\rm him}}\nolimits$, the wind

pouring across him, left to right. The horizon was a line where purest blue met bluest black. He kicked his heels against the rock. He could see

just well enough to tell which pages in the notebooks had writing on them;

he tore these from the wire spirals, and bunched them into balls and

threw

them away. They flew off to the right and disappeared immediately in the

 $% \left(1\right) =\left(1\right) \left(1\right)$ murk and whitecaps. When he had disposed of all the pages he had written

on he cleared the long torn shreds of paper out of the wire rings, and tossed them after the rest.

It was getting cold, and the wind was a constant kinetic assault. He went

back to the car and sat in the passenger seat. His notebooks lay on the driver's seat. The western horizon was a deep blue, now. Must be eleven at

least.

After a time he lit the candle and set it on the dash. The car was still $% \left(1\right) =\left(1\right) +\left(1\right) +\left$

rocking in the wind, and the candle flame danced and trembled on its wick.

All the black shadows in the car shivered too, synchronized perfectly with

the flame.

He picked up a notebook and opened it. There were a few pages left between

damp cardboard covers. He found a pen in his daypack. He rested his hand

on the page, the pen in position to write, its tip in the quivering shadow

of his hand. He wrote, "I believe that man is good. I believe we stand at

the dawn of a century that will be more peaceful and prosperous than any $\ensuremath{\mathsf{L}}$

in history." Outside it was dark, and the wind howled.

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