Time Travel has been a popular idea in science fiction ever since the British author H.G. Wells wrote his short novel <u>The Time Machine</u> in 1895. In his novel, Wells, suggested that in addition to the three dimensions of length, height, and width, there was a fourth dimension of duration, or time. Wells speculated that if a machine could be invented to move along the fourth dimension, travel backward and forward in time would be possible.

Science fiction writers since Wells's time have continued to use time travel as a basis for many adventures. Films such as *Back to the Future* popularized the notion of time travel. The story that follows is set in the future, yet characters travel back into the distant past.

A Sound of Thunder

By Ray Bradbury

The sign on the wall seemed to quaver under a film of sliding warm water. Eckels felt his eyelids blink over his stare, and the sign burned in this momentary darkness:

TIME SAFARI, INC.

SAFARIS TO ANY YEAR IN THE PAST.

YOU NAME THE ANIMAL.

WE TAKE YOU THERE.

YOU SHOOT IT.

A warm phlegm gathered in Eckels' throat; he swallowed and pushed it down. The muscles around his mouth formed a smile as he put his hand slowly out upon the air, and in that hand waved a check for ten thousand dollars to the man behind the desk.

"Does this safari guarantee I come back alive?"

"We guarantee nothing," said the official, "except the dinosaurs." He turned. "This is Mr. Travis, your Safari Guide in the Past. He'll tell you what and where to shoot. If he says no shooting, no shooting. If you disobey instructions, there's a stiff penalty of another ten thousand dollars, plus possible government action, on your return."

Eckels glanced across the vast office at a mass and tangle, a snaking and humming of wires and steel boxes, at an aurora that flickered now orange, now silver, now blue. There was a sound like a gigantic bonfire burning all of Time, all the years and all the parchment calendars, all the hours piled high and set aflame.

A touch of the hand and this burning would, on the instant, beautifully reverse itself. Eckels remembered the wording in the advertisements to

Aurora: a light that changes color.

the letter. Out of chars and ashes, out of dust and coals, like golden salamanders, the old years, the green years, might leap; roses sweeten the air, white hair turn Irish-black, wrinkles vanish; all, everything fly back to seed, flee death, rush down to their beginnings, suns rise in western skies and set in glorious easts, moons eat themselves opposite to the custom, all and everything cupping one in another like Chinese boxes, rabbits into hats, all and everything returning to the fresh death, the seed death, the green death, to the time before the beginning. A touch of a hand might do it, the merest touch of a hand.

"Unbelievable." Eckels breathed, the light of the Machine on his thin face. "A real Time Machine." He shook his head. "Makes you think, If the election had gone badly yesterday, I might be here now running away from the results. Thank God Keith won. He'll make a fine President of the United States."

"Yes," said the man behind the desk. "We're lucky. If Deutscher had gotten in, we'd have the worst kind of dictatorship. There's an anti everything man for you, a militarist, anti-Christ, anti-human, anti-intellectual. People called us up, you know, joking but not joking. Said if Deutscher became President they wanted to go live in 1492. Of course it's not our business to conduct Escapes, but to form Safaris. Anyway, Keith's President now. All you got to worry about is-"

"Shooting my dinosaur," Eckels finished it for him.

"A Tyrannosaurus Rex. The Tyrant Lizard, the most incredible monster in history. Sign this release. Anything happens to you, we're not responsible. Those dinosaurs are hungry."

Eckels flushed angrily. "Trying to scare me!"

"Frankly, yes. We don't want anyone going who'll panic at the first shot. Six Safari leaders were killed last year, and a dozen hunters. We're here to give you the severest thrill a real hunter ever asked for. Traveling you back sixty million years to bag the biggest game in all of Time. Your personal check's still there. Tear it up."

Mr. Eckels looked at the check. His fingers twitched.

"Good luck," said the man behind the desk. "Mr. Travis, he's all yours."

They moved silently across the room, taking their guns with them, toward the Machine, toward the silver metal and the roaring light.

First a day and then a night and then a day and then a night, then it was daynight-day-night. A week, a month, a year, a decade! A.D. 2055. A.D. 2019. 1999! 1957! Gone! The Machine roared.

Chinese boxes: a series of boxes, each of which fits neatly inside the next larger They put on their oxygen helmets and tested the intercoms.

Eckels swayed on the padded seat, his face pale, his jaw stiff. He felt the trembling in his arms and he looked down and found his hands tight on the new rifle. There were four other men in the Machine. Travis, the Safari Leader, his assistant, Lesperance, and two other hunters, Billings and Kramer. They sat looking at each other, and the years blazed around them.

"Can these guns get a dinosaur cold?" Eckels felt his mouth saying.

"If you hit them right," said Travis on the helmet radio. "Some dinosaurs have two brains, one in the head, another far down the spinal column. We stay away from those. That's stretching luck. Put your first two shots into the eyes, if you can, blind them, and go back into the brain."

The Machine howled. Time was a film run backward. Suns fled and ten million moons fled after them. "Think," said Eckels. "Every hunter that ever lived would envy us today. This makes Africa seem like Illinois."

The Machine slowed; its scream fell to a murmur. The Machine stopped.

The sun stopped in the sky.

The fog that had enveloped the Machine blew away and they were in an old time, a very old time indeed, three hunters and two Safari Heads with their blue metal guns across their knees.

"Christ isn't born yet," said Travis, "Moses has not gone to the mountains to talk with God. The Pyramids are still in the earth, waiting to be cut out and put up. *Remember* that. Alexander, Caesar, Napoleon, Hitler-none of them exists."

The man nodded.

"That" - Mr. Travis pointed - "is the jungle of sixty million two thousand and fifty-five years before President Keith." He indicated a metal path that struck off into green wilderness, over streaming swamp, among giant ferns and palms.

"And that," he said, "is the Path, laid by Time Safari for your use, It floats six inches above the earth. Doesn't touch so much as one grass blade, flower, or tree. It's an anti-gravity metal. Its purpose is to keep you from touching this world of the past in any way. Stay on the Path. Don't go off it. I repeat. *Don't go off.* For any reason! If you fall off, there's a penalty. And don't shoot any animal we don't okay."

"Why?" asked Eckels.

They sat in the ancient wilderness. Far birds' cries blew on a wind, and the smell of tar and an old salt sea, moist grasses, and flowers the color of blood.

"We don't want to change the Future. We don't belong here in the Past. The government doesn't like us here. We have to pay big graft to keep our franchise. A Time Machine is finicky business. Not knowing it, we might kill an important animal, a small bird, a roach, a flower even, thus destroying an important link in a growing species."

"That's not clear," said Eckels.

"All right," Travis continued, "say we accidentally kill one mouse here. That means all the future families of this one particular mouse are destroyed, right?"

"Right"

"And all the families of the families of the families of that one mouse! With a stamp of your foot, you annihilate first one, then a dozen, then a thousand, a million, a billion possible mice!"

"So they're dead," said Eckels. "So what?"

"So what?" Travis snorted quietly. "Well, what about the foxes that'll need those mice to survive? For want of ten mice, a fox dies. For want of ten foxes a lion starves. For want of a lion, all manner of insects, vultures, infinite billions of life forms are thrown into chaos and destruction.

Eventually it all boils down to this: fifty-nine million years later, a caveman, one of a dozen on the *entire world*, goes hunting wild boar or saber-toothed tiger for food. But you, friend, have *stepped* on all the tigers in that region. By stepping on *one* single mouse. So the caveman starves. And the caveman, please note, is not just any expendable man, no! He is an entire future nation. From his loins would have sprung ten sons. From *their* loins one hundred sons, and thus onward to a civilization. Destroy this one man, and you destroy a race, a people, an entire history of life. It is comparable to slaying some of Adam's grandchildren. The stomp of your foot, on one mouse, could start an earthquake, the effects of which could shake our earth and destinies down through Time, to their very foundations. With the death of that one caveman, a billion others yet unborn are throttled in the womb. Perhaps Rome never rises on its seven hills. Perhaps Europe is forever a dark forest, and only Asia waxes healthy and teeming. Step on a mouse and you crush the Pyramids. Step on a mouse and you leave your print, like a Grand Canyon, across Eternity. Queen Elizabeth might never be born, Washington might not cross the Delaware, there might never be a United States at all. So be careful. Stay on the Path. Never step off!"

"I see," said Eckels. "Then it wouldn't pay for us even to touch the grass?"

"Correct. Crushing certain plants could add up infinitesimally. A little error here would multiply in sixty million years, all out of proportion. Of course maybe our theory is wrong. Maybe Time *can't* be changed by us. Or maybe it can be changed only in little subtle ways. A dead mouse here makes an insect imbalance there, a population disproportion later, a bad harvest further on, a depression, mass starvation, and finally, a change in *social* temperament in far-flung countries. Something much more subtle, like that. Perhaps only a soft breath, a whisper, a hair, pollen on the air, such a slight, slight change that unless you looked close you wouldn't see it. Who knows? Who really can say he knows? We don't know. We're guessing. But until we do know for certain whether our messing around in Time *can* make a big roar or a little rustle in history, we're being careful. This Machine, this Path, your clothing and bodies, were sterilized, as you know, before the journey. We wear these oxygen helmets so we can't introduce our bacteria into an ancient atmosphere."

"How do we know which animals to shoot?"

"They're marked with red paint," said Travis. "Today, before our journey, we sent Lesperance here back with the Machine. He came to this particular era and followed certain animals."

"Studying them?"

"Right," said Lesperance. "I track them through their entire existence, noting which of them lives longest. Very few. How many times they mate. Not often. Life's short, When I find one that's going to die when a tree falls on him, or one that drowns in a tar pit, I note the exact hour, minute, and second. I shoot a paint bomb. It leaves a red patch on his side. We can't miss it. Then I correlate our arrival in the Past so that we meet the Monster not more than two minutes before he would have died anyway. This way, we kill only animals with no future, that are never going to mate again. You see how *careful* we are?"

"But if you come back this morning in Time," said Eckels eagerly, you must've bumped into *us*, our Safari! How did it turn out? Was it successful? Did all of us get through-alive?"

Travis and Lesperance gave each other a look.

"That'd be a paradox," said the latter. "Time doesn't permit that sort of mess-a man meeting himself. When such occasions threaten, Time steps aside. Like an airplane hitting an air pocket. You felt the Machine jump just before we stopped? That was us passing ourselves on the way back to the Future. We saw nothing. There's no way of telling *if* this expedition was a success, *if we* got our monster, or whether all of us - meaning *you*, Mr. Eckels - got out alive."

Eckels smiled palely.

"Cut that," said Travis sharply. "Everyone on his feet!"

They were ready to leave the Machine.

The jungle was high and the jungle was broad and the jungle was the entire world forever and forever. Sounds like music and sounds like flying tents filled the sky, and those were pterodactyls soaring with cavernous gray wings, gigantic bats of delirium and night fever. Eckels, balanced on the narrow Path, aimed his rifle playfully.

"Stop that!" said Travis. "Don't even aim for fun, blast you! If your guns should go off - - "

Eckels flushed. "Where's our Tyrannosaurus?"

Lesperance checked his wristwatch. "Up ahead, We'll bisect his trail in sixty seconds. Look for the red paint! Don't shoot till we give the word. Stay on the Path."

They moved forward in the wind of morning.

"Strange," murmured Eckels. "Up ahead, sixty million years, Election Day over. Keith made President. Everyone celebrating. And here we are, a million years lost, and they don't exist. The things we worried about for months, a lifetime, not even born or thought of yet."

"Safety catches off, everyone!" ordered Travis. "You, first shot, Eckels. Second, Billings, Third, Kramer."

"I've hunted tiger, wild boar, buffalo, elephant, but now, this is it," said Eckels. "I'm shaking like a kid."

"Ah," said Travis.

Everyone stopped.

Travis raised his hand. "Ahead," he whispered. "In the mist. There he is. There's His Royal Majesty now."

The jungle was wide and full of twitterings, rustlings, murmurs, and sighs.

Suddenly it all ceased, as if someone had shut a door.

Silence.

A sound of thunder.

Out of the mist, one hundred yards away, came *Tyrannosaurus Rex*.

"It," whispered Eckels. "It.....

"Sh!"

It came on great oiled, resilient, striding legs. It towered thirty feet above half of the trees, a great evil god, folding its delicate watchmaker's claws close to its oily reptilian chest. Each lower leg was a piston, a thousand pounds of white bone, sunk in thick ropes of muscle, sheathed over in a gleam of pebbled skin like the mail of a terrible warrior. Each thigh was a ton of meat, ivory, and steel mesh. And from the great breathing cage of the upper body those two delicate arms dangled out front, arms with hands which might pick up and examine men like toys, while the snake neck coiled. And the head itself, a ton of sculptured stone, lifted easily upon the sky. Its mouth gaped, exposing a fence of teeth like daggers. Its eyes rolled, ostrich eggs, empty of all expression save hunger. It closed its mouth in a death grin. It ran, its pelvic bones crushing aside trees and bushes, its taloned feet clawing damp earth, leaving prints six inches deep wherever it settled its weight. It ran with a gliding ballet step, far too poised and balanced for its ten tons. It moved into a sunlit area warily, its beautifully reptilian hands feeling the air.

"Why, why," Eckels twitched his mouth. "It could reach up and grab the moon."

"Sh!" Travis jerked angrily. "He hasn't seen us yet."

"It can't be killed," Eckels pronounced this verdict quietly, as if there could be no argument. He had weighed the evidence and this was his considered opinion. The rifle in his hands seemed a cap gun. "We were fools to come. This is impossible."

"Shut up!" hissed Travis.

"Nightmare."

"Turn around," commanded Travis. "Walk quietly to the Machine. We'll remit half your fee."

"I didn't realize it would be this big," said Eckels. "I miscalculated, that's all. And now I want out."

"It sees us!"

"There's the red paint on its chest!"

The Tyrant Lizard raised itself. Its armored flesh glittered like a thousand green coins. The coins, crusted with slime, steamed. In the slime, tiny insects wriggled, so that the entire body seemed to twitch and undulate, even while the monster itself did not move. It exhaled. The stink of raw flesh blew down the wilderness.

"Get me out of here," said Eckels. "It was never like this before. I was always sure I'd come through alive. I had good guides, good safaris, and safety. This time, I figured wrong. I've met my match and admit it. This is too much for me to get hold of."

"Don't run," said Lesperance. "Turn around. Hide in the Machine."

"Yes." Eckels seemed to be numb. He looked at his feet as if trying to make them move. He gave a grunt of helplessness.

"Eckels!"

He took a few steps, blinking, shuffling.

"Not that way!"

The Monster, at the first motion, lunged forward with a terrible scream. It covered one hundred yards in six seconds. The rifles jerked up and blazed fire. A windstorm from the beast's mouth engulfed them in the stench of slime and old blood. The Monster roared, teeth glittering with sun.

Eckels, not looking back, walked blindly to the edge of the Path, his gun limp in his arms, stepped off the Path, and walked, not knowing it, in the jungle. His feet sank into green moss. His legs moved him, and he felt alone and remote from the events behind.

The rifles cracked again, Their sound was lost in shriek and lizard thunder. The great level of the reptile's tail swung up, lashed sideways. Trees exploded in clouds of leaf and branch. The Monster twitched its jeweler's hands down to fondle at the men, to twist them in half, to crush them like berries, to cram them into its teeth and its screaming throat. Its boulder-stone eyes leveled with the men. They saw themselves mirrored. They fired at the metallic eyelids and the blazing black iris,

Like a stone idol, like a mountain avalanche, *Tyrannosaurus* fell. Thundering, it clutched trees, pulled them with it. It wrenched and tore the metal Path. The men flung themselves back and away. The body hit, ten tons of cold flesh and stone. The guns fired. The Monster lashed its armored tail, twitched its snake jaws, and lay still. A fount of blood spurted from its throat. Somewhere inside, a sac of fluids burst. Sickening gushes drenched the hunters. They stood, red and glistening.

The thunder faded.

The jungle was silent. After the avalanche, a green peace. After the nightmare, morning.

Billings and Kramer sat on the pathway and threw up. Travis and Lesperance stood with smoking rifles, cursing steadily.

In the Time Machine, on his face, Eckels lay shivering. He had found his way back to the Path, climbed into the Machine.

Travis came walking, glanced at Eckels, took cotton gauze from a metal box, and returned to the others, who were sitting on the Path.

"Clean up."

They wiped the blood from their helmets. They began to curse too. The Monster lay, a hill of solid flesh. Within, you could hear the sighs and murmurs as the furthest chambers of it died, the organs malfunctioning, liquids running a final instant from pocket to sac to spleen, everything shutting off, closing up forever. It was like standing by a wrecked locomotive or a steam shovel at quitting time, all valves being released or levered tight. Bones cracked; the tonnage of its own flesh, off balance, dead weight, snapped the delicate forearms, caught underneath. The meat settled, quivering.

Another cracking sound. Overhead, a gigantic tree branch broke from its heavy mooring, fell. It crashed upon the dead beast with finality.

"There." Lesperance checked his watch. "Right on time. That's the giant tree that was scheduled to fall and kill this animal originally." He glanced at the two hunters. "You want the trophy picture?"

"What?"

"We can't take a trophy back to the Future. The body has to stay right here where it would have died originally, so the insects, birds, and bacteria can get at it, as they were intended to. Everything in balance. The body stays. But we *can* take a picture of you standing near it."

The two men tried to think, but gave up, shaking their heads.

They let themselves be led along the metal Path. They sank wearily into the Machine cushions. They gazed back at the ruined Monster, the stagnating mound, where already strange reptilian birds and golden insects were busy at the steaming armor.

A sound on the floor of the Time Machine stiffened them. Eckels sat there, shivering.

"I'm sorry," he said at last.

"Get up!" cried Travis.

Eckels got up.

"Go out on that Path alone," said Travis. He had his rifle pointed, "You're not coming back in the Machine. We're leaving you here!"

Lesperance seized Travis's arm. "Wait-"

"Stay out of this!" Travis shook his hand away. "This fool nearly killed us. But it isn't that so much, no. It's his shoes! Look at them! He ran off the Path. That ruins us! We'll forfeit! Thousands of dollars of insurance! We guarantee no one leaves the Path. He left it. Oh, the fool! I'll have to report to the government. They might revoke our license to travel. Who knows what he's done to Time, to History!"

"Take it easy, all he did was kick up some dirt."

"How do we *know*?" cried Travis. "We don't know anything! It's all a mystery! Get out of here, Eckels!"

Eckels fumbled his shirt. "I'll pay anything. A hundred thousand dollars!"

Travis glared at Eckels' checkbook and spat. "Go out there. The Monster's next to the Path. Stick your arms up to your elbows in his mouth. Then you can come back with us."

"That's unreasonable!"

"The Monster's dead, you idiot. The bullets! The bullets can't be left behind. They don't belong in the Past; they might change anything. Here's my knife. Dig them out!"

The jungle was alive again, full of the old tremorings and bird cries. Eckels turned slowly to regard the primeval garbage dump, that hill of nightmares and terror. After a long time, like a sleepwalker he shuffled out along the Path.

He returned, shuddering, five minutes later, his arms soaked and red to the elbows. He held out his hands. Each held a number of steel bullets. Then he fell. He lay where he fell, not moving.

"You didn't have to make him do that," said Lesperance.

"Didn't I? It's too early to tell." Travis nudged the still body. "He'll live. Next time he won't go hunting game like this. Okay." He jerked his thumb wearily at Lesperance. "Switch on. Let's go home."

1492, 1776, 1812,

They cleaned their hands and faces. They changed their caking shirts and pants. Eckels was up and around again, not speaking. Travis glared at him for a full ten minutes.

"Don't look at me," cried Eckels. "I haven't done anything."

"Who can tell?"

"Just ran off the Path, that's all, a little mud on my shoes-what do you want me to do-get down and pray?"

"We might need it. I'm warning you, Eckels, I might kill you yet. I've got my gun ready."

"I'm innocent. I've done nothing!"

1999.2000.2055.

The Machine stopped.

"Get out," said Travis.

The room was there as they had left it. But not the same as they had left it. The same man sat behind the same desk. But the same man did not quite sit behind the same desk.

Travis looked around swiftly. "Everything okay here?" he snapped.

"Fine. Welcome home!"

Travis did not relax. He seemed to be looking through the one high window.

"Okay, Eckels, get out. Don't ever come back."

Eckels could not move.

"You heard me," said Travis. "What're you staring at?"

Eckels stood smelling of the air, and there was a thing to the air, a chemical taint so subtle, so slight, that only a faint cry of his subliminal senses warned him it was there. The colors, white, gray, blue, orange, in the wall, in the furniture, in the sky beyond the window, were . . . were And there was a *feel*. His flesh twitched. His hands twitched. He stood drinking the oddness with the pores of his body. Somewhere, someone must have been screaming one of those whistles that only a dog can hear. His body screamed silence in return. Beyond this room, beyond this wall, beyond this man who was not quite the same man seated at this desk that was not quite the same desk . . . lay an entire world of streets and people. What sort of world it was now, there was no telling. He could feel them moving there, beyond the walls, almost, like so many chess pieces blown in a dry wind

But the immediate thing was the sign painted on the office wall, the same sign he had read earlier today on first entering.

Somehow, the sign had changed:

TYME SEFARI INC.

SEFARIS TU ANY YEER EN THE PAST.

YU NAIM THE ANIMALL.

WEE TAEK YU THAIR.

YU SHOOT ITT.

Eckels felt himself fall into a chair. He fumbled crazily at the thick slime on his boots. He held up a clod of dirt, trembling, "No, it *can't* be. Not a *little* thing like that. No!"

Embedded in the mud, glistening green and gold and black, was a butterfly, very beautiful and very dead.

"Not a little thing like that! Not a butterfly!" cried Eckels.

It fell to the floor, an exquisite thing, a small thing that could upset balances and knock down a line of small dominoes and then big dominoes and then gigantic dominoes, all down the years across Time. Eckels' mind whirled. It *couldn't* change things. Killing one butterfly couldn't be *that* important! Could it?

His face was cold. His mouth trembled, asking: "Who - who won the presidential election yesterday?"

The man behind the desk laughed. "You joking? You know very well. Deutscher, of course! Who else? Not that fool weakling Keith. We got an iron man now, a man with guts!" The official stopped. "What's wrong?"

Eckels moaned. He dropped to his knees. He scrabbled at the golden butterfly with shaking fingers. "Can't we," he pleaded to the world, to himself, to the officials, to the Machine, "can't we take it *back*, can't we *make* it alive again? Can't we start over? Can't we-"

He did not move. Eyes shut, he waited, shivering. He heard Travis breathe loud in the room; he heard Travis shift his rifle, click the safety catch, and raise the weapon.

There was a sound of thunder.