THE PAUSE

Isaac Asimov

The white powder was confined within a thin-walled, transparent capsule. The capsule in turn was heat-sealed into a double strip of parafilm. Along that strip of parafilm were other capsules at six-inch intervals.

The strip moved. Each capsule in the course of events rested for one minute on a metal jaw immediately beneath a mica window. On another portion of the face of the radiation counter a number clicked out upon an unrolling cylinder of paper. The capsule moved on; the next took its place.

The number printed at 1:45 P.M. was 308. A minute later 256 appeared. A minute later, 391. A minute later, 477. A minute later, 202. A minute later, 251. A minute later, 000. A minute later, 000. A minute later, 000.

Shortly after 2:00 P.M. Mr. Alexander Johannison passed by the counter and the corner of one eye stubbed itself over the row of figures. Two steps past the counter he stopped and returned.

He ran the paper cylinder backward, then restored its position and said, "Nuts!"

He said it with vehemence. He was tall and thin, with bigknuckled hands, sandy hair and light eyebrows. He looked tired and, at the moment, perplexed.

Gene Damelli wandered his way with the same easy carelessness he brought to all his actions. He was dark, hairy, and on the short side. His nose had once been broken and it made him look curiously unlike the popular conception of the nuclear physicist. Damelli said, "My damned Geiger won't pick up a thing, and I'm not in the mood to go over the wiring. Got a cigarette?"

Johannison held out a pack. "What about the others in the building?"

"I haven't tried them, but I guess they haven't all gone."

"Why not? My counter isn't registering either."

"No kidding. You see? All the money invested, too. It doesn't mean a thing. Let's step out for a coke."

Johannison said with greater vehemence than he intended, "No! I'm going to see George Duke. I want to see his machine. If it's off—"

Damelli tagged along. "It won't-be off, Alex. Don't be an ass."

George Duke listened to Johannison and watched him disapprovingly over rimless glasses. He was an old-young man with little hair and less patience.

He said, "I'm busy."

"Too busy to tell me if your rig is working, for heaven's sake?"

Duke stood up. "Oh, hell, when does a man have time to work around here?" His slide-rule fell with a thud over a scattering of ruled paper as he rounded his desk.

He stepped to a cluttered lab table and lifted the heavy gray leaden top from a heavier gray leaden container. He reached in with a two-foot long pair of tongs and took out a small silvery cylinder.

Duke said grimly, "Stay where you are."

Johannison didn't need the advice. He kept his distance. He had not been exposed to any abnormal dosage of radio-activity over the past month but there was no sense getting any closer than necessary to "hot" cobalt.

Still using the tongs, and with arms held well away from his body, Duke brought the shining bit of metal that contained the concentrated radioactivity up to the window of his counter. At two feet, the counter should have chattered its head off. It didn't.

Duke said, "Guk!" and let the cobalt container drop. He scrabbled madly for it and lifted it against the window again. Closer.

There was no sound. The dots of light on the scaler did not show. Numbers did not step up and up.

Johannison said, "Not even background noise."

Damelli said, "Holy jumping Jupiter!"

Duke put the cobalt tube back into its leaden sheath, as gingerly as ever, and stood there, glaring.

Johannison burst into Bill Everard's office with Damelli at his heels. He spoke for excited minutes, his bony hands knuckly-white on Everard's shiny desk. Everard listened, his smooth, fresh-shaven cheeks turning pink and his plump neck bulging out a bit over his stiff, white collar.

Everard looked at Damelli and pointed a questioning thumb at Johannison. Damelli shrugged, bringing his hands forward, palms upward, and corrugating his forehead.

Everard said, "I don't see how they can all go wrong."
"They have, that's all," insisted Johannison. "They all went dead at about two o'clock. That's over an hour ago now and none of them is back in order. Even George Duke can't do anything about it. I'm telling you it isn't the counters."

"You're saying it is."

"I'm saying they're not working. But that's not their fault. There's nothing for them to work on."

"What do you mean?"

"I mean there isn't any radioactivity in this place. In this whole building. Nowhere."

"I don't believe you."

"Listen, if a hot cobalt cartridge won't start up a counter, maybe there's something wrong with every counter we try. But when that same cartridge won't discharge a gold-leaf electroscope and when it won't even fog a photographic film, then there's something wrong with the cartridge."

"All right," said Everard, "so it's a dud. Somebody made a

mistake and never filled it."

"The same cartridge was working this morning, but never mind that. Maybe cartridges can get switched somehow. But I got that hunk of pitchblende from our display box on the fourth floor and that doesn't register either. You're not going to tell me that someone forgot to put the uranium in it."

Everard rubbed his ear. "What do you think, Damelli?"
Damelli shook his head. "I don't know, Boss. Wish I did."
Johannison said, "It's not the time for thinking. It's a time
for doing. You've got to call Washington."

"What about?" asked Everard.

"About the A-bomb supply."

"What?"

"That might be the answer, Boss. Look, someone has figured out a way to stop radioactivity, all of it. It might be blanketing the country, the whole U.S.A. If that's being done, it can only be to put our A-bombs out of commission. They don't know where we keep them, so they have to blank out the nation. And if that's right, it means an attack is due. Any minute, maybe. Use the phone, Boss!"

Everard's hand reached for the phone. His eyes and Jo-

hannison's met and locked.

He said into the mouthpiece, "An outside call, please." It was five minutes of four. Everard put down the phone.

"Was that the Commissioner?" asked Johannison.

"Yes," said Everard. He was frowning.

"All right. What did he say?"

"'Son,'" said Everard, "he said to me, 'What A-bombs?" Johannison looked bewildered, "What the devil does he mean, 'What A-bombs?' I know! They've already found out they've got duds on their hands, and they won't talk. Not even to us. Now what?"

"Now nothing," said Everard. He sat back in his chair and glowered at the physicist, "Alex, I know the kind of strain you're under; so I'm not going to blow up about this. What bothers me is, how did you get me started on this nonsense."

Johannison paled, "This isn't nonsense. Did the Commis-

sioner say it was?"

"He said I was a fool, and so I am. What the devil do you mean coming here with your stories about A-bombs? What are A-bombs? I never heard of them."

"You never heard of atom bombs? What is this? A gag?"

"I never heard of them. It sounds like something from a comic strip."

Johannison turned to Damelli, whose olive complexion had seemed to deepen with worry. "Tell him, Gene."

Damelli shook his head. "Leave me out of this."

"All right." Johannison leaned forward, looking at the line of books in the shelves above Everard's head. "I don't know what this is all about, but I can go along with it. Where's Glasstone?"

"Right there," said Everard.

"No. Not the Textbook of Physical Chemistry. I want his Source-book on Atomic Energy."

"Never heard of it."

"What are you talking about? It's been here in your shelf since I've been here."

"Never heard of it," said Everard, stubbornly.

"I suppose you haven't heard of Kamen's Radioactive Tracers in Biology either?"

"No."

Johannison shouted, "All right. Let's use Glasstone's Text-book then. It will do."

He brought down the thick book and flipped the pages. First once, then a second time. He frowned and looked at the copyright page. It said: Third Edition, 1956. He went through the first two chapters page by page. It was there, atomic structure, quantum numbers, electrons and their shells, transition series—but no radioactivity, nothing about that.

He turned to the table of elements on the inside front cover. It took him only a few seconds to see that there were only eighty-one listed, the eighty-one non-radioactive ones.

Johannison's throat felt bricky-dry. He said, huskily, to

Everard. "I suppose you never heard of uranium."

"What's that?" asked Everard, coldly. "A trade name?" Desperately, Johannison dropped Glasstone and reached for the Handbook of Chemistry and Physics. He used the index. He looked up Radioactive Series, Uranium, Plutonium, Isotopes. He found only the last. With fumbling, jittery fingers, he turned to the table of isotopes. Just a glance. Only the stable isotopes were listed.

He said, pleadingly, "All right. I give up. Enough's enough. You've set up a bunch of fake books just to get a rise out of

me, haven't you?" He tried to smile.

Éverard stiffened. "Don't be a fool, Johannison. You'd better go home. See a doctor."

"There's nothing wrong with me."

"You may not think so, but there is. You need a vacation, so take one. Damelli, do me a favor. Get him into a cab and see that he gets home."

Johannison stood irresolute. Suddenly, he screamed, "Then what are all the counters in this place for? What do they do?"

"I don't know what you mean by counters. If you mean computers, they're here to solve our problems for us."

Johannison pointed to a plaque on the wall. "All right, then. See those initials. A! E! C! Atomic! Energy! Commission!" He spaced the words, staccato.

Everard pointed in turn. "Air! Experimental! Commission! Get him home, Damelli."

Johannison turned to Damelli when they reached the sidewalk. Urgently, he whispered, "Listen, Gene, don't be a setup for that guy. Everard's sold out. They got to him someway. Imagine them setting up the faked books and trying to make me think I'm crazy.'

Damelli said, levelly, "Cool down, Alex, boy. You're just

jumping a little. Everard's all right."

"You heard him. He never heard of A-bombs. Uranium's

a trade name. How can he be all right?"

"If it comes to that. I never heard of A-bombs, or uranium."

He lifted a finger. "Taxi!" It whizzed by.

Johannison got rid of the gagging sensation. "Gene! You were there when the counters quit. You were there when the pitchblende went dead. You came with me to Everard to get the thing straightened out."

"If you want the straight truth, Alex, you said you had something to discuss with the Boss and you asked me to come along, and that's all I know about it. Nothing went wrong as far as I know, and what the devil would we be doing with this pitchblende. We don't use any tar in the place.—Taxi!"

A cab drew up to the curb.

Damelli opened the door, motioned Johannison in. Johannison entered, then, with red-eyed fury, turned, snatched the door out of Damelli's hand, slammed it closed, and shouted an address at the cab driver. He leaned out the window as the cab pulled away, leaving Damelli stranded and staring.

Johannison cried, "Tell Everard it won't work. I'm wise to

all of you."

He fell back into the upholstery exhausted. He was sure Damelli had heard the address he gave. Would they get to the FBI first with some story about a nervous breakdown? Would they take Everard's word against his? They couldn't deny the stopping of the radioactivity. They couldn't deny the faked books.

But what was the good of it? An enemy attack was on its

way and men like Everard and Damelli—How rotten with treason was the country?

He stiffened, suddenly. "Driver!" he cried. Then louder,

"Driver!"

The man at the wheel did not turn around. The traffic passed smoothly by them.

Johannison tried to struggle up from his seat, but his head

was swimming.

"Driver!" he muttered. This wasn't the way to the FBI. He was being taken home. But how did the driver know where he lived?

A planted driver, of course. He could scarcely see and

there was a roaring in his ears.

Lord, what organization! There was no use fighting! He blacked out!

He was moving up the walk toward the small two-story brick-fronted house in which Mercedes and he lived. He didn't remember getting out of the cab.

He turned. There was no taxicab in sight. Automatically, he felt for his wallet and keys. They were there. Nothing had

been touched.

Mercedes was at the door, waiting. She didn't seem surprised at his return. He looked at his watch quickly. It was nearly an hour before his usual homecoming.

He said, "Mercy, we've got to get out of here and—" She said, huskily, "I know all about it, Alex. Come in."

She looked like heaven to him. Straight hair, a little on the blonde side, parted in the middle and drawn into a horse-tail; wide-set blue eyes with that slight Oriental tilt, full lips and little ears set close to the head. Johannison's eyes devoured her.

But he could see she was doing her best to repress a certain fension.

He said, "Did Everard call you? Or Damelli?"

She said, "We have a visitor."

He thought, They've got to her.

He might snatch her out of the doorway. They would run, try to make it to safety. But how could they? The visitor would be standing in the shadows of the hallway. It was a thick brutal voice and foreign accent, standing there with a hand in his jacket pocket and a bulge there that was bigger than his hand.

Numbly, he stepped inside.

"In the living-room," said Mercedes. A smile flashed momentarily across her face. "I think it's all right."

The visitor was standing. He had an unreal look about him, the unreality of perfection. His face and body were flawless and carefully devoid of individuality. He might have stepped off a billboard.

His voice had the cultured and unimpassioned sound of the professional radio announcer. It was entirely free of ac-

cent.

He said, "It was quite troublesome getting you home, Dr. Johannison."

Johannison said, "Whatever it is, whatever you want, I'm not co-operating."

Mercedes broke in. "No, Alex, you don't understand. We've been talking. He says all radioactivity has been stopped."

"Yes, it has, and how I wish this collar-ad could tell me how it was done! Look here, you, are you an American?"

"You still don't understand, Alex," said his wife. "It's stopped all over the world. This man isn't from anywhere on Earth. Don't look at me like that, Alex. It's true. I know it's true. Look at him."

The visitor smiled. It was a perfect smile. He said, "This body in which I appear is carefully built up according to specification but it is only matter. It's under complete control." He held out a hand and the skin vanished. The muscles, the straight tendons and crooked veins were exposed. The walls of the veins disappeared and blood flowed smoothly without the necessity of containment. All dissolved to the appearance of smooth gray bone. That went also.

Then all reappeared.

Johannison muttered, "Hypnotism!"
"Not at all," said the visitor, calmly.
Johannison said, "Where are you from:

Johannison said, "Where are you from?"
The visitor said, "That's hard to explain. Does it matter?"
"I've got to understand what's going on," cried Johannison.
"Can't you see that?"

"Yes. I can. It's why I'm here. At this moment, I am speaking to a hundred and more of your people all over your

planet. In different bodies, of course, since different segments of your people have different preferences and standards as far as bodily appearance is concerned!"

Fleetingly, Johannison wondered if he were mad after all. He said, "Are you from—from Mars? Any place like that?

Are you taking over? Is this war?"

"You see," said the visitor, "that sort of attitude is what we're trying to correct. Your people are sick, Dr. Johannison, very sick. For tens of thousands of your years we have known that your particular species has great possibilities. It has been a great disappointment to us that your development has taken a pathological pathway. Definitely pathological." He shook his head.

Mercedes interrupted. "He told me before you came that he was trying to cure us."

"Who asked him?" muttered Johannison.

The visitor only smiled. He said, "I was assigned the job a long time ago, but such illnesses are always hard to treat. For one thing, there is the difficulty in communication." "We're communicating," said Johannison, stubbornly.

"Yes. In a manner of speaking, we are. I'm using your concepts, your code system. It's quite inadequate. I couldn't even explain to you the true nature of the disease of your species. By your concepts, the closest approach I can make is that it is a disease of the spirit."

"Huh."

"It's a kind of social ailment that is very ticklish to handle. That's why I've hesitated for so long to attempt a direct cure. It would be sad if, through accident, so gifted a potentiality as that of your race were lost to us. What I've tried to do for millennia has been to work indirectly through the few individuals in each generation who had natural immunity to the disease. Philosophers, moralists, warriors, and politicians. All those who had a glimpse of world brotherhood. All those who-"

"All right. You failed. Let it go at that. Now suppose you

tell me about your people, not mine."

"What can I tell you that you would understand?"

"Where are you from? Begin with that."

"You have no proper concept. I'm not from anywhere in the yard."

"What yard?"

"In the universe, I mean. I'm from outside the universe." Mercedes interrupted again, leaning forward. "Alex, don't you see what he means? Suppose you landed on the New Guinea coast and talked to some natives through television somehow. I mean to natives who had never seen or heard of anyone outside their tribe. Could you explain how television worked or how it made it possible for you to speak to many men in many places at once? Could you explain that the image wasn't you yourself but merely an illusion that you could make disappear and reappear? You couldn't even explain where you came from if all the universe they knew was their own island."

"Well, then, we're savages to him. Is that it?" demanded

Johannison.

The visitor said, "Your wife is being metaphorical. Let me finish. I can no longer try to encourage your society to cure itself. The disease has progressed too far. I am going to have to alter the temperamental make-up of the race."

"How?"

"There are neither words nor concepts to explain that either. You must see that our control of physical matter is extensive. It was quite simple to stop all radioactivity. It was a little more difficult to see to it that all things, including books, now suited a world in which radioactivity did not exist. It was still more difficult, and took more time, to wipe out all thought of radioactivity from the minds of men. Right now, uranium does not exist on Earth. No one ever heard of it."

"I have," said Johannison. "How about you, Mercy?" "I remember, too," said Mercedes.

"You two are omitted for a reason," said the visitor, "as are over a hundred others, men and women, all over the world."

"No radioactivity," muttered Johannison. "Forever?"
"For five of your years," said the visitor. "It is a pause, nothing more. Merely a pause, or call it a period of anesthesia, so that I can operate on the species without the interim danger of atomic war. In five years, the phenomenon of radioactivity will return together with all the uranium and thorium that currently do not exist. The knowledge will not return, however. That is where you will come in. You and the others-like you. You will re-educate the world gradually."

"That's quite a job. It took fifty years to get us to this point. Even allowing for less the second time, why not simply re-

store knowledge? You can do that, can't you?"

"The operation," said the visitor, "will be a serious one. It will take anywhere up to a decade to make certain there are no complications. So we want re-education slowly, on purpose."

Johannison said, "How do we know when the time comes?

I mean when the operation's over?"

The visitor smiled. "When the time comes, you will know.

Be assured of that."

"Well, it's a hell of a thing, waiting five years for a gong to ring in your head. What if it never comes? What if your operation isn't successful?"

The visitor said, seriously, "Let us hope that it is."

"But if it isn't? Can't you clear our minds temporarily, too?

Can't you let us live normally till it's time?"

"No. I'm sorry. I need your minds untouched. If the operation is a failure; if the cure does not work out, I will need a small reservoir of normal, untouched minds out of which to bring about the growth of a new population on this planet on whom a new variety of cure may be attempted. At all costs, your species must be preserved. It is valuable to us. It is why I am spending so much time trying to explain the situation to you. If I had left you as you were an hour ago, five days, let alone five years, would have completely ruined you."

And without another word, he disappeared.

Mercedes went through the motions of preparing supper and they sat at the table almost as though it had been any other day.

Johannison said, "Is it true? Is it all real?"

"I saw it, too," said Mercedes. "I heard it."

"I went through my own books. They're all changed." When this—pause is over, we'll be working strictly from memory, all of us who are left. We'll have to build instruments again. It will take a long time to get it across to those who won't remember." Suddenly he was angry, "And what for, I want to know? What for?"

"Alex," Mercedes began timidly, "he may have been on Earth before and spoken to people. He's lived for thousands

and thousands of years. Do you suppose he's what we've been thinking of for so long as—as—".

Johannison looked at her. "As God? Is that what you're trying to say? How should I know? All I know is that his people, whatever they are, are infinitely more advanced than we, and that he's curing us of a disease."

Mercedes said, "Then I think of him as a doctor or what's

equivalent to it in his society."

"A doctor? All he kept saying was that the difficulty of communication was the big problem. What kind of a doctor can't communicate with his patients? A vet! An animal doctor!"

He pushed his plate away.

His wife said, "Even so. If he brings an end to war-"

"Why should he want to? What are we to him? We're animals. We are animals to him. Literally. He as much as said so. When I asked him where he was from, he said he didn't come from the 'yard' at all. Get it? The barnyard. Then he changed it to the 'universe.' He didn't come from the 'universe' at all. His difficulty in communication gave him away. He used the concept for what our universe was to him rather than what it was to us. So the universe is a barnyard and we're—horses, chickens, sheep. Take your choice."

Mercedes said softly, "'The Lord is my Shepherd. I shall

not want."

"Stop it, Mercy. That's a metaphor; this is reality. If he's a shepherd, then we're sheep with a queer unnatural desire, and ability, to kill one another. Why stop us?"

"He said-"

"I know what he said. He said we have great potentialities. We're very valuable. Right?"

"Yes."

"But what are the potentialities and values of sheep to a shepherd? The sheep wouldn't have any idea. They couldn't. Maybe if they knew why they were coddled so, they'd prefer to live their own lives. They'd take their own chances with wolves or with themselves."

Mercedes looked at him helplessly.

Johannison cried, "It's what I keep asking myself now. Where are we going? Where are we going? Do sheep know? Do we know? Can we know?"

They sat staring at their plates, not eating.
Outside, there was the noise of traffic and the calling of children at play. Night was falling and gradually it grew dark.