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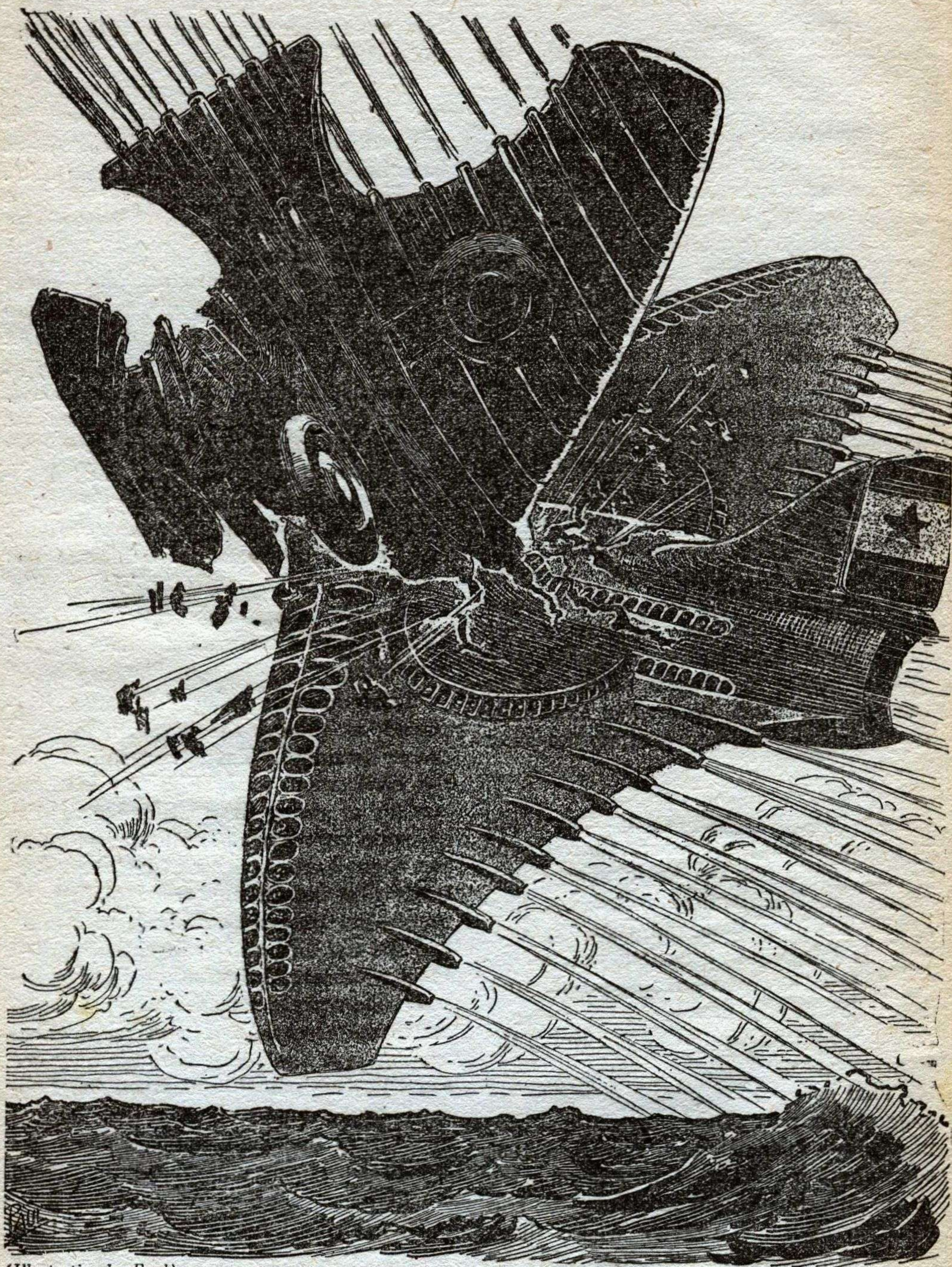
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● ON THE COVER

This month we find the hero in A. Connell's thrilling story, "The Reign of the Reptiles," about to be sent into the past, against his will, by the three enthusiastic scientists, where he is on the verge of the strangest experience ever to confront a human being.



(Illustration by Paul)

The *Baikal*, flying at the north edge of the eastbound lane to avoid a storm, had locked wings with a British fruitship.

THE WORLDS OF IF

By STANLEY G.
WEINBAUM

● I stopped on the way to the Staten Island Airport to call up, and that was a mistake, doubtless, since I had a chance of making it otherwise. But the office was affable. "We'll hold the ship five minutes for you," the clerk said. "That's the best we can do."

So I rushed back to my taxi and we spun off to the third level and sped across the Staten Bridge like a comet treading a steel rainbow. I had to be in Moscow by evening, by eight o'clock, in fact, for the opening of bids on the Ural Tunnel. The Government required the personal presence of an agent of each bidder, but the firm should have known better than to send me, Dixon Wells, even though the N. J. Wells Corporation is, so to speak, my father. I have a—well, an undeserved reputation for being late to everything; something always comes up to prevent me from getting anywhere on time. It's never *my* fault; this time it was a chance encounter with my old physics professor, old Haskel van Manderpootz. I couldn't very well just say hello and good-bye to him; I'd been a favorite of his back in the college days of 2014.

I missed the airliner, of course. I was still on the Staten Bridge when I heard the roar of the catapult and the Soviet rocket *Baikal* hummed over us like a tracer bullet with a long tail of flame.

We got the contract anyway; the firm wired our man in Beirut and he flew up to Moscow, but it didn't help my reputation. However, I felt a great deal better when I saw the evening papers; the *Baikal*, flying at the north edge of the eastbound lane to avoid a storm, had

● There are two types of stories that we can enjoy reading—those containing so many original conceptions that they do not need a masterful technique, and those which are so well written that a possible hackneyed plot is not even noticed. In the metaphor, these two elements are easily worked by any good author, but are inert as far as combining them goes to most.

We find in this story the inimitable literary style of Mr. Weinbaum which has made him the favorite of many of our readers with his first two stories, and original conceptions, such as we are seeking in our new policy.

In other words, we have here everything you could ask for and a lot more. If you have never read anything by this author before, you will be glad to make his acquaintance with "The Worlds of If"—and if you have read his "Tweel" stories, you have most likely skipped past this "blurb" entirely in order to get to the story more quickly.

locked wings with a British fruitship and all but a hundred of her five hundred passengers were lost. I had almost become "the late Mr. Wells" in a grimmer sense.

I'd made an engagement for the following week with old van Manderpootz. It seems he'd transferred to N. Y. U. as head of the department of Newer Physics—that is, of Relativity. He deserved it; the old chap was a genius if ever there was one, and even now, eight years out of college, I remember more from his course than from half a dozen calculus, steam and gas, mechanics, and other hazards on the path to an engineer's education. So on Tuesday night I dropped in an hour or so late, to tell the truth, since I'd forgotten about the engagement until mid-evening.

He was reading in a room as disorderly as ever. "Humph!" he grunted.

"Time changes everything but habit, I see. You were a good student, Dick, but I seem to recall that you always arrived in class toward the middle of the lecture."

"I had a course in East Hall just before," I explained. "I couldn't seem to make it in time."

"Well, it's time you learned to be on time," he growled. Then his eyes twinkled. "Time!" he ejaculated. "The most fascinating word in the language. Here we've used it five times (there goes the sixth time—and the seventh!) in the first minute of conversation; each of us understands the other, yet science is just beginning to learn its meaning. Science? I mean that *I* am beginning to learn."

I sat down. "You and science are synonymous," I grinned. "Aren't you one of the world's outstanding physicists?"

"One of them!" he snorted. "*One* of them, eh! And who are the others?"

"Oh, Corveille and Hastings and Shrimski—"

"Bah! Would you mention them in the same breath with the name of van Manderpootz? A pack of jackals, eating the crumbs of ideas that drop from my feast of thoughts! Had you gone back into the last century, now—had you mentioned Einstein and de Sitter—there, perhaps, are names worthy to rank with (or just below) van Manderpootz!"

I grinned again in amusement. "Einstein is considered pretty good, isn't he?" I remarked. "After all, he was the first to tie time and space to the laboratory. Before him they were just philosophical concepts."

"He didn't!" rasped the professor. "Perhaps, in a dim, primitive fashion, he showed the way, but I—I, van Manderpootz—am the first to seize time, drag it into my laboratory, and perform an experiment on it."

"Indeed? And what sort of experiment?"

"What experiment, other than simple measurement, is it possible to perform?" he snapped.

"Why—I don't know. To travel in it?"

"Exactly."

"Like these time-machines that are so popular in the current magazines? To go into the future or the past?"

"Bah! Many bahs! The future or the past—pfui! It needs no van Manderpootz to see the fallacy in that. Einstein showed us that much."

"How? It's conceivable, isn't it?"

"Conceivable? And you, Dixon Wells, studied under van Manderpootz!" He grew red with emotion, then grimly calm. "Listen to me. You know how time varies with the speed of a system—Einstein's relativity."

"Yes."

"Very well. Now suppose then that the great engineer Dixon Wells invents a machine capable of traveling very fast, enormously fast, nine-tenths as fast as light. Do you follow? Good. You then fuel this miracle ship for a little jaunt of a half million miles, which, since mass (and with it inertia) increases according to the Einstein formula with increasing speed, takes all the fuel in the world. But you solve that. You discover atomic energy. Then, since at nine-tenths light-speed, your ship weighs about as much as the sun, you disintegrate North America to give you sufficient motive power. You start off at that speed, a hundred and sixty-eight thousand miles per second, and you travel for two hundred and four thousand miles. The acceleration has now crushed you to death, but you have penetrated the future." He paused, grinning sardonically. "Haven't you?"

"Yes."

"And how far?"

I hesitated.

"Use your Einstein formula!" he screeched. "How far? I'll tell you. *One second!*" He grinned triumphantly. "That's how possible it is to travel into the future. And as for the past—in the first place, you'd have to exceed light-speed, which immediately entails the use of more than an infinite number of horse-powers. We'll assume that the great engineer Dixon Wells solves that little problem too, even though the energy out-put of the whole universe is not an infinite

number of horsepower. Then he applies this more than infinite power to travel at two hundred and four thousand miles per second for *ten* seconds. He has then penetrated the past. How far?"

● Again I hesitated.

"I'll tell you. *One second!*" He glared at me. "Now all you have to do is to design such a machine, and then van Manderpootz will admit the possibility of traveling into the future—for a limited number of seconds. As for the past, I have just explained that all the energy in the universe is insufficient for that."

"But," I stammered, "you just said that you—"

"I did *not* say anything about traveling into either future or past, which I have just demonstrated to you to be impossible—a practical impossibility in the one case and an absolute one in the other."

"Then how *do* you travel in time?"

"Not even van Manderpootz can perform the impossible," said the professor, now faintly jovial. He tapped a thick pad of typewriter paper on the table beside him. "See, Dick, this is the world, the universe." He swept a finger down it. "It is long in time, and"—sweeping his hand across—"it is broad in space, but"—now jabbing his finger against its center—"it is very thin in the fourth dimension. Van Manderpootz takes always the shortest, the most logical course. I do not travel along time, into past or future. No. Me, I travel across time, sideways!"

I gulped. "Sideways into time! What's there?"

"What would naturally be there?" he snorted. "Ahead is the future; behind is the past. Those are real, the worlds of past and future. What worlds are neither past nor future, but contemporary and yet—extemporal—existing, as it were, in time parallel to our time?"

I shook my head.

"Idiot!" he snapped. "The conditional worlds, of course! The worlds of 'if.' Ahead are the worlds to be; behind are the worlds that were; to either side are

the worlds that might have been—the worlds of 'if'!"

"Eh?" I was puzzled. "Do you mean that you can see what will happen if I do such and such?"

"No!" he snorted. "My machine does not reveal the past nor predict the future. It will show, as I told you, the conditional worlds. You might express it, by 'if I had done such and such, so and so would have happened.' The worlds of the subjunctive mode."

"Now how the devil does it do that?"

"Simple, for van Manderpootz! I use polarized light, polarized not in the horizontal or vertical planes, but in the direction of the fourth dimension—an easy matter. One uses Iceland spar under colossal pressures, that is all. And since the worlds are very thin in the direction of the fourth dimension, the thickness of a single light wave, though it be but millionths of an inch, is sufficient. A considerable improvement over time-traveling in past or future, with its impossible velocities and ridiculous distances!"

"But—are those—worlds of 'if'—real?"

"Real? What is real? They are real, perhaps, in the sense that two is a real number as opposed to $\sqrt{-2}$, which is imaginary. They are the worlds that would have been *if*—Do you see?"

I nodded. "Dimly. You could see, for instance, what New York would have been like if England had won the Revolution instead of the Colonies."

"That's the principle, true enough, but you couldn't see that on the machine. Part of it, you see, is a Horsten psychomat (stolen from one of *my* ideas, by the way) and you, the user, become part of the device. Your own mind is necessary to furnish the background. For instance, if George Washington could have used the mechanism after the signing of peace, he could have seen what you suggest. We can't. You can't even see what would have happened if I hadn't invented the thing, but *I* can. Do you understand?"

"Of course. You mean the background has to rest in the past experiences of the user."

"You're growing brilliant," he scoffed. "Yes. The device will show ten hours of what would have happened *if*—condensed, of course, as in a movie, to half an hour's actual time."

"Say, that sounds interesting!"

"You'd like to see it? Is there anything you'd like to find out?—any choice you'd alter?"

"I'll say!—a thousand of 'em. I'd like to know what would have happened if I'd sold out my stocks in 2009 instead of '10. I was a millionaire in my own right then, but I was a little—well, a little late in liquidating."

"As usual," remarked van Manderpootz. "Let's go over to the laboratory, then."

● The professor's quarters were but a block from the campus. He ushered me into the Physics Building, and thence into his own research laboratory, much like the one I had visited during my courses under him. The device—he called it his "subjunctivisor," since it operated in hypothetical worlds—occupied the entire center table. Most of it was merely a Horsten psychomat, but glittering crystalline and glassy was the prism of Iceland spar, the polarizing agent that was the heart of the instrument.

Van Manderpootz pointed to the head-piece. "Put it on," he said, and I sat staring at the screen of the psychomat. I suppose everyone is familiar with the Horsten psychomat; it was as much a fad a few years ago as the ouija board a century back. Yet it isn't just a toy; sometimes, much as the ouija board, it's a real aid to memory. A maze of vague and colored shadows is caused to drift slowly across the screen, and one watches them, meanwhile visualizing whatever scene or circumstances he is trying to remember. He turns a knob that alters the arrangement of lights and shadows, and when, by chance, the design corresponds to his mental picture—presto! There is his scene re-created under his eyes. Of course his own mind adds the details. All the screen actually shows are these tinted blobs of

light and shadow, but the thing can be amazingly real. I've seen occasions when I could have sworn the psychomat showed pictures almost as sharp and detailed as reality itself; the illusion is sometimes as startling as that.

Van Manderpootz switched on the light, and the play of shadows began. "Now recall the circumstances of, say, a half-year after the market crash. Turn the knob until the picture clears, then stop. At that point I direct the light of the subjunctivisor upon the screen, and you have nothing more to do than watch."

I did as directed. Momentary pictures formed and vanished. The inchoate sounds of the device hummed like distant voices, but without the added suggestion of the picture, they meant nothing. My own face flashed and dissolved, and then, finally, I had it. There was a picture of myself sitting in an ill-defined room; that was all. I released the knob and gestured.

A click followed. The light dimmed, then brightened. The picture cleared, and amazingly, another figure emerged, a woman. I recognized her. It was Whimsy White, erstwhile star of television and premiere of the "Vision Varieties of '09." She was changed on that picture, but I recognized her.

I'll say I did! I'd been trailing her all through the boom years of '07 to '10, trying to marry her, while old N. J. raved and ranted and threatened to leave everything to the Society for Rehabilitation of the Gobi Desert. I think those threats were what kept her from accepting me, but after I took my own money and ran it up to a couple of million in that crazy market of '08 and '09, she softened.

Temporarily, that is. When the crash of the spring of '10 came and bounced me back on my father and into the firm of N. J. Wells, her favor dropped a dozen points to the market's one. In February we were engaged, in April we were hardly speaking. In May they sold me out. I'd been late again.

And now, there she was on the psychomat screen, obviously plumping out, and not nearly so pretty as memory had

pictured her. She was staring at me with an expression of enmity, and I was glaring back. The buzzes became voices.

"You nit-wit!" she snapped. "You can't bury me out here. I want to go back to New York, where there's a little life. I'm bored with you and your golf."

"And I'm bored with you and your whole dizzy crowd."

"At least they're *alive*. You're a walking corpse. Just because you were lucky enough to gamble yourself into the money, you think you're a tin god."

"Well, I *don't* think you're Cleopatra! Those friends of yours—they trail after you because you give parties and spend money—*my* money."

"Better than spending it to knock a white walnut along a mountainside!"

"Indeed? You ought to try it, Marie." (That was her real name.) "It might help your figure—though I doubt if anything could!"

She glared in rage and—well, that was a painful half hour. I won't give all the details, but I was glad when the screen dissolved into meaningless colored clouds.

"Whew!" I said, staring at van Manderpootz, who had been reading.

"You liked it?"

"Liked it! Say, I guess I was lucky to be cleaned out. I won't regret it from now on."

"That," said the professor grandly, "is van Manderpootz's great contribution to human happiness. 'Of all sad words of tongue or pen, the saddest are these: It might have been!' True no longer, my friend Dick. Van Manderpootz has shown that the proper reading is 'It might have been—worse!'"

● It was very late when I returned home, and as a result, very late when I rose, and equally late when I got to the office. My father was unnecessarily worked up about it, but he exaggerated when he said I'd never been on time. He forgets the occasions when he's awakened me and dragged me down with him. Nor was it necessary to refer so sarcastically to my missing the *Baikal*; I reminded him of

the wrecking of the liner, and he responded very heartlessly that if I'd been aboard, the rocket would have been late, and so would have missed colliding with the British fruitship. It was likewise superfluous for him to mention that when he and I had tried to snatch a few weeks of golfing in the mountains, even the spring had been late. I had nothing to do with that.

"Dixon," he concluded, "you have no conception whatever of time. None whatever."

The conversation with van Manderpootz recurred to me. I was impelled to ask, "And have you, sir?"

"I have," he said grimly. "I most assuredly have. Time," he said oracularly, "is money."

You can't argue with a viewpoint like that.

But those aspersions of his rankled, especially that about the *Baikal*. Tardy I might be, but it was hardly conceivable that my presence aboard the rocket could have averted the catastrophe. It irritated me; in a way, it made me responsible for the deaths of those unrescued hundreds among the passengers and crew, and I didn't like the thought.

Of course, if they'd waited an extra five minutes for me, or if I'd been on time and they'd left on schedule instead of five minutes late, or if—if—if!

If! The word called up van Manderpootz and his subjunctivisor—the worlds of "if," the weird, unreal worlds that existed beside reality, neither past nor future, but contemporary, yet extemporal. Somewhere among their ghostly infinities existed one that represented the world that would have been had I made the liner. I had only to call up Haskel van Manderpootz, make an appointment, and then—find out.

Yet it wasn't an easy decision. Suppose—just suppose that I found myself responsible—not legally responsible, certainly; there'd be no question of criminal negligence, or anything of that sort—not even morally responsible, because I couldn't possibly have anticipated that my

presence or absence could weigh so heavily in the scales of life and death, nor could I have known in which direction the scales would tip. Just—responsible; that was all. Yet I hated to find out.

I hated equally not finding out. Uncertainty has its pangs too, quite as painful as those of remorse. It might be less nerve-racking to know myself responsible than to wonder, to waste thoughts in vain doubts and futile reproaches. So I seized the visiphone, dialed the number of the University, and at length gazed on the broad, humorous, intelligent features of van Manderpootz, dragged from a morning lecture by my call.

● I was all but prompt for the appointment the following evening, and might have been actually on time but for an unreasonable traffic officer who insisted on booking me for speeding. At any rate, van Manderpootz was impressed.

"Well!" he rumbled. "I almost missed you, Dixon. I was just going over to the club, since I didn't expect you for an hour. You're only ten minutes late."

I ignored this. "Professor, I want to use your—uh—your subjunctivisor."

"Eh? Oh, yes. You're lucky, then. I was just about to dismantle it."

"Dismantle it? Why?"

"It has served its purpose. It has given birth to an idea far more important than itself. I shall need the space it occupies."

"But what is the idea, if it's not too presumptuous of me to ask?"

"It is not too presumptuous. You and the world which awaits it so eagerly may both know, but you hear it from the lips of the author. It is nothing less than the autobiography of van Manderpootz!" He paused impressively.

I gaped. "Your autobiography?"

"Yes. The world, though perhaps unaware, is crying for it. I shall detail my life, my work. I shall reveal myself as the man responsible for the three years' duration of the Pacific War of 2004."

"You?"

"None other. Had I not been a loyal Netherlands subject at that time, and

therefore neutral, the forces of Asia would have been crushed in three months instead of three years. The subjunctivisor tells me so; I would have invented a calculator to forecast the chances of every engagement; van Manderpootz would have removed the hit or miss element in the conduct of war." He frowned solemnly. "There is my idea. The autobiography of van Manderpootz. What do you think of it?"

I recovered my thoughts. "It's—uh—it's colossal!" I said vehemently. "I'll buy a copy myself. Several copies. I'll send 'em to my friends."

"I," said van Manderpootz expansively, "shall autograph your copy for you. It will be priceless. I shall write in some fitting phrase, perhaps something like *Magnificus sed non superbus*. 'Great but not proud!' That well describes van Manderpootz, who despite his greatness is simple, modest, and unassuming. Don't you agree?"

"Perfectly! A very apt description of you. But—couldn't I see your subjunctivisor before it's dismantled to make way for the greater work?"

"Ah! You wish to find out something?"

"Yes, professor. Do you remember the *Baikal* disaster of a week or two ago? I was to have taken that liner to Moscow. I just missed it." I related the circumstances.

"Humph!" he grunted. "You wish to discover what would have happened had you caught it, eh? Well, I see several possibilities. Among the worlds of 'if' is the one that would have been real if you had been on time, the one that depended on the vessel waiting for your actual arrival, and the one that hung on your arriving within the five minutes they actually waited. In which are you interested?"

"Oh—the last one." That seemed the likeliest. After all, it was too much to expect that Dixon Wells could ever be on time, and as to the second possibility—well, they *hadn't* waited for me, and that, in a way, removed the weight of responsibility.

"Come on," rumbled van Manderpootz.

I followed him across to the Physics Building and into his littered laboratory. The device still stood on the table and I took my place before it, staring at the screen of the Horsten psychomat. The clouds wavered and shifted as I sought to impress my memories on their suggestive shapes, to read into them some picture of that vanished morning.

Then I had it. I made out the vista from the Staten Bridge, and was speeding across the giant span toward the airport. I waved a signal to van Manderpootz, the thing clicked, and the subjunctivisor was on.

The grassless clay of the field appeared. It is a curious thing about the psychomat that you see not only through your own eyes but also through the eyes of your image on the screen. It lends a strange reality to the working of the toy; I suppose a sort of self-hypnosis is partly responsible.

I was rushing over the ground toward the glittering, silver-winged projectile that was the *Baikal*. A glowering officer waved me on, and I dashed up the slant of the gangplank and into the ship; the port dropped and I heaved a long "Whew!" of relief.

"Sit down!" barked the officer, gesturing toward an unoccupied seat. I fell into it; the ship quivered under the thrust of the catapult, grated harshly into motion, and then was flung bodily into the air. The blasts roared instantly, then settled to a more muffled throbbing, and I watched Staten Island drop down and slide back beneath me. The giant rocket was under way.

"Whew!" I breathed again. "Made it!"

I caught an amused glance from my right. I was in an aisle seat; there was no one to my left, so I turned to the eyes that had flashed, glanced, and froze staring.

It was a girl. Perhaps she wasn't actually as lovely as she looked to me; after all, I was seeing her through the half-visionary screen of a psychomat. I've told myself since that she *couldn't* have been as pretty as she seemed, that it was due

to my own imagination filling in the details. I don't know; I remember only that I stared at curiously lovely silver-blue eyes and velvety brown hair, and a small amused mouth, and an impudent nose. I kept staring until she flushed.

"I'm sorry," I said quickly. "I—was startled."

● There's a friendly atmosphere aboard a trans-oceanic rocket. The passengers are forced into a crowded intimacy for anywhere from seven to twelve hours, and there isn't much room for moving about. Generally, one strikes up an acquaintance with his neighbors; introductions aren't at all necessary, and the custom is simply to speak to anybody you choose—something like an all-day trip on the railroad trains of the last century, I suppose. You make friends for the duration of the journey, and then, nine times out of ten, you never hear of your traveling companions again.

The girl smiled. "Are you the individual responsible for the delay in starting?"

I admitted it. "I seem to be chronically late. Even watches lose time as soon as I wear them."

She laughed. "Your responsibilities can't be very heavy."

Well, they weren't, of course, though it's surprising how many clubs, caddies, and chorus girls have depended on me at various times for appreciable portions of their incomes. But somehow I didn't feel like mentioning those things to the silvery-eyed girl.

We talked. Her name, it developed, was Joanna Caldwell, and she was going as far as Paris. She was an artist, or hoped to be one day, and of course there is no place in the world that can supply both training and inspiration like Paris. So it was there she was bound for a year of study, and despite her demurely humorous lips and laughing eyes, I could see that the business was of vast importance to her. I gathered that she had worked hard for the year in Paris, had scraped and saved for three years as fashion illustrator

for some woman's magazine, though she couldn't have been many months over twenty-one. Her painting meant a great deal to her, and I could understand it. I'd felt that way about polo once.

So you see, we were sympathetic spirits from the beginning. I knew that she liked me, and it was obvious that she didn't connect Dixon Wells with the N. J. Wells Corporation. And as for me—well, after that first glance into her cool silver eyes, I simply didn't care to look anywhere else. The hours seemed to drip away like minutes while I watched her.

You know how those things go. Suddenly I was calling her Joanna and she was calling me Dick, and it seemed as if we'd been doing just that all our lives. I'd decided to stop over in Paris on my way back from Moscow, and I'd secured her promise to let me see her. She was different, I tell you; she was nothing like the calculating Whimsy White, and still less like the dancing, simpering, giddy youngsters one meets around at social affairs. She was just Joanna, cool and humorous, yet sympathetic and serious, and as pretty as a Majolica figurine.

We could scarcely realize it when the steward passed along to take orders for luncheon. Four hours out? It seemed like forty minutes. And we had a pleasant feeling of intimacy in the discovery that both of us liked lobster salad and detested oysters. It was another bond; I told her whimsically that it was an omen, nor did she object to considering it so.

Afterwards we walked along the narrow aisle to the glassed-in observation room up forward. It was almost too crowded for entry, but we didn't mind that at all, as it forced us to sit very close together. We stayed long after both of us had begun to notice the stuffiness of the air.

It was just after we had returned to our seats that the catastrophe occurred. There was no warning save a sudden lurch, the result, I suppose, of the pilot's futile last-minute attempt to swerve—just that and then a grinding crash and a terrible sensation of spinning, and after that a chorus

of shrieks that were like the sounds of battle.

It *was* battle. Five hundred people were picking themselves up from the floor, were trampling each other, milling around, being cast helplessly down as the great rocket-plane, its left wing but a broken stub, circled downward toward the Atlantic.

The shouts of officers sounded and a loudspeaker blared. "Be calm," it kept repeating, and then, "There has been a collision. We have contacted a surface ship. There is no danger— There is no danger—"

I struggled up from the debris of shattered seats. Joanna was gone; just as I found her crumpled between the rows, the ship struck the water with a jar that set everything crashing again. The speaker blared, "Put on the cork belts under the seats. The life-belts are under the seats."

I dragged a belt loose and snapped it around Joanna, then donned one myself. The crowd was surging forward now, and the tail end of the ship began to drop. There was water behind us, sloshing in the darkness as the lights went out. An officer came sliding by, stooped, and fastened a belt about an unconscious woman ahead of us. "You all right?" he yelled, and passed on without waiting for an answer.

The speaker must have been cut on to a battery circuit. "And get as far away as possible," it ordered suddenly. "Jump from the forward port and get as far away as possible. A ship is standing by. You will be picked up. Jump from the—" It went dead again.

I got Joanna untangled from the wreckage. She was pale; her silvery-eyes were closed. I started dragging her slowly and painfully toward the forward port, and the slant of the floor increased until it was like the slide of a ski-jump. The officer passed again. "Can you handle her?" he asked, and again dashed away.

I was getting there. The crowd around the port looked smaller, or was it simply huddling closer? Then suddenly, a wail

of fear and despair went up, and there was a roar of water. The observation room walls had given. I saw the green surge of waves, and a billowing deluge rushed down upon us. I had been late again.

That was all. I raised shocked and frightened eyes from the subjunctivisor to face van Manderpootz, who was scribbling on the edge of the table.

"Well?" he asked.

I shuddered. "Horrible!" I murmured. "We—I guess we wouldn't have been among the survivors."

"We, eh? *We?*" His eyes twinkled.

I did not enlighten him. I thanked him, bade him good-night, and went dolorously home.

● Even my father noticed something queer about me. The day I got to the office only five minutes late, he called me in for some anxious questioning as to my health. I couldn't tell him anything, of course. How could I explain that I'd been late once too often, and had fallen in love with a girl two weeks after she was dead?

The thought drove me nearly crazy. Joanna! Joanna with her silvery-eyes now lay somewhere at the bottom of the Atlantic. I went around half dazed, scarcely speaking. One night I actually lacked the energy to go home and sat smoking in my father's big overstuffed chair in his private office until I finally dozed off. The next morning, when old N. J. entered and found me there before him, he turned pale as paper, staggered, and gasped, "My heart!" It took a lot of explaining to convince him that I wasn't early at the office, but just very late going home.

At last I felt that I couldn't stand it. I had to do something—anything at all. I thought finally of the subjunctivisor. I could see—yes, I could see what would have transpired if the ship hadn't been wrecked! I could trace out that weird, unreal romance hidden somewhere in the worlds of "if." I could, perhaps, wring a somber, vicarious joy from the things that might have been. I could see Joanna once more!

It was late afternoon when I rushed over to van Manderpootz's quarters. He wasn't there; I encountered him finally in the hall of the Physics Building.

"Dick!" he exclaimed. "Are you sick?"

"Sick? No. Not physically. Professor, I've got to use your subjunctivisor again. I've *got* to!"

"Eh? Oh—that toy. You're too late, Dick. I've dismantled it. I have a better use for the space."

I gave a miserable groan and was tempted to damn the autobiography of the great van Manderpootz. A gleam of sympathy showed in his eyes, and he took my arm, dragging me into the little office adjoining his laboratory.

"Tell me," he commanded.

I did. I guess I made the tragedy plain enough, for his heavy brows knit in a frown of pity. "Not even van Manderpootz can bring back the dead," he murmured. "I'm sorry, Dick. Take your mind from the affair. Even were my subjunctivisor available, I wouldn't permit you to use it. That would be but to turn the knife in the wound." He paused. "Find something else to occupy your mind. Do as van Manderpootz does. Find forgetfulness in work."

"Yes," I responded dully. "But who'd want to read *my* autobiography? That's all right for you."

"Autobiography? Oh! I remember. No, I have abandoned that. History itself will record the life and works of van Manderpootz. Now I am engaged on a far grander project."

"Indeed?" I was utterly, gloomily disinterested.

"Yes. Gogli has been here, Gogli the sculptor. He is to make a bust of me. What better legacy can I leave to the world than a bust of van Manderpootz, sculptured from life? Perhaps I shall present it to the city, perhaps to the university. I would have given it to the Royal Society if they had been a little more receptive, if they—if—if!" This last in a shout.

(Continued on page 364)

THE WORLDS OF IF

By Stanley G. Weinbaum

(Continued from page 285)

"Huh?"

"If!" cried van Manderpootz. "What you saw in the subjunctivisor was what would have happened if you had caught the ship!"

"I know that."

"But something quite different might have really happened! Don't you see? She—she— Where are those old newspapers?"

He was pawing through a pile of them. He flourished one finally. "Here! Here are the survivors!"

Like letters of flame, Joanna Caldwell's name leaped out at me. There was even a little paragraph about it, as I saw once my reeling brain permitted me to read:

"At least a score of survivors owe their lives to the bravery of twenty-eight year old Navigator Orris Hope, who patrolled both aisles during the panic, lacing lifebelts on the injured and helpless, and carrying many to the port. He remained on the sinking liner until the last, finally fighting his way to the surface through the broken walls of the observation room. Among those who owe their lives to the young officer are: Patrick Owensby, New York City; Mrs. Campbell Warren, Boston; Miss Joanna Caldwell, New York City——"

I suppose my shout of joy was heard over in the Administration Building, blocks away. I didn't care; if van Manderpootz hadn't been armored in stubby whiskers, I'd have kissed him. Perhaps I did anyway; I can't be sure of my actions during those chaotic minutes in the professor's tiny office.

At last I calmed. "I can look her up!" I gloated. "She must have landed with the other survivors, and they were all on that British tramp freighter, the *Osgood*, that docked here last week. She must be in New York—and if she's gone over to Paris, I'll find out and follow her!"

● Well, it's a queer ending. She *was* in New York, but—you see, Dixon Wells had, so to speak, known Joanna Caldwell by means of the professor's subjunctivisor, but Joanna had never known Dixon Wells. What the ending might have been if—if— But it wasn't; she had married Orris Hope, the young officer who had rescued her. I was late again.

THE END

WHAT IS YOUR SCIENCE KNOWLEDGE?

Test Yourself by This Questionnaire

1. What is the scientific name for the age of reptiles? (See Page 266)
2. How can the sodium atom be used as a clock? (See Page 274)
3. Where in the sun has the sodium atom been located? (See Page 274)
4. Give one of the prime essentials of survival. (See Page 275)
5. In whose theory is it stated that time varies with the speed of a system? (See Page 278)
6. Define the second dimension, the third, and the fourth. (See Page 288)
7. In zoology, what is the *genus homo*? (See Page 302)
8. What is mass-hypnotism? (See Page 310)
9. When cannot a susceptible person be hypnotized? (See Page 315)
10. How are revolving mirrors used by hypnotists? (See Page 321)
11. When did the famous French expedition of the Sahara Desert take place? (See Page 324)
12. How can the flow of blood from a punctured artery be stopped? (See Page 328)
13. What is the result of much sweating? (See Page 352)
14. What do atoms consist of? (See Page 355)
15. Tell briefly how the human circulatory system works. (See Page 368)