

FOOL'S MATE

BY ROBERT SHECKLEY

There is a pattern in everything in the universe — but that does not prove you can find it!

Illustrated by Orban

The players met, on the great, timeless board of space. The glittering dots that were the pieces swam in their separate patterns. In that configuration at the beginning, even before the first move was made, the outcome of the game was determined.

Both players saw, and knew which had won. But they played on.

Because the game had to be played out.

"Nielson!"

Lieutenant Nielson sat in front of his gunfire board with an idyllic smile on his face. He didn't look up.

"Nielson!"

The lieutenant was looking at his fingers now, with the stare of a puzzled child.

"Nielson! Snap out of it!" General Branch loomed sternly over him. "Do you hear me, lieutenant?"

Nielson shook his head dully. He started to look at his fingers again, then his gaze was caught by the glittering array of buttons on the gunfire panel.

"Pretty," he said.

General Branch stepped inside the cubicle, grabbed Nielson by the shoulders and shook him.

"Pretty things," Nielson said, gesturing at the panel. He smiled at Branch.

Margraves, second in command, stuck his head in the doorway. He still had sergeant's stripes on his sleeve, having been promoted to colonel only three days ago.

"Ed," he said, "the president's representative is here. Sneak visit."

"Wait a minute," Branch said, "I want to complete this inspection." He grinned sourly. It was one hell of an inspection when you went around finding how many sane men you had left.

"Do you hear me, lieutenant?"

"Ten thousand ships," Nielson said. "Ten thousand ships—all gone!"

"I'm sorry," Branch said. He leaned forward and slapped him smartly across the face.

Lieutenant Nielson started to cry.

"Hey, Ed—what about that representative?"

At close range, Colonel Margraves' breath was a solid essence of whisky, but Branch didn't reprimand him. If you had a good officer left you didn't reprimand him, no matter what he did. Also, Branch approved of whisky. It was a good release, under the circumstances. Probably better than his own, he thought, glancing at his scarred knuckles.

"I'll be right with you. Nielson, can you understand me?"

"Yes, sir," the lieutenant said in a shaky voice. "I'm all right now, sir."

"Good," Branch said. "Can you stay on duty?"

"For a while," Nielson said. "But, sir—I'm not well. I can feel it."

"I know," Branch said. "You deserve a rest. But you're the only gun officer I've got left on this side of the ship. The rest are in the wards."

"I'll try, sir," Nielson said, looking at the gunfire panel again. "But I hear voices sometimes. I can't promise anything, sir."

"Ed," Margraves began again, "that representative—"

"Coming. Good boy, Nielson." The lieutenant didn't look up as Branch and Margraves left.

"I escorted him to the bridge," Margraves said, listing slightly to starboard as he walked. "Offered him a drink, but he didn't want one."

"All right," Branch said.

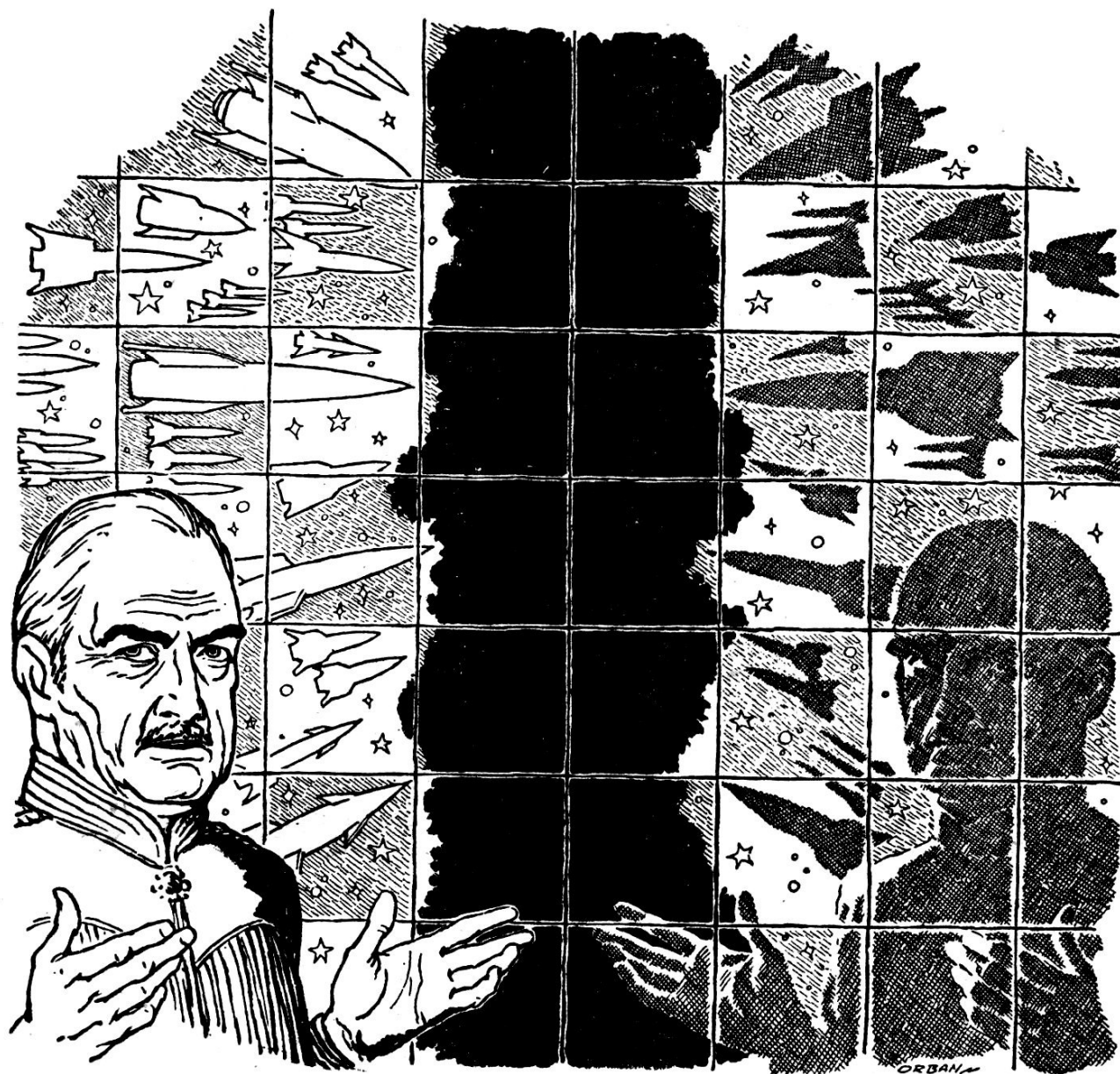
"He was bursting with questions," Margraves continued, chuckling to himself. "One of those earnest, tanned State Department men, out to win the war in five minutes flat. Very friendly boy. Wanted to know why I, personally, thought the fleet had been maneuvering in space for a year with no action."

"What did you tell him?"

"Said we were waiting for a consignment of zap guns," Margraves said. "I think he almost believed me. Then he started talking about logistics."

"Hm-m-m," Branch said. There was no telling what Margraves, half drunk, had told the representative. Not that it mattered. An official inquiry into the prosecution of the war had been due for a long time.

"I'm going to leave you here," Margraves said. "I've got some unfinished business to attend to."



"Right," Branch said, since it was all he could say. He knew that Margraves' unfinished business concerned a bottle.

He walked alone to the bridge.

The president's representative was looking at the huge location screen. It covered one entire wall, glowing with a slowly shifting pattern of dots.

The thousands of green dots on the left represented the Earth fleet, separated by a black void from the orange of the enemy. As he watched, the fluid, three-dimensional front slowly changed. The armies of dots clustered, shifted, retreated, advanced, moving with hypnotic slowness.

But the black void remained between them. General Branch had been

watching that sight for almost a year. As far as he was concerned, the screen was a luxury. He couldn't determine from it what was really happening. Only the CPC calculators could, and they didn't need it.

"How do you do, General Branch?" the president's representative said, coming forward and offering his hand. "My name's Richard Ellsner."

Branch shook hands, noticing that Margraves' description had been pretty good. The representative was no more than thirty. His tan looked strange, after a year of pallid faces.

"My credentials," Ellsner said, handing Branch a sheaf of papers. The general skimmed through them, noting Ellsner's authorization as Presidential Voice in Space. A high honor for so young a man.

"How are things on Earth?" Branch asked, just to say something. He ushered Ellsner to a chair, and sat down himself.

"Tight," Ellsner said. "We've been stripping the planet bare of radio-actives to keep your fleet operating. To say nothing of the tremendous cost of shipping food, oxygen, spare parts, and all the other equipment you need to keep a fleet this size in the field."

"I know," Branch murmured, his broad face expressionless.

"I'd like to start right in with the president's complaints," Ellsner said with an apologetic little laugh. "Just to get them off my chest."

"Go right ahead," Branch said.

"Now then," Ellsner began, consulting a pocket notebook, "you've had the fleet in space for eleven months and seven days. Is that right?"

"Yes."

"During that time there have been light engagements, but no actual hostilities. You—and the enemy commander—have been content, evidently, to sniff each other like discontented dogs."

"I wouldn't use that analogy," Branch said, conceiving an instant dislike for the young man. "But go on."

"I apologize. It was an unfortunate, though inevitable, comparison. Anyhow, there has been no battle, even though you have a numerical superiority. Is that correct?"

"Yes."

"And you know the maintenance of this fleet strains the resources of Earth. The President would like to know why battle has not been joined?"

"I'd like to hear the rest of the complaints first," Branch said. He tightened his battered fists, but, with remarkable self-control, kept them at his sides.

"Very well. The morale factor. We keep getting reports from you on the incidence of combat fatigue—crack-up, in plain language. The figures are absurd! Thirty per cent of your men seem to be under restraint. That's way out of line, even for a tense situation."

Branch didn't answer.

"To cut this short," Ellsner said, "I would like the answer to those

questions. Then, I would like your assistance in negotiating a truce. This war was absurd to begin with. It was none of Earth's choosing. It seems to the President that, in view of the static situation, the enemy commander will be amenable to the idea."

Colonel Margraves staggered in, his face flushed. He had completed his unfinished business; adding another fourth to his half-drunk.

"What's this I hear about a truce?" he shouted.

Ellsner stared at him for a moment, then turned back to Branch.

"I suppose you will take care of this yourself. If you will contact the enemy commander, I will try to come to terms with him."

"They aren't interested," Branch said.

"How do you know?"

"I've tried. I've been trying to negotiate a truce for six months now. They want complete capitulation."

"But that's absurd," Ellsner said, shaking his head. "They have no bargaining point. The fleets are of approximately the same size. There have been no major engagements yet. How can they—"

"Easily," Margraves roared, walking up to the representative and peering truculently in his face.

"General. This man is drunk." Ellsner got to his feet.

"Of course, you little idiot! Don't you understand yet? *The war is lost!* Completely, irrevocably."

Ellsner turned angrily to Branch. The general sighed and stood up.

"That's right, Ellsner. The war is lost and every man in the fleet knows it. That's what's wrong with the morale. We're just hanging here, waiting to be blasted out of existence."

The fleets shifted and weaved. Thousands of dots floated in space, in twisted, random patterns.

Seemingly random.

The patterns interlocked, opened and closed. Dynamically, delicately balanced, each configuration was a planned move on a hundred thousand mile front. The opposing dots shifted to meet the exigencies of the new pattern.

Where was the advantage? To the unskilled eye, a chess game is a meaningless array of pieces and positions. But to the players—the game may be already won or lost.

The mechanical players who moved the thousands of dots knew who had won—and who had lost.

"Now let's all relax," Branch said soothingly. "Margraves, mix us a couple of drinks. I'll explain everything." The colonel moved to a well-stocked cabinet in a corner of the room.

"I'm waiting," Ellsner said.

"First, a review. Do you remember when the war was declared, two years ago? Both sides subscribed to the Holmstead pact, not to bomb home

planets. A rendezvous was arranged in space, for the fleets to meet."

"That's ancient history," Ellsner said.

"It has a point. Earth's fleet blasted off, grouped and went to the rendezvous." Branch cleared his throat.

"Do you know the CPC's? The Configuration-Probability-Calculators? They're like chess players, enormously extended. They arrange the fleet in an optimum attack-defense pattern, based on the configuration of the opposing fleet. So the first pattern was set."

"I don't see the need—" Ellsner started, but Margraves, returning with the drinks, interrupted him.

"Wait, my boy. Soon there will be a blinding light."

"When the fleets met, the CPC's calculated the probabilities of attack. They found we'd lose approximately eighty-seven per cent of our fleet, to sixty-five per cent of the enemy's. If they attacked, they'd lose seventy-nine per cent, to our sixty-four. That was the situation as it stood then. By extrapolation, their *optimum* attack pattern—at that time—would net them a forty-five per cent loss. Ours would have given us a seventy-two per cent loss."

"I don't know much about the CPC's," Ellsner confessed. "My field's psych." He sipped his drink, grimaced, and sipped again.

"Think of them as chess players," Branch said. "They can estimate the loss probabilities for an attack at any

given point of time, in any pattern. They can extrapolate the probable moves of both sides.

"That's why battle wasn't joined when we first met. No commander is going to annihilate his entire fleet like that."

"Well then," Ellsner said, "why haven't you exploited your slight numerical superiority? Why haven't you gotten an advantage over them?"

"Ah!" Margraves cried, sipping his drink. "It comes, the light!"

"Let me put it in the form of an analogy," Branch said. "If you have two chess players of equally high skill, the game's end is determined when one of them gains an advantage. Once the advantage is there, there's nothing the other player can do, unless the first makes a mistake. If everything goes as it should, the game's end is predetermined. The turning point may come a few moves after the game starts, although the game itself could drag on for hours."

"And remember," Margraves broke in, "to the casual eye, there may be no apparent advantage. Not a piece may have been lost."

"That's what's happened here," Branch finished sadly. "The CPC units in both fleets are of maximum efficiency. But the enemy has an edge, which they are carefully exploiting. And there's nothing we can do about it."

"But how did this happen?" Ellsner asked. "Who slipped up?"

"The CPC's have inducted the cause of the failure," Branch said. "The end of the war was inherent in our take-off formation."

"What do you mean?" Ellsner said, setting down his drink.

"Just that. The configuration the fleet was in, light-years away from battle, before we had even contacted their fleet. When the two met, they had an infinitesimal advantage of position. That was enough. Enough for the CPC's, anyhow."

"If it's any consolation," Margraves put in, "it was a fifty-fifty chance. It could have just as well been us with the edge."

"I'll have to find out more about this," Ellsner said. "I don't understand it all yet."

Branch snarled: "The war's lost. What more do you want to know?"

Ellsner shook his head.

"Wilt snare me with predestination 'round," Margraves quoted, "and then impute my fall to sin?"

Lieutenant Nielson sat in front of the gunfire panel, his fingers interlocked. This was necessary, because Nielson had an almost overpowering desire to push the buttons.

The pretty buttons.

Then he swore, and sat on his hands. He had promised General Branch that he would carry on, and that was important. It was three days since he had seen the general, but he was determined to carry on. Resolutely

he fixed his gaze on the gunfire dials.

Delicate indicators wavered and trembled. Dials measured distance, and adjusted aperture to range. The slender indicators rose and fell as the ship maneuvered, lifting toward the red line, but never quite reaching it.

The red line marked emergency. That was when he would start firing, when the little black arrow crossed the little red line.

He had been waiting almost a year now, for that little arrow. Little arrow. Little narrow. Little arrow. Little narrow.

Stop it.

That was when he would start firing.

Lieutenant Nielson lifted his hands into view and inspected his nails. Fastidiously he cleaned a bit of dirt out of one. He interlocked his fingers again, and looked at the pretty buttons, the black arrow, the red line.

He smiled to himself. He had promised the general. Only three days ago.

So he pretended not to hear what the buttons were whispering to him.

"The thing I don't see," Ellsner said, "is why you can't do something about the pattern? Retreat and regroup, for example?"

"I'll explain that," Margraves said. "It'll give Ed a chance for a drink. Come over here." He led Ellsner to an instrument panel. They had been showing Ellsner around the ship for three days, more to relieve their own tension than for any other reason. The

last day had turned into a fairly prolonged drinking bout.

"Do you see this dial?" Margraves pointed to one. The instrument panel covered an area four feet wide by twenty feet long. The buttons and switches on it controlled the movements of the entire fleet.

"Notice the shaded area. That marks the safety limit. If we use a forbidden configuration, the indicator goes over and all hell breaks loose."

"And what is a forbidden configuration?"

Margraves thought for a moment. "The forbidden configurations are those which would give the enemy an attack advantage. Or, to put it in another way, moves which change the attack-probability-loss picture sufficiently to warrant an attack."

"So you can move only within strict limits?" Ellsner asked, looking at the dial.

"That's right. Out of the infinite number of possible formations, we can use only a few, if we want to play safe. It's like chess. Say you'd like to put a sixth row pawn in your opponent's back row. But it would take two moves to do it. And after you move to the seventh row, your opponent has a clear avenue, leading inevitably to checkmate.

"Of course, if the enemy advances too boldly the odds are changed again, and *we* attack."

"That's our only hope," General Branch said. "We're praying they do

something wrong. The fleet is in readiness for instant attack, if our CPC shows that the enemy has overextended himself anywhere."

"And that's the reason for the crack-ups," Ellsner said. "Every man in the fleet on nerves' edge, waiting for a chance he's sure will never come. But having to wait anyhow. How long will this go on?"

"This moving and checking can go on for a little over two years," Branch said. "Then they will be in the optimum formation for attack, with a twenty-eight per cent loss probability to our ninety-three. They'll have to attack then, or the probabilities will start to shift back in our favor."

"You poor devils," Ellsner said softly. "Waiting for a chance that's never going to come. Knowing you're going to be blasted out of space sooner or later."

"Oh, it's jolly," said Margraves, with an instinctive dislike for a civilian's sympathy.

Something buzzed on the switchboard, and Branch walked over and plugged in a line. "Hello? Yes. Yes. . . . All right, Williams. Right." He unplugged the line.

"Colonel Williams has had to lock his men in their rooms," Branch said. "That's the third this month. I'll have to get CPC to dope out a formation so we can take him out of the front." He walked to a side panel and started pushing buttons.

"And there it is," Margraves said.

"What do you plan to do, Mr. Presidential Representative?"

The glittering dots shifted and deployed, advanced and retreated, always keeping a barrier of black space between them. The mechanical chess players watched each move, calculating its effect into the far future. Back and forth across the great chess board the pieces moved.

The chess players worked dispassionately, knowing beforehand the outcome of the game. In their strictly ordered universe there was no possible fluctuation, no stupidity, no failure.

They moved. And knew. And moved.

"Oh, yes," Lieutenant Nielson said to the smiling room. "Oh, yes." And look at all the buttons, he thought, laughing to himself.

So stupid. Georgia.

Nielson accepted the deep blue of sanctity, draping it across his shoulders. Bird song, somewhere.

Of course.

Three buttons red. He pushed them. Three buttons green. He pushed them. Four dials. Riverread.

"Oh-oh. Nielson's cracked."

"Three is for me," Nielson said, and touched his forehead with greatest stealth. Then he reached for the keyboard again. Unimaginable associations raced through his mind, produced by unaccountable stimuli.

"Better grab him. Watch out!"

Gentle hands surround me as I push

two are brown for which is for mother, and one is high for all rest.

"Stop him from shooting off those guns!"

I am lifted into the air, I fly, I fly.

"Is there any hope for that man?" Ellsner asked, after they had locked Nielson in a ward.

"Who knows," Branch said. His broad face tightened; knots of muscle pushed out his cheeks. Suddenly he turned, shouted, and swung his fist wildly at the metal wall. After it hit, he grunted and grinned sheepishly.

"Silly, isn't it? Margraves drinks. I let off steam by hitting walls. Let's go eat."

The officers ate separate from the crew. Branch had found that some officers tended to get murdered by psychotic crewmen. It was best to keep them apart.

During the meal, Branch suddenly turned to Ellsner.

"Boy, I haven't told you the entire truth. I said this would go on for two years? Well, the men won't last that long. I don't know if I can hold this fleet together for two more weeks."

"What would you suggest?"

"I don't know," Branch said. He still refused to consider surrender, although he knew it was the only realistic answer.

"I'm not sure," Ellsner said, "but I think there may be a way out of your dilemma." The officers stopped eating and looked at him.



"Have you got some superweapons for us?" Margraves asked. "A disintegrator strapped to your chest?"

"I'm afraid not. But I think you've been so close to the situation that you don't see it in its true light. A case of the forest for the trees."

"Go on," Branch said, munching methodically on a piece of bread.

"Consider the universe as the CPC sees it. A world of strict causality. A logical, coherent universe. In this

world, every effect has a cause. Every factor can be instantly accounted for.

"That's not a picture of the real world. There is *no* explanation for everything, really. The CPC is built to see a specialized universe, and to extrapolate on the basis of that."

"So," Margraves said, "what would you do?"

"Throw the world out of joint," Ellsner said. "Bring in uncertainty. Add a human factor that the machines

can't calculate."

"How can you introduce uncertainty in a chess game?" Branch asked, interested in spite of himself.

"By sneezing at a crucial moment, perhaps. How could a machine calculate that?"

"It wouldn't have to. It would just classify it as extraneous noise, and ignore it."

"True." Ellsner thought for a moment. "This battle—how long will it take once the actual hostilities are begun?"

"About six minutes," Branch told him. "Plus or minus twenty seconds."

"That confirms an idea of mine," Ellsner said. "The chess game analogy you use is faulty. There's no real comparison."

"It's a convenient way of thinking of it," Margraves said.

"But it's an *untrue* way of thinking of it. Checkmating a king can't be equated with destroying a fleet. Nor is the rest of the situation like chess. In chess you play by rules previously agreed upon by the players. In this game you can make up your own rules."

"This game had inherent rules of its own," Branch said.

"No," Ellsner said. "Only the CPC's have rules. How about this? Suppose you dispensed with the CPC's? Gave every commander his head, told him to attack on his own, with no pattern. What would happen?"

"It wouldn't work," Margraves told

him. "The CPC can still total the picture, on the basis of the planning ability of the average human. More than that, they can handle the attack of a few thousand second-rate calculators—humans—with ease. It would be like shooting clay pigeons."

"But you've *got* to try something," Ellsner pleaded.

"Now wait a minute," Branch said. "You can spout theory all you want. I know what the CPC's tell me, and I believe them. I'm still in command of this fleet, and I'm not going to risk the lives in my command on some harebrained scheme."

"Harebrained schemes sometimes win wars," Ellsner said.

"They usually lose them."

"The war is lost already, by your own admission."

"I can still wait for them to make a mistake."

"Do you think it will come?"

"No."

"Well then?"

"I'm still going to wait."

The rest of the meal was completed in moody silence. Afterward, Ellsner went to his room.

"Well, Ed?" Margraves asked, unbuttoning his shirt.

"Well yourself," the general said. He lay down on his bed, trying not to think. It was too much. Logistics. Predetermined battles. The coming debacle. He considered slamming his fist against the wall, but decided against it.

It was sprained already. He was going to sleep.

On the **borderline** between slumber and sleep, he heard a click.

The door!

Branch jumped out of bed and tried the knob. Then he threw himself against it.

Locked.

"General, please strap yourself down. We are attacking." It was Ellsner's voice, over the intercom.

"I looked over that keyboard of yours, sir, and found the magnetic doorlocks. Mighty handy in case of a mutiny, isn't it?"

"You idiot!" Branch shouted. "You'll kill us all! That CPC—"

"I've disconnected our CPC," Ellsner said pleasantly. "I'm a pretty logical boy, and I think I know how a sneeze will bother them."

"He's mad," Margraves shouted to Branch. Together they threw themselves against the metal door.

Then they were thrown to the floor.

"All gunners—fire at will!" Ellsner broadcasted to the fleet.

The ship was in motion. The attack was underway!

The dots drifted together, crossing the no man's land of space.

They coalesced! Energy flared, and the battle was joined.

Six minutes, human time. Hours for the electronically fast chess player. He checked his pieces for an instant, deducing the pattern of attack.

There was no pattern!

Half of the opposing chess player's pieces shot out into space, completely out of the battle. Whole flanks advanced, split, rejoined, wrenched forward, dissolved their formation, formed it again.

No pattern? There *had* to be a pattern. The chess player knew that everything had a pattern. It was just a question of finding it, of taking the moves already made and extrapolating to determine what the end was supposed to be.

The end was—chaos!

The dots swept in and out, shot away at right angles to the battle, checked and returned, meaninglessly.

What did it mean, the chess player asked himself with the calmness of metal. He waited for a recognizable configuration to emerge.

Watching dispassionately as his pieces were swept off the board.

"I'm letting you out of your room now," Ellsner called, "but don't try to stop me. I think I've won your battle."

The lock released. The two officers ran down the corridor to the bridge, determined to break Ellsner into little pieces.

Inside, they slowed down.

The screen showed the great mass of Earth dots sweeping over a scattering of enemy dots.

What stopped them, however, was Nielson, laughing, his hands sweeping

over switches and buttons on the great master control board.

The CPC was droning the losses. "Earth—eighteen per cent. Enemy—eighty-three. Eighty-four. Eighty-six. Earth, nineteen per cent."

"Mate!" Ellsner shouted. He stood beside Neilson, a Stillson wrench clenched in his hand. "Lack of pattern. I gave their CPC something it couldn't handle. An attack with no apparent pattern. Meaningless configurations!"

"But what are they doing?" Branch asked, gesturing at the dwindling enemy dots.

"Still relying on their chess player," Ellsner said. "Still waiting for him to dope out the attack pattern in this

madman's mind. Too much faith in machines, general. This man doesn't even know he's precipitating an attack."

. . . And push three that's for dad on the olive tree I always wanted to two two two Danbury fair with buckle shoe brown all brown buttons down and in, sin, eight red for sin—

"What's the wrench for?" Margraves asked.

"That?" Ellsner weighed it in his hand. "That's to turn off Neilson here, after the attack."

. . . And five and love and black, all blacks, fair buttons in I remember when I was very young at all push five and there on the grass ouch—

THE END

IN TIMES TO COME

Next issue starts several important items. First off, Hal Clement's new novel, "A Mission of Gravity" begins. The hero is a rough, tough, case-hardened individual. He's a trader-explorer sea-captain, on a world with a culture at about the confused level Earth had around 1450 A.D. And he's tough — you'd be surprised how tough! He's a little guy, really — but then, you don't grow very big, but you do grow very, very tough when the surface gravity in your homeland runs between 400 and 700 G! Where a dropped pebble vanishes with an acceleration about equal to that of a bullet in a revolver barrel. And where muscles as tough as steel would be useless — steel's too flimsy!

Also beginning next month is the new bonus for authors policy. You readers, by your votes, can give a man who's done a sound, clean job of story-building, a bonus pat on the back. The story that wins first place in reader opinion in the April issue will earn a 4¢ rate — your votes will determine which one that is.

A postcard listing your selections in order will be of real help to both myself and my team — the authors.

THE EDITOR.