

ASCENT INTO CHAOS

BY M. C. PEASE

The proposition being, basically, that the best way to handle a nearly hopeless situation is to give up and say it is hopeless, because then it's no longer hopeless!

Illustrated by Cartier

The office was large and impressive. The wall behind the desk was a continuous window looking over the immense expanse of the city of Thar, already beginning to be flecked with lights as the daylight faded. The opposite wall was a kind of blackboard which, at the moment, was almost completely covered with mathematical symbols. The third wall showed a three-dimensional picture in glowing filaments and brilliant points of light. There was beauty to it, but the average man, seeing it, would have wondered what it was. Knowing he was in the office of the Chief Mathematician of the Trade Co-ordination Adminis-

tration, he might have guessed it was a symbolic map of the computer that was the reason for the existence of Thar, but he could hardly have known. The fourth wall was also bewildering. Prosaically enough, there was a door in it. But the rest of the wall was hidden behind what might have been taken for the console of a huge organ, except that the keys were of many colors, and had weird symbols inscribed on them. Also, between the rows of keys, there was a multitude of dials and knobs.

Sita Lanter, secretary to the Chief Mathematician, opened the door enough to slide in. Closing it quietly, she leaned against it and looked at her boss behind the desk. In many ways, she was a very attractive girl. Her blond face and trim figure were not often ignored by the male sex. But there was in her eyes a glint of hardness, of cynicism and of intolerance for hypocrisy that made most men uncomfortable.

The man at whom she looked, Lan Korbet, was sitting with his chin in his hands. His eyes were on the blackboard but they were unseeing. His face was relaxed in perfect concentration. He was a young man. Surprisingly so for the responsibilities he held as Chief Mathematician. Not a very handsome man, but one with a keenness—an awareness, even in his abstraction—that compelled attention. He had an air of utter competence.

When she had waited a moment

without response, Sita told him: "Our estimable Chairman of the Board is outside."

His eyes swung slowly to her. "Oh? What does he want?"

"He did not say," she said. "Something, no doubt. Curlin doesn't do anything without a motive. But I can hardly insist that he tell me, can I?"

Lan smiled. "I didn't know there were limits to what you can do. Send him in."

"Turn on the intercom," she told him. "I'll put a recorder on it."

"It would do no good," he shrugged. "The people trust him, not me. Anyway, I don't play that way. And neither does anyone who works for me."

"Well, turn it on anyway," she said. "I promise no recorder. But I got to keep track of my own job. And if he gets you, I'll be looking for a new one myself."

"Doesn't anything mean more to you than that? Some day, when I am not so busy, I shall have to find out if you have a heart under that egoism." He did not look angry, however. And he did turn on the intercom.

Sita stared at him but said nothing. She smiled enigmatically, and then turned to open the door. She had, after all, got what she wanted. She would be able to hear what passed between her boss and Curlin. The question of why she wanted to hear it, whether for her own sake or for his, was another question. And if Lan did not know the answer to it, at least she did.

The man who came in at her invitation was a big man. He was handsome, with the air of honest geniality that has always been so useful to politicians. He was a man to inspire confidence in the average individual. And since the average voter had little chance to see the fraud that lay behind that open glance, he was a very successful politician.

Sita returned to her desk and sat down. She put a headphone on and adjusted a control until she could hear the men inside.

They were still talking trivialities, she found. It was not for some minutes that she found reason to sit up and listen closely. Not until she heard Curlin say, in an offhand tone: "I suppose you are working hard on your report?"

"Oh, it's pretty well done," she heard Lan answer. "After all, the Board meeting is the day after tomorrow, and the final typing takes the better part of a day."

"Of course," Curlin audibly nodded. "This meeting, incidentally, will be rather an important one. That is what I wanted to discuss with you."

"Oh?" Lan's voice was courteous but cold.

"Yes." The politician's voice was equally cold and courteous. "I think the time has come when you must make a final decision."

"Regarding what?"

"I am going to be very frank, Lan," Curlin said. "This could be rather

embarrassing to me if what I am going to say should get out. However, I shall accept your promise that it will not."

"I promise nothing." Lan's voice was curt.

Curlin sighed audibly. "I feared as much. You have always been uncooperative. However, I am still willing to talk frankly. I don't think anyone would believe you. The average man is stupid. He trusts men like me, and not people like you. He thinks I'm the friend of the people, concerned only with their welfare. He calls you a 'long-hair' and holds you in awe—but also in contempt. He is a fool. And because he is a fool, I find I am strong enough to have you thrown out of this office. I intend to do it at the next Board meeting—the day after tomorrow."

"You are going to demand my resignation?"

"I, or one of my tools."

There was a pause, and then Lan asked: "On what grounds?"

"On the grounds of incompetence." Curlin's voice was smooth. "I shall hold you responsible for the progressive breakdown of the Computer. This dates, I know, from far before your time. But the people are only just beginning to realize just how serious it is. It has only recently gone far enough to scare them. So you can be made the goat."

"And how do you do that?" Lan asked. "The cause of the creeping breakdown is the Subtronic Drive.

How do you make me responsible for that?"

"It is your responsibility to adapt the Computer to new conditions." Curlin's voice was patient. "The existence of the Subtronic Drive is a new condition. Or, at least, its widespread use is. And you have not been able to adapt the Computer to it. You have failed your responsibility. Your defense that the problem is logically insoluble is obviously only an evasion, a feeble attempt to absolve yourself from blame. Personally, when you say it is insoluble, I happen to believe you. I don't know that I fully understand your argument, but I have great trust in your technical abilities. Only, the people don't. They only have trust in me. And they will hold you responsible unless I tell them different."

"And you aren't going to tell them different." It was a statement that Lan made.

"No, I don't think so. At least, not unless I can make a deal with you. Which, as a matter of fact, is why I am here telling you these things."

"You expect me to make a deal with you?" Lan's voice sneered.

"As a matter of fact, no." Curlin's voice was cheerful. "I fear you are too much of a political fool, however much you may be a technical genius. Actually, it would make sense, even with your idealism. What I want is power. I don't think I can get complete control over the entire Federation. I

would like it, I admit, but I don't think I can get it. I am willing to settle for this world. All I ask of you is that you give me a little help."

"All you want," Lan sneered, "is that I direct the Computer's malfunctioning so that Thar gets preferential treatment. You will take the credit and be the fair-haired boy of Thar. Besides using the information to make yourself rich. Isn't that it?"

"Exactly." Curlin sounded completely unruffled. "That is, of course, strictly against all your principles. But the point is that I can force you out. Then I shall appoint someone else—somebody who will do what I want. Only he won't be as clever as you are. The chap I have in mind has nowhere near your ability. He has enough to do the job I want, but he will probably wreck the Federation while he does it. So, by giving me what I want, you can save the Plan."

He paused, and then continued. "As I said, I do not think I can take over the whole Federation. But, if it starts to break up, I may be able to capture a large part. You could prevent this. So maybe I am dumb to offer you a deal. Maybe I ought to actually work to knock down the whole Plan. I have thought it over and I am still making you the offer. The right man in the right place can profit greatly from chaos. I am the right man but whether I am in the right place or not is strictly a guess at this point. And I do not like having to be

lucky as well as skillful. I would rather play it safe for smaller stakes. This is why I am making you the offer."

"I do not quite get it," Lan said. "Suppose you do put your chap in. What will he do about the Subtronic Drive?"

"Nothing," Curlin admitted. "But, by the time the people see he isn't going to, it will be too late. And, if necessary, we will fire him and get us a new stooge. By the way, I am still curious as to just why this problem is insoluble."

"Why? Because it is so fundamental." Lan sounded impatient. "The Plan for which the Trade Coordination Administration was organized was based on the principle that trade between the fifteen hundred worlds of the Federation must be kept balanced. The heart—or, perhaps, brain—of the Administration is the Computer here on Thar. It collects the information as to who needs what or has which to spare. It figures out the best possible arrangement of trade so that everybody gets the best deal possible. Now the one bit of information that is absolutely basic to this job is the topology of the Federation. It has to know who *can* trade with whom, before it can study who *ought* to trade what with whom. And this is the information that it cannot get with the Drive.

"The Drive allows any world that feels unhappy to just take off. Because

of the vast distances over which it can move a world, and the short interval of 'real' time that it takes, the Uncertainty principle is terrifically magnified. So when a world turns on its Drive, it doesn't know where it is going. This does not greatly bother it. With the Mesonic Prime Generator supplying unlimited power, it can take care of itself no matter where it lands. There is no need to land near a star. So a world that is moving doesn't care that it only knows the very general area of space for which it is heading. But the Computer does. The Computer has to know who you are going to be able to trade with. It takes from six months to two years for the news to get back. In the meantime, the Computer does not know the topology for which it must find a solution."

Curlin chuckled. "A pretty problem, I admit. But why is the breakdown progressive? The Drive's been known for a hundred years or so. And the Generator for a good deal longer. Why is it only getting serious now?"

"Because," Lan answered, "before a world takes off, it has to have both the Drive and the Generator. And these are not simple gadgets. Their construction taxes the full resources of a highly industrialized world. The only worlds that were able to build them at first were the most prosperous of the Federation. And only those prosperous ones whose prosperity was based on industry. Now, generally, these worlds had no reason to move.

They had prospered under the existing topology. Why change it? But, as a few worlds did move, and the topology was changed, things happened. Worlds that had been favorably located found themselves on the short end—and, since they had the Drive and Generator, having been prosperous, they promptly moved, changing the topology again. And, with the shifting topology, worlds that had been badly off sometimes found themselves well off for a change. Most of these worlds had the good sense to immediately use their new prosperity to build the Drive and Generator needed to protect their new good fortune.

“Anyway, we have now reached the point where a great many members of the Federation have the Drive and Generator, and can, if they want, move. There are enough in this position so that, by the Law of Probability, some of these will be, or will think they are, unfavorably located under almost any topology. We are reaching the point where there are always dissatisfied members who are able to do something about it. And some of these are always doing it.

“At the moment, three worlds are ‘lost.’ The last time we knew where everybody was all at once was over twelve years ago. We have not gotten a complete integration of the trade problem since then. And the longer we go without a complete integration, the more fouled up the Computer becomes.

“But you must know all this. It is in practically every report I have written.” Lan’s voice was surprised.

“I rarely read reports.” Curlin’s voice was dry. “However, you are right. I do know it, although I am glad to get a review. But I let you talk to give you time to think about my proposition.”

“That I sell out Thar to you for the right to try to keep you from getting the rest of the Federation?”

“A somewhat brutal way of putting it.” Curlin’s voice was mild. “Let us say rather ‘for the right to try to save as much of the Plan as can be saved under the circumstances.’”

“I prefer my way of putting it.” There was a rasp in Lan’s tone. “The answer is ‘no’. It has to be ‘no’ for the very simple reason that the sell-out of Thar would itself destroy the Federation and the Plan. It would break the faith of the other worlds in us.”

“That is your final answer?” Curlin did not sound surprised.

“It is.” Lan’s voice was bleak and cold.

“You do not want to think it over? I can give you a little time.”

“It is not necessary. The answer is ‘no’ and will remain ‘no!’” There was finality in the mathematician’s voice. “And now, if you please, I have work to do.”

“You are a fool, boy. I admire you for it, in a way. But, nevertheless, you are a fool. Good day.”

Sita leaned back in her chair and took off the headphones through which she had been eavesdropping on the meeting. Her lips were thin and drawn. They moved, silently mouthing the words: "You are a fool, Lan; a blighted, benighted idiot of a fool. But I love you for it." Her eyes were hooded as she watched Curlin cross her office and walk out. As the door closed behind him, she got up and walked into her boss' office. As before, she leaned against the door and said nothing.

Lan was sitting, his head in his hands. He raised it to look at her. "You heard?" he asked.

"I heard," she said.

"If he were only less intelligent, less capable, it would not be so bad. But, unless somebody can stop him, he will most certainly wreck the Federation. How can a man do that, Sita?" It was a blind man, crying in the dark. "How can a man deliberately set out to wreck the work of centuries, just to satisfy his own lust for power? He knows the only thing that stopped the Chain of Wars was the Plan. And yet he's willing to wreck it! He doesn't care!"



"There are people like that." Sita's voice was soft and sympathetic. "And people like you are often helpless against people like him. I take it he really can shove you out and put his stooge in?"

"Oh, yes." Lan looked old at the moment. "He can. He has complete control of the Board. Cernok is his tool. Bahnfred is an idiot who believes what Curlin tells him. Riccon is honest and intelligent. But he has so little self-confidence that before he will have made up his mind, it will be all over. Crillon is a crook. Curlin's probably made a deal with him. Twik is too old, emotionally and mentally, as well as chronologically. He does not care any more. And there you are."

"And, having got his stooge in as Chief Mathematician, he can take over Thar?"

"Probably. The Computer is running so poorly—giving conflicting or impossible orders and whatnot—that it could easily be manipulated. But whether Curlin succeeds or not, his trying will at least wreck the Plan."

"And the poor operation of the Computer cannot be helped?"

"No. The malfunctioning stems from the shifting topology of the Federation. And there is nothing anybody can do about that."

"Oh." Sita looked thoughtful. "Then you have lost. The battle is finished. And with it the war. So, my motherly advice is to pick up the pieces. That's also my sisterly advice. And any other

kind you might be willing to accept." Her smile was cynical, but there was something behind it that was not at all cynical.

He looked at her with a startled expression. "Are you trying to proposition me?"

"Who me?" She tried to look insulted. "I'll have you know, sir—But since, I expect to be your secretary for only a couple more days, and since I have never got more than a dinner or two out of you, and since I also prescribe as your family advisor, a little alcohol for your troubles—?" She tilted her head as she looked at him.

He smiled and then chuckled. "You tempt me. But . . . there is work to do. Give me a rain check, will you? I hope I'll be able to use it some day."

"Work?" She seemed genuinely surprised. "Why? Does your conscience demand that you go through all the motions all the way up to when the ax falls?"

"No." Lan meditated a moment. "But I still hold the title of Chief Mathematician. And that title still commands respect."

"So you think you had better act up to it, eh?" There was mockery in her tone.

"N-no," he answered, thoughtfully. "No, that is not it."

"It still sounds like an overworked conscience to me," she said. "I think you had better forget all that hogwash and take me out. It will be much more

fun, I promise you." Her smile confirmed the promise.

"Get thee behind me, Satan. But, in point of fact, you don't understand. The war is lost, yes. But the decision as to precisely how the surrender will take place is yet to be made."

"Even that sounded like it was settled," she said. "At the Board meeting."

"True," he admitted. "But the metaphor is not exact. The point is I am still the Chief Mathematician. And will be for another day and two nights. And there are still some things I can do to decide the future course of history."

"You can stop Curlin? Even now?" Sita gaped at him.

"No. Probably not. But—"

"But what?" She was getting exasperated.

"Oh, just 'but.' I do not choose to talk." He smiled to take the sting from his words. "I don't want to talk because, little Sita, I don't want you hounding me. I have to make up my own mind. Nothing you could say would help. So I'd rather you didn't say it. As the Chief Mathematician, I am alone. It has to be this way. Do you see?"

She studied him, frowning. She seemed troubled but she said: "Have it your own way. But if you want the rain check you mentioned, at least you'll have to come home to supper with me. And this, I might add, is not a proposition. My brother will be

there, too."

He blinked, "You know, it sounds like you're worried about me." He stared at her. "However, if it will make you feel better, I shall come." He suddenly smiled. "That is gracious of me, isn't it? But I would like it, really."

Sita looked happy as she went to get her coat. Happy but puzzled. There was something here she could not understand. Something that scared her. Lan agreed he could not stop Curlin. But still, there was something he could do—something he apparently did not want to do. There was a decision to be made, and she could not even begin to guess what the decision involved. But at least she could make him lay aside his problem for a little while.

Sita's house on the outskirts of the city of Thar was just big enough to hold comfortably her two guests. She could hear them in the living room as she was cleaning up after the dinner. Lan, she knew was stretched out in the big chair, probably studying the bubbles in his glass. Her brother, Tryg, was equally stretched out on the couch.

She thought with satisfaction of the dinner. It had been a success. Lan had, at its end, very cheerfully admitted that she could, indeed, cook. And the two men had been friends when she was still in school. Lan, she knew, had great respect for the other.

And Tryg, deep down where he would hardly admit it to himself, practically worshiped the mathematician. Tryg was an engineer. But, as a man, he was more than that. He had a mind that ranged, covering all sorts of unlikely subjects for an engineer, willing to challenge all dogmatism. He was, she thought, the antidote Lan needed.

She heard Tryg's drawl now—the drawl he used when advancing one of his more preposterous hypotheses. "You know," he was saying, "I sometimes wonder where all this is leading to. The treasonable thought occurs to me to ask if the Trade Co-ordination Administration is really a good thing. What would happen if we suddenly stopped?"

"Chaos," Lan answered. "Utter, complete chaos."

"Precisely," Tryg said. "But is that bad?"

"Don't tell me you are an anarchist?" There was laughter in Lan's voice. "And here I thought you were intelligent. Do you really want us to go back to hunting our food with bow and arrow? Or is it the thought of dragging your women off by their hair that appeals to you?"

She heard Tryg chuckle. "You are extrapolating my words far beyond what I mean. But I am just wondering. The word 'chaos' is a very unpleasant one. Everybody agrees that chaos must be avoided at all costs. But let's take the word 'freedom.' Everybody also agrees that that is a good

word. We all want freedom. And we more or less measure a civilization by its ability to retain the individual's freedom while preventing chaos. But aren't 'chaos' and 'freedom' almost synonymous? Aren't they the good and bad aspects of the same thing?

"In other words, when we say that some proposed action will either 'lead to chaos' or 'promote individual freedom,' aren't we pulling a semantic trick, and condemning or supporting the measure by the label we pin on it?" Tryg's voice had lost its drawl. It was earnest and sincere.

"I suppose you are right," Lan admitted. "But what has this got to do with the Administration?"

"Let's consider the Plan, instead of the Administration," Tryg said. "If I remember my sociology, the purpose of the Trade Control Plan is to correct, and keep corrected, certain specific conditions. Before it was adopted, many worlds were extremely poor. And some of these had fairly wealthy neighbors. One of two things usually happened. Either the rich ones took over the poor ones as empires, or the poor worlds ganged up on the rich ones—as a matter of fact, they had to. The wealthy ones were afraid of the poor worlds—afraid of their jealousy and of their envy. A prosperous world had to take over its neighbors as a simple matter of self-protection.

"On the other side, the poorer worlds had to destroy their more powerful neighbors to keep from being

taken over—namely for *their* self-protection. It was a vicious cycle of fear, aggravated continually by the uneasy consciences of the richer worlds, and the bitter frustration of the poorer ones. The result was the Chain of Wars. An epoch in which, at any given time, nearly all the worlds were fighting a war, struggling to recover from the previous one, or preparing for the next. It was, I think, a most unhappy time.

“The answer that was finally forced by the rising tide of blood and misery—to quote my history book—was the Trade Co-ordination Administration. It was based on the Plan of so regulating the trade between worlds that the poorer ones got the best possible break. The unlucky ones, then, had no reason to try to take over the richer ones. In fact, they had every reason not to. They were already getting the best break possible. The wealthy worlds, on the other hand, no longer had to fear their less lucky neighbors. And, in fact, they found that, although the dice were loaded in favor of the backward worlds, yet they still came off far better than they had in the old days when much of their prosperity had had to be invested in armaments.

“Anyway, this, in its briefest essence, is the Plan. And it has worked. With only a few very minor and local exceptions, war has ceased to be.”

“Let me remind you,” Lan cut in,

his voice dry, “that you were arguing that maybe we ought to dispense with the Administration. So far, you have put up a pretty good case for the opposite.”

“No, it only seems that way,” Tryg said. “The point I am making is that the main purpose of the Administration was to avoid war. It was war that made the period before the Plan one of ‘chaos’ and not of ‘freedom.’ It was to avoid war that the separate worlds agreed to restrict their separate freedom—agreeing to submerge their freedoms to trade with whom they pleased. But what I would suggest to you is that this purpose no longer has meaning.” The drawl was back in his voice.

“Eh? Why not?” Lan’s voice was alert. “We could wage some horrible wars with the physics we have now.”

“We could,” Tryg agreed, “providing we could find the enemy. If a world was threatened in the old days, the only thing it could do was to form coalitions and prepare to fight. But now we have the Subtronic Drive. And a world that is threatened need only put its Drive into stand-by condition. And then all it needs is two minutes warning of an impending attack and it can, if it wants, just not be there when the attack arrives. The Drive is the perfect escape mechanism.

“And if war, as I think, is now a practical impossibility, then, it seems to me, the sacrifice of freedom which

the Plan requires, and which is justified as an avoidance of chaos, is needless. The Plan itself is needless."

"That is interesting." There was an odd quality in Lan's voice. "Talk some more."

"All right, I'll go further," Tryg drawled. "It occurs to me that the present situation in which the Computer does not ever have the basic information it needs to do its job is not a reflection of the subconscious awareness through the Federation. The same type of argument is used as would be without the Plan. 'If I am threatened economically, then I'll move.' If the Plan were abolished you would have to make it 'economically or militarily,' but this is a minor change."

After a moment's silence, he continued: "I also think that may be the real reason why a man like Curlin is where he is. In the early days of the Plan, I don't think he would have got far. I don't think he could have fooled the people. But now—well, deep down maybe they don't care. Maybe they have a subconscious feeling that it doesn't really matter. I don't know, but I can't help wondering."

There was silence for a minute. Then Sita heard Tryg's voice: "Hey?" Then the door closed. She looked into the living room. Only her brother was there. She asked him: "Where did Lan go?"

"I don't know," he answered. "He just got up and walked out. I don't think I said anything to make him mad. I was just asking whether we really needed the Federation or not."

"Did he look mad?" she asked.

"N-no," Tryg said. "I wouldn't say so. Rather as if he were thinking hard."

"You must have given him an idea," she said. "Though I don't know what." She was thoughtful. "It may make sense, though. I didn't get a chance to tell you, but Curlin announced he was taking over. Going to force Lan's resignation at the Board meeting the day after tomorrow. Will put his own stooge in Lan's place. Curlin was quite open about it this afternoon. And open about how he would take over Thar as a result of this move. Lan says this will destroy the Federation, and I guess it will. He also says Curlin can do it, and that there is nothing he can do to stop it. And I guess that is right, too. But Lan does have some idea. What it is, or what he would hope to accomplish with it, I don't know and can't guess. But he has not yet decided whether to do it or not. Maybe your talk of being able to dispense with the Trade Control Administration ties in. Maybe it has given him a new viewpoint, and he has gone outside to study it in detail." Her voice was uneasy.

"I hope so," Tryg said. "I knew he was worrying about something. I was just talking, trying to give him some-

thing to think about besides his own troubles. I wouldn't want to make those troubles worse."

"You better not, boy!"

Tryg laughed. "That I know. You got a fine glib tongue, dear sister, but I know you too well, and the words you say don't fool me a bit."

"Do you blame me?" she asked. "If it were anybody else in this fight, I'd think he was worried about getting bounced from a good job. But Lan I don't think he's bothered a bit. He's concerned about the Federation. And, as far as I can see, that's all. I never met a guy like that before."

"There are not many of them," Tryg said. "He is worth going after, sis."

"I am," she said, simply. "Only I wish I knew how. I wish he would let me in on what he is thinking. What *can* he do? What is he meditating? All I know is that it is something that has to do with the fact that his title 'still commands respect.'"

"Publicity?" Tryg asked.

"Maybe," she said. "But how? Curlin's the fair-haired boy of the people. Lan would have to do something very drastic. Something like—" Her eyes widened in sudden horror.

"What is it?" Tryg's voice was like a knife.

Her tone was suddenly flat and lifeless. "Talking about rain checks, he said 'I hope I'll be able to use it some day.'"

She looked around in sudden panic. "Oh, Tryg, we've got to go

after him!"

"No." Tryg caught her arm. "He has got to solve his problem himself. There is no other way."

"But maybe he's thinking of . . . considering . . . some gesture of some kind." There was incipient hysteria in her voice.

"Suicide?" Tryg was deliberately unemotional. "You are afraid he will commit suicide, trying to stop Curlin by the publicity it would bring?"

"Y-yes." The words sobbed. "Don't you see, it is the only thing he can do. It would be useless—futile. But it is all that's left for him to do."

"Maybe," Tryg acknowledged. "And maybe it would not be completely useless. It might make people think. And that is what Curlin has most to fear."

"Oh, Tryg!"

"Well, it might. And there's no point in denying the fact."

"We've got to stop him, Tryg. We've got to."

"No," he answered. "In the first place, we can't. If he makes up his mind to it, not you nor anyone else can stop him. He is that kind. In the second place, our only hope is to let him figure it out for himself, coldly and logically, and pray that he decides against it. If we confuse him with an emotional appeal, I think it would probably make him go ahead with it. It is, after all, the dramatic solution. For a chap like him, the hardest thing is to accept defeat. Don't you see? It



won't be easy, but we've got to sweat it out."

She stared at him in blank horror. Slowly she crumpled. He caught her as she fell, and carried her to the couch. She lay there sobbing.

The next day, at the office, Sita was a wreck. Mechanically she went through the motions. She typed the final copies of the report of the Chief Mathematician to the Board. She sorted mail and answered the phone. She worked like a robot, blind, unthinking.

Tryg called up several times and dropped in personally twice. Each time she had to tell him she had heard

nothing. That she had not heard from Lan, and that neither had she heard of him. He tried to tell her there was hope in the fact they had not heard. She tried to believe it, but the thought oppressed her that, if Lan was going to try to stop Curlin by committing suicide with an appropriate accusing note, then the logical time to do it was while the Board was meeting. At least the fact of his suicide should hit the newscasts then.

He tried to tell her that suicide could not have been Lan's thought. After all, he, Tryg, had been arguing that Trade Control could be dispensed with, and this argument had obviously been tied in with what Lan had

been meditating. And how could that thought be tied to suicide?

"It is no good, Tryg," she said. "Look, suppose he does k-k . . . do it. And suppose it does work. Suppose it does stop Curlin. At the same time, it will weaken the faith of all the people in the Administration. His very success will undermine at least part of what he is fighting for. That's what he meant, I think, when he said he could not stop Curlin from wrecking the Plan. But you tell him Trade Control is not needed. This danger, then—that his action might itself destroy the Plan—is less important. It does tie in, Tryg. It does."

And Tryg could find no answer.

The second day, the day of the Board meeting, she was in worse shape. When the Board had assembled, they called her to ask where Lan was. She had to tell them she did not know. And then she collapsed. Tryg, fortunately, was there to stand guard while she wept.

It was, perhaps, a half hour later that the door opened. Sita did not stir. Her face stayed buried in her arms until she heard the disbelieving voice of Tryg cry out: "Lan!" Only then did she look up to see her missing boss standing in the doorway looking very pale and tired.

She gaped at him and stammered: "We . . . we . . . thought—" She could not finish.

"Then you guessed." Lan's voice

was gentle. "I'm sorry. I thought I had spared you that."

"But where have you been?" Tryg asked.

"Sitting in a park, meditating," Lan answered. "Most of the time, anyhow. Just now, of course, I've been to the Board meeting."

"The Board meeting?" Sita asked. "But they called about half an hour ago. To know where you were."

"Must have been just before I got there," he answered. "I was not there long. I gave them my resignation on the grounds of ill health. They argued politely but, as soon as they decently could, they accepted. All very polite but quick."

"Then you gave in?" Tryg asked. "Without even a token fight? I suppose you might as well. If you are going to lose anyway, cut your losses." He did not sound happy.

Lan smiled and winked. He beckoned them with his finger. "Come, children," he said. "We all need a drink. Let us discuss these matters in more congenial quarters. Besides, since my resignation was effective immediately, I no longer have any right to be here." He practically pushed them out the door.

When they were comfortably settled in a lonesome corner of a small tavern, Lan looked at each of them. "I did not dare talk in there," he said. "It is all too possible that that office is wired for sound."

"It is just as well," Sita said. "I am only just getting my breath. I was so sure you were going to make the gallant gesture."

Lan's mouth twisted, wryly. "You weren't alone," he said. "Yesterday I thought so too. And even Curlin would have agreed this morning."

"Curlin thought you would kill yourself?" she asked.

"Yes," he answered, "at least I think so. I think that may have been why he came to see me. At least that it was a risk he had anticipated. I think he thought he could weather the publicity by calling me insane. If so, then later troubles could be blamed on my insanity. If he could only get that idea across, then he would not need to worry ever. So I suspect he was perfectly willing to see me commit suicide."

"And yet you thought—? Or was this analysis of Curlin's motives an afterthought?" Sita asked.

"No, I thought that was what he had on his mind during the conference," Lan answered. "But I did not think he could weather it. Not entirely, at least. And anyway, there did not seem to be any other alternative that had any kind of a chance to be effective. At least this way offered a gamble." He dropped his head on his hands. His words were muffled. "You know, that's what hurt. The thought that I would never know whether the gamble had worked or not. If it hadn't been for that, I do not think it

would have been hard."

Tryg had been sitting back, smoking. He leaned forward. "If it will do you any good," he said, "I do not think your suicide would have beaten him. Curlin, whatever else he is, is a first-rank politician. And you are not. If he thought he could weather your suicide, then I would give heavy odds he could. So I do not think you should feel bad about not making the try."

"Feel bad?" Lan looked up, surprised. "I don't feel bad. Except worn out. Shaken up emotionally. But no more. Why should I?"

"Oh, I don't know." Tryg seemed a bit embarrassed. "I just thought you had the idea you should not have quit."

Lan, in his turn, looked suddenly embarrassed. "Uh—One thing I forgot to mention. I didn't quit. And Curlin, though he undoubtedly thinks so, has not won. In fact, I think he's lost."

"Eh?" Tryg's mouth was open.

"Don't look so surprised," Lan told him. "The credit actually belongs to you. You gave me the basis in what you were saying the other night—about the Plan not being needed any more. Also, its now being an infringement of liberty that is no longer justified. Remember?"

Tryg nodded. "Yes. I was maintaining that the justification of the Plan was to prevent the chaos of war. Only, now, any world that finds itself threatened with war can move. Providing, at least, it has the Drive and

the Generator. Which most of the worlds of the Federation now do. But what has that got to do with Curlin?"

"Plenty," Lan answered. "It took me a long time to see it. I didn't, at first. When I was listening to you, I just got the feeling that there was something there of tremendous importance. I left to get peace in which to try to figure out what it was. To let my thoughts crystallize. Only they didn't. I could not find the key at all. I sat in the park all that night and yesterday hunting for it. I just kept coming back to suicide as my only alternative to surrender.

"It is a funny thing, you know, the way the mind works. By yesterday afternoon, I was exhausted and frustrated. I had not found the barest gleam of the idea I had felt while listening to you. I had decided the whole thing had been a mental quirk. A delusion fostered by my own will to live. So, I made the final decision for suicide—and went to sleep.

"I woke up about ten last night. And the whole beautiful logic was clear before me. Each piece neatly fitted the puzzle. And all I could do was kick myself for having been so blind." He shook his head ruefully.

"Will you take us off the hook and tell us what this is all about," Tryg said, "or do I have to bash your head in?" Sita nodded emphatically.

"Well, let me ask you a question," Lan said. "Granted that the Plan is

now obsolete—that most worlds no longer need Trade Control—how would you go about canceling it? You would not just drop the whole thing. That would really throw the whole Federation into chaos—and I do mean chaos, not freedom, in spite of your semantic argument. But most worlds are not prepared to take over control of their own trade. And some worlds still need the Plan. And there are others that can still use it profitably.

"No, you would not simply drop the whole Plan. But you would, I think, let worlds back out of it as they wanted. You would give each the option of either staying in the Plan or of fending for itself. Wouldn't you?"

Tryg smiled. "Having answered your own question, go on."

"I'll ask you another question, then," Lan said. "And I'll answer this one, too. What would the effect of this be on the Computer? The correct answer is 'lovely.' The trouble with the Computer is that it does not know the topology with which it is dealing. Whenever a world moves, the Computer loses it for a while. And this confuses the Computer. If the price of a world staying in the Plan were that it must stay put, then the Computer would have no trouble dealing with the worlds in the Plan."

"The worlds of the Plan would be forbidden to trade with those outside?" Tryg asked.

"No," the mathematician answered.

"The worlds outside would be presumed to be unpredictable factors. They would be comparable in the type of effect they would have to know new inventions, or any of the other unpredictable factors. The Computer can adjust to bonanzas and disasters. It would be able to adjust to trade with the free worlds."

"I suppose so," Tryg nodded. "I'll take your word for it. Get back to Curlin."

"Well, suppose I could make this change over night," Lan said. "What would that do to Curlin's plans? Supposing he suddenly found himself with a Computer that worked? I don't know, but I think he would find it very hard to operate. I think he needs a Computer that doesn't work."

"Besides, as you said—and I think you are probably right—the reason Curlin is where he is is that the people, having lost faith in the Computer, have also lost interest in it. If the Computer started working again, I think they might get interested again. And that would certainly be disastrous to Curlin."

"Furthermore—and this, to me, is the cream of the jest—suppose nobody knew why the Computer was working. And suppose it was giving some very weird answers to certain unimportant questions. I think this will challenge the people. And I think it will throw Curlin completely off base. Maybe he will even try to explain what is happening—and end up making a com-

plete fool of himself. I am hoping so, anyway."

"Your supposings seem to have turned into facts," Tryg observed. "Only, of course, they obviously can't be. You would have to change the Prime Directive and that takes about fifteen years minimum."

Lan chuckled. "That statement is not quite correct. Remember how the Administration is organized. The Prime Directive is the basic authority. It can be changed only by a two-thirds vote of all the worlds of the Federation. Which, as you say, takes a good many years. But the Directive is written in words. And words have to be interpreted. They have to be defined, and the relations between them given the proper sense. And this is one of the most important functions of the Chief Mathematician and of the Board. It is a function that is not often used any more. Things have got pretty well stabilized. But it is still there. And it is still important."

"I don't understand," Tryg cut in, "why is it so important?"

"Take the last time it was used," Lan said. "When the Drive was first used—on Dorik, I believe—everything came to a screaming halt. The Computer did not give some bad answers as it sometimes does now; it gave no answers. The Prime Directive says that any solution must be such that the poorest world under it must be better off than it would be under

any other solution. It also says that all the worlds that exist that are inhabited by humans are in the Federation. So Dorik, since it still existed, was still in the Federation. And since it was getting no trade—since nobody knew where it was—it was obviously in a bad way. But, since nobody knew where it was, the Computer could not decide whether a given solution was better or worse than another. It could not pick a solution. It stopped.

“That particular crisis was handled by juggling the definition of the word ‘solution.’ Where, before, each order had been a separate solution, now the word was made to mean the general trade pattern. With this change, the Computer started working again. Not well, perhaps. It continued to order shipments to where Dorik had been, even though it wasn’t there any more, because that had been in the pattern before Dorik moved. But, at least it worked. And when Dorik was finally found, then the Computer was able to get a new complete integration—and establish a new ‘solution.’”

“I see,” Tryg said. “I guess it does have possibilities, at that. So what?”

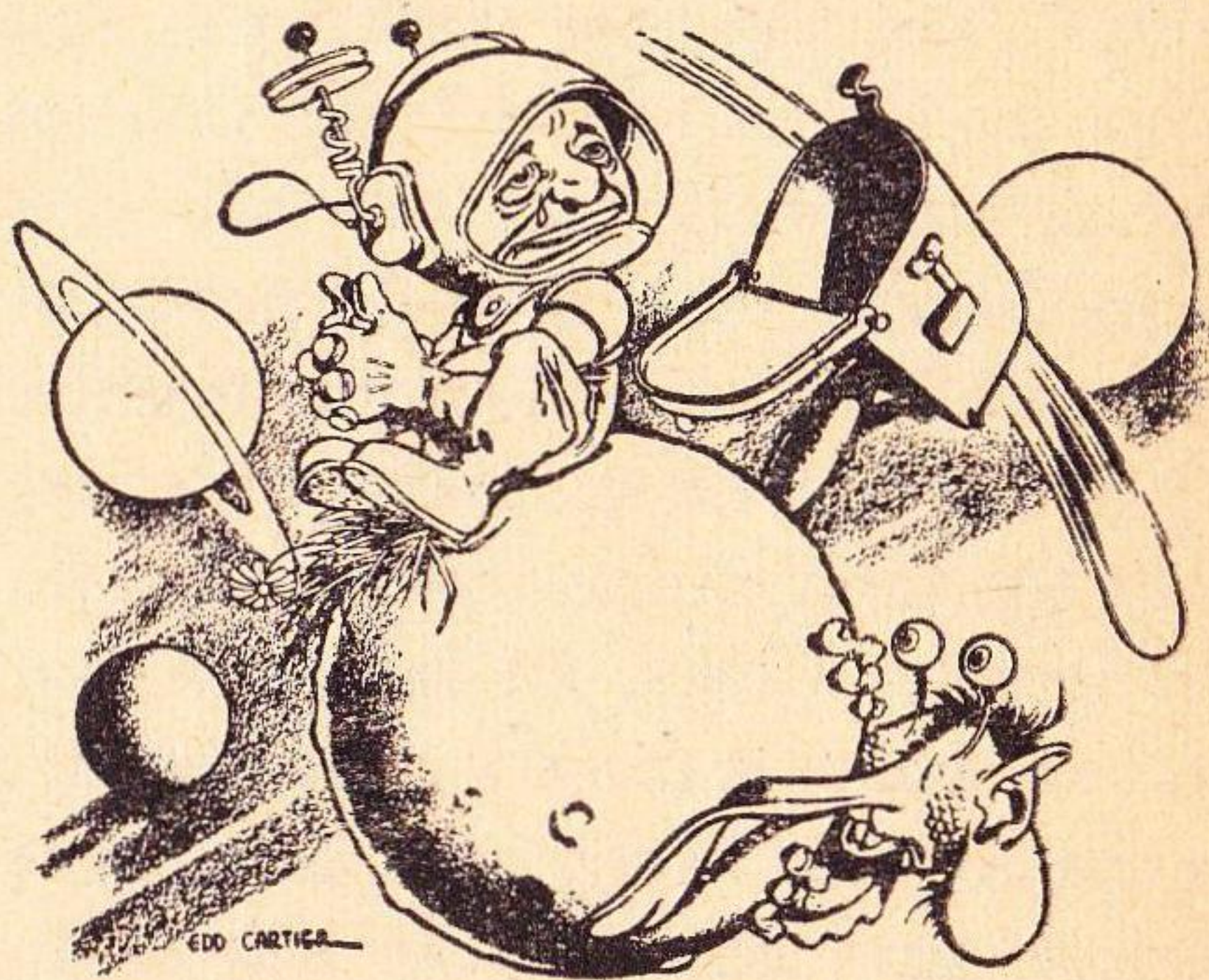
“So,” Lan said, “consider the statement in the Prime Directive that the ‘Federation consists of all the worlds that exist that are inhabited by humans.’ This is a statement of identity. It equates the term ‘being a member of the Federation’ with the term ‘being a world that exists that is inhabited by humans.’ It is a bilateral

relationship.

“Up to now, that statement has been used to define the Federation. But, last night, after I had awakened in the park with all the pieces put together, I sneaked into my office and turned it around. That control board, there, you know, can do almost anything that is legal.” He looked very smug.

“I don’t see what this does,” Tryg said, frowning in concentration.

“It modifies the Plan, for one thing,” Lan answered. “As far as the Computer is concerned, the Federation is now defined by its topology. As soon as a world moves out of that to-



MOVING?

Going to have a new address?

We can't send your regular Astounding SCIENCE FICTION along if you don't warn us ahead of time. If you're going to move, let us know six weeks in advance. Otherwise you'll have a neglected mailbox!

Write SUBSCRIPTION DEPT.

Astounding SCIENCE FICTION
304 East 45th St., New York 17, N. Y.

pology it will, for the Computer, 'cease to exist.' This, in fact, will be the Computer's answer to the question of where a world is that has moved. This answer will appear a little ridiculous when this 'world that doesn't exist' starts trading with other worlds in its new location. And this, I hope, is what will drive Curlin bats."

Tryg sat meditating for a few moments. "I think I see," he finally said. "By defining 'existence' in terms of 'the Federation,' stead of the other way around, and leaving the Federation to be defined by its topology, you have set it up so the Computer will count out any world that uses its Drive. Since these worlds are, generally, the prosperous ones, they won't suffer. And the poor worlds will still have the benefit of the Trade Control Administration. In fact, they will have more benefit than they do now, because the Computer will work properly."

"Curlin will be stymied by the fact that the Computer works leaving him no muddy waters. In fact, his past record, which is there for the digging, is apt to blow back in his face as the people get interested in the Plan again. And to stimulate this renaissance of the people's attention, there will be the puzzle of why the Computer insists that worlds do not exist that obviously do."

"Precisely," Lan nodded.

Tryg and Sita sat meditating a few moments. Then Tryg started to chuckle. Soon Sita joined him, and the two soon found themselves roaring uncontrollably. The few customers in the tavern turned to look, but Lan just sat there quietly smiling. Finally Sita stopped long enough to gasp: "You did it, Lan. You really did it." Tryg could only nod violently.

It was some minutes later, after they had control of themselves, that Lan turned to Tryg and said: "As I see it, you now have two alternatives. I don't want to seem ungrateful. I do acknowledge that it was you that gave me the clue to the solution. But, in spite of this debt I owe you, there are other factors to be considered. It is because of these other factors that I feel that you must either go home—or, at least, go—or find yourself a girl. I have a rain check, you see—with Sita. And, to be perfectly frank, you will not be welcome on that rain check—not by your lonesome. I suspect, you see, that I have been neglecting my opportunities." His hand moved on top of Sita's. She turned hers over. "And now that I am unemployed," he continued, his voice soft, "I have both the time and the inclination to make amends." He turned and smiled at Sita, and it was a very nice smile.

Tryg chuckled but said nothing. He just got up and walked out the door.

THE END