The efficient way of doing things is to have a strong, centralized Center of Command that makes all the decisions. Well . . . at least as long as the thing works at all . . .

## **F. PAUL WILSON**ILLUSTRATED BY VINCENT DI FATE

He didn't know how long he had been sitting there, looking out through the dirty window without seeing anything, when a movement caught his eye. A small dog, a mongrel with a limp, rounded a corner and loped down the near-deserted street. Something about the dog made him lean forward in his chair and stare intently. And while his eyes were riveted on the animal, his mind reviewed the events of the past few weeks in a effort to make a connection between the dog and the catastrophe that threatened Morgan City and the rest of the planet.

Decker Eiselt gnawed at a stubborn cuticle as he gazed from the flitter window. He was short, very dark and had an intelligent, fine-featured face. He was presently engaged in marveling at Morgan City which lay spread out below him. This was hardly the first time he had seen it from the air but the perfect harmony of its layout always managed to stir him. This was a city as cities should be—a *planned* city, a city that knew where it was going, a city with a purpose.

Discounting a few large islands, Kamedon had only one continent and Morgan City occupied its center, a fitting capital for a world that had become one of the centers of Restructurist ideology and the pride of the Restructurist movement.

Yes, Morgan City was beautiful as cities go, but Decker Eiselt preferred the coast. The university was there and the years spent near the sea in study and research had instilled a narcoticlike dependency in his system . . . without the continuous, dull roar of the surf and a certain subtle tang in the air, he could never, feel quite at ease, could never fully relax and feel at home.

And then there were the fishermen. During his stay in Morgan City he would miss rising early with the sun glaring on the water and watching the fishermen head out of the harbor as he and Sally ate breakfast. Most of the men on those slow, ponderous boats were salaried by the government fisheries but a few die-hards still insisted on free-lancing and trying to earn more by catching more. Eiselt detested their stubbornness but their spirit struck a resonance somewhere within him and he was forced to admit a grudging admiration for them—until they got out of hand, of course.

He idly wondered if there could possibly be any connection between the disorder at the local fishery the other day and his being called to Morgan City, but promptly dismissed the thought. He was a research physician and had nothing to do with fisheries. And besides, the incident had been minor by any standard, just some pushing and shoving at the pay window. Some of the local fishermen—the free lancers especially—had become angry when the pay authorizations were delayed. Nothing to get excited about, really; this was the first time such a delay had ever occurred and would no doubt be the last. The Department of Sea Industries was far too efficient to allow such an oversight to happen a second time.

They were coming in for a landing, now. The roof of the Department of Medicine and Research's administration building grew large beneath them as Eiselt's darting brown eyes strained to recognize the figure waiting below. It was Dr. Caelen, no doubt. Eiselt hadn't liked being called away from his work for some mysterious reason that would not be explained until he arrived in Morgan City, but an unmistakable note of urgency had filtered through the message. And so Decker Eiselt chewed a cuticle as he did whenever he was puzzled. What was the urgent need for a research physician? And why the mystery? He smiled grimly. No use in getting worked up about it; he'd know soon enough. He didn't have much choice in the matter, anyway: when Dr. Alton Caelen summons you to the capital, you go to the capital. Immediately.

The flitter touched down with a jolt and Eiselt, the only passenger, hopped out as soon as the engines were cut. A lean, graying man in his fifties stepped forward to meet him.

"Decker!" he said, shaking his hand. "Good to see you!"

Eiselt couldn't reply. Was it . . . ? Yes, it was Dr. Caelen and he looked terrible! Bright eyes gleamed from sockets deep-sunk in a lined and haggard face. "Dr. Caelen!" he stammered. "I . . ."

"I know," the older man said quickly. "You're about to say I look like death warmed over and you're right. But we'll talk about it downstairs." Caelen led him to the elevator and kept up an incessant flow of trivia on the way down, punctuating each phrase with quick, nervous gestures.

"How's the wife? Very pregnant and very happy, I suppose. Lovely girl, Sally. Dr. Bain's taking care of her, I suppose. Good, good. How about that little disturbance out your way? Unfortunate, very unfortunate. But things may get worse before they get better. Yes, they may well get worse."

Stimulants? Eiselt asked himself. Dr. Caelen was definitely hyper. He had never seen the man so worked up. After reaching his office, however, he visibly sagged and Eiselt could no longer contain himself.

"My God, Doctor! What's happened to you?"

"I'm not sleeping very well," he replied simply and calmly.

Under normal circumstances, Eiselt would have waited for an invitation before sitting down but these weren't normal circumstances. He grabbed the nearest chair and, without taking his eyes off Caelen, slowly sank into it. "There must be more to it than that. A sedative will cure insomnia."

Caelen followed Eiselt's lead and fell into the chair behind his desk before answering. "There's not much more to tell, really," he said, putting his hands over his temples and resting his elbows on the desk top. "I just can't seem to get enough air at night. When I doze off, I wake up a few minutes later, gasping frantically. And it's getting worse."

Eiselt repressed an audible sigh. Pulmonary diseases had been his field of research for the past ten years and he felt as if he were on firm ground again. His muscles relaxed somewhat and he settled more comfortably into the chair.

"Was the onset of symptoms slow, or abrupt?" he asked.

"Slow. So slow that I didn't become concerned until recently. But I can trace it pretty clearly in retrospect. The symptoms started showing up during my daily exercises—"

"You mean you have respiratory troubles during periods of exertion, too?" Eiselt interrupted.

"Yes . . . sorry if I gave you the impression that I'm only bothered when I'm trying to sleep. The problem isn't that simple. You see, about nine months ago I started noticing little irregularities in my breathing rhythm as I exercised. I didn't pay too much attention to it at the time but it's got to the point where short, simple exercises, that I formerly performed with ease, leave me gasping for air. Two or three months ago I started having sleeping problems. Nothing much at first: restlessness, insomnia, inability to sleep for more than an hour at a time. Things have progressed to the present stage where I can hardly sleep at all. And, unless I concentrate fully on my breathing, I can't exert myself in the slightest."

"Are you having any difficulty right now, just sitting and talking?"

"Only a little, but I find myself out of breath at the oddest times."

Eiselt mused a moment. "The syndrome, as you've related it, doesn't ring a bell. I'd like to make some tests, if I may."

"I figured you would," Caelen said and managed a smile. "The lab downstairs will be at your disposal."

"Good. But one question: Why me? There are plenty of others in Morgan City who could handle this, many of them right in this building. Of course I'm honored that you thought of me but I am, after all, a research physician."

"I wanted you here for a number of reasons," Caelen stated. "Central among them was the fact that there isn't much you don't know about respiratory pathology. The others I'll explain to you after you've made your tests."

Eiselt nodded. "O.K., but one other question, if you don't mind: What psychological symptoms? If you're losing *rem* sleep ..."

"I'm as irritable as hell, if that's what you mean. It's only with the greatest exercise of will that I keep myself from biting off the head of anyone I meet, including you. So stop quizzing me and get on with your tests!"

"Well, then," Eiselt said, rising and smiling, "let's go." He didn't know what was plaguing Caelen but was confident he could come up with an answer in a short while. No doubt it was a variation on another familiar syndrome.

Later in the day he wasn't so sure. All his tests for pathology had come up negative. Strange, a man with Caelen's symptoms should certainly show some pathology. Feeling not a little embarrassed, Eiselt took the elevator to the upper levels. Dr. Caelen had taught at the university before the Department of Medicine and Research decided to move him into Administration. He now headed that department and Eiselt, one of his former students, had wanted to look good for the old man.

Dr. Caelen awaited him in his office. "Well, Decker, what have you found?"

"Frankly, I'm a little at a loss," he admitted. "Your lungs are in great shape. You shouldn't have the symptoms you do."

He paused, but Caelen waited for him to go on.

Obviously crestfallen, he concluded: "I'm afraid I'll need some more data before I can even guess which way to go."

"Don't feel too badly about it," Caelen told him. "Nobody else knows what's going on around here, either—and we've had the best working on it. I knew you'd want to make those tests yourself and draw your own conclusions so I let you."

"Thanks. That makes me feel a little better. But now I'd like to know those 'other reasons' for sending for me."

Caelen nodded. "O.K. Tell me: have you noticed anything unusual about our personnel?"

"To tell the truth, the building seems almost deserted."

"True, that's part of the problem. But what about those you have seen?"

"They all look pretty beat," he replied after a pause, "almost like ... Doctor, is there an epidemic of this syndrome?"

"Yes, I'm afraid so," Caelen said. "Why haven't I heard anything about it?"

Caelen sighed. "Because we've been doing our best to keep the lid on it until we find out just what it is we're dealing with."

"Does it seem to be spreading?"

"Most suburban hospitals are packed with cases, but they're not as bad off as the city proper. It seems as if the entire population of the capital has come down with this ... this syndrome. And we've also had reports of isolated cases from coast to coast. Figure that one out!"

Eiselt's teeth found a cuticle and went to work on it. "I have an instinctive feeling that this isn't the work of any pathogenic organism, known or unknown. Yet, an epidemic usually means contagion ..." His voice drifted off into thought.

"Speaking of contagion," Caelen said, "I must apologize for exposing you to whatever it is that's plaguing us but we needed someone who was uninfected to work on it. The rest of us are so exhausted that we can't think straight about any subject other than sleep. We don't trust our own judgment. I hope I haven't endangered you, but you must understand that we're getting desperate. None of the departments can get anything done because no one can concentrate anymore. That's why the Department of Sea Industries made that error with the pay authorizations. And there have been a number of other, similar cases. The Department of Public Information has been keeping it quiet but little things have a way of piling up. We may soon have a very frightened planet on our hands if we don't come up with something soon. I tried to handle it myself but my stamina has been completely sapped."

"Could it possibly be a Federation plot?" Eiselt asked.

Caelen repressed a smile. Decker Eiselt hadn't changed much. He had been an adamant Restructurist during his college years and had evidently remained so. "Ridiculous, Decker! The very reason we want to `restructure' the Federation is because it limits itself exclusively to interplanetary affairs. A plot against Kamedon would be strictly out of character."

"But you have to admit that the Federation would hardly be dismayed if the people lost faith in the

government and the planet ground to a halt."

"You've got a point there, but you I must realize that the Restructurist movement will go on, with or without Kamedon. And you can't go around looking for a Federation plot every time something goes wrong."

"I suppose you're right," Eiselt reluctantly agreed.

"Of course I'm right! So let's not worry about the Federation or Restructurism. Let's worry about Morgan City. I don't want to have to call in the IMC."

Eiselt blanched. "The Interstellar Medical Corps is pro-Federation! Asking them for help is like going to the Federation itself!"

"Well, then," Caelen said pointedly, "I hope you've got some sort of a plan on how to tackle this."

"I've got the start of a plan. Those isolated cases might provide us with a clue. I'd like to have every one of them flown to the capital as soon as possible."

"Good idea," Caelen agreed, swallowing another stimulant.

After two weeks of testing and interviewing patients from the outlying districts, Eiselt was able to hand Dr. Caelen a piece of paper with,a date scrawled on it. "Remember that day?" he said.

Caelen hesitated. "No, can't say I do." Daily he and all the other victims had grown more haggard and exhausted. Remembering was an effort. "Almost a year ago . . . wait! Wasn't this the day of the accident in Dr. Sebitow's lab?"

"Correct. And how does this strike you: every case I've interviewed was in Morgan City when the accident occurred!"

Caelen slumped in his seat. "Sebitow's ray," he muttered.

"What's that supposed to mean?"

"I don't know. No one really knew except Sebitow—and he's dead."

Eiselt's tone showed his exasperation. "But the department gave him the money! You must know what he was working on!"

"What do you know about administration, Decker?" the older man flared. "How do you handle a man who is one of the greatest medical minds in the galaxy but who has no conception of politics, who has no loyalty to anything but his work? To Nathan Sebitow the Federation and the Restructurist movement were just words! The only way to keep a man like that working for you is to give him full rein. A number of other planets had offered him unlimited funds and unlimited freedom so we had to match them. He said he was onto something big and wanted the money immediately, so we gave it to him."

"But don't you have any idea what he was doing?"

Caelen paused. "All we know is that he was working on a high-penetration radiation with neuronal effects. When he worked out a few bugs he was going to give us a full report. Decker, you don't think the Respiratory Center could have been affected, do you?"

"Not a chance," Eiselt replied with a slow shake of his head. "The Respiratory Center is intact and functional. Were any of Sebitow's records recovered?"

"None."

"But wasn't he still alive when they found him? I remember a report about Sebitow being taken to a hospital . . . did he say anything?"

"He said a few words," Caelen replied, "but they didn't make too much sense."

"Remember what they were? It might give us a lead."

"Not really. Something about an over-reaction, I think."

"Please try to remember!" Eiselt urged.

Caelen shrugged. "We had a recorder going when he came around. If you think it's important, go down to Hearn's office and he'll play it for you."

Dr. Hearn, too, was gaunt and haggard and really didn't want to be bothered with retrieving a recording of Dr. Sebitow's last words. His last stimulant was wearing off.

"I'll tell you what he said, Dr. Eiselt: 'Over-reaction . . . danger . . . tell . . . ens ...' That was all."

"Yes, but I'd like to hear it myself. I know what you're going through but I'm trying to find a key to this mess. Please get it."

Wearily, Hearn went to a file, pulled out a cartridge and fitted it into a viewer. For seemingly interminable minutes Eiselt watched the injured Dr. Sebitow toss his bandaged head and mumble incoherently. Suddenly, the man opened his eyes and shouted, "Over-reaction! Danger! Tell . . . ens . . . " and then relapsed into mumbles. Hearn switched it off.

"What did he mean by 'ens?' " Eiselt asked.

Hearn shrugged. "That puzzled us for a while until we remembered that his chief assistant's name was Endicott. He must have wanted someone to tell Endicott something but never finished the sentence." "Endicott? Where is Endicott?" "Dead, too."

Eiselt rose wordlessly and started for the door.

"We've got to get to the bottom of this soon, Doctor," he heard Hearn say behind him. "Do you know that all surgery is being performed under local anesthesia? Put a patient out and he starts to die right on the table—he stops breathing! And stimulant supplies are diminishing. The Department of Production is so understaffed that it hasn't been able to issue the latest production quotas and so factories and mills all over the continent have had to shut down. We've actually had food riots in some areas because the Department of Distribution has fouled up its scheduling. There's even talk of a march on Morgan City to demand more competence and efficiency in 'the handling of public affairs!"

"I'm doing the best I can!" Eiselt gritted.

"I know you are, and you're doing it almost single-handedly. It's just that I dread the thought of having to call in the IMC. But I fear it must come to that if we don't get a breakthrough soon."

"Never! If we can't lick this thing, they certainly can't do any better!" he declared, approaching Hearn's desk.

"Come now, Doctor," Hearn replied. "I know you're a dedicated Restructurist, as are we all, but let's be realistic. The IMC has the brains, talents and resources of a thousand worlds at its disposal. You can't hope to compare our facilities with theirs."

Eiselt slammed his fist on the desk top. "We'll solve this and we'll do it without the help of the IMC!"

"I hope you're right," Hearn said softly as he watched Eiselt storm from the office. "And I hope it's soon."

Eiselt managed to cool his temper by the time he made his daily call to Sally. As her face came into focus on the viewscreen, he noticed that she looked distraught.

"Something wrong, honey?" he asked.

"Oh, Decker!" she cried. "They've gone!"

"Who?"

"Almost everyone! Students, faculty, administrators, fishermen, shopkeepers, everyone! They chartered groundcars and flitters and started out for Morgan City this morning!"

Eiselt remembered the march Hearn had mentioned. "What about Dr. Bain?" he asked with concern.

"Oh, he's still here. His wife wants me to stay with them until you get back. Maybe I'd better take her up on it." The exodus from town had made her somewhat anxious and Eiselt wished he could be with her.

"Good idea," he said. Ed Bain would look after her. After all, she was his patient and in her eighth month and if her husband couldn't be there, someone should keep an eye on her. "Get over there as soon as possible and tell them I'll be eternally grateful!"

She ran a hand nervously through her brown hair. "O.K. Any luck so far?"

"No. Every time I think I'm onto something, I wind up in a dead end."

The frustration was evident in her husband's voice and Sally figured that the best thing she could do for him was allow him to get back to his work. "I'd better get packed now," she told him. "Call me tomorrow."

"I will," he promised and broke the connection:

Depression was unusual for Decker Eiselt. In the past his nervous energy had always carried him

through the troughs as well as over the peaks. But he felt drained now. He took the elevator down to street level and dropped into a chair by the window. That was when he spotted the dog.

It was the dog's gait that held his attention; the uneven, limping stride reminded him of another dog.. years ago... at the university.

Suddenly he was on his feet and racing for the elevator. He shot to the upper levels and burst into Caelen's office just as the man was about to take another stimulant capsule.

"Don't take that! I've got one more test to make and I want you to try and sleep while I'm doing it." Caelen hesitated. "I'm afraid, Decker. I'm afraid I may not wake up one of these times."

"I'll be right there," he assured him. "I want to monitor your cortex while you sleep."

"Are you on to something, Decker?"

Eiselt pulled him to his feet. "I'll explain as I wire you up. Let's just say that I hope I'm wrong."

Supine on a table, a very groggy Dr. Caelen tried valiantly to focus his eyes on the oscilloscope screen and concentrate on what his younger colleague was saying.

"See that?" Eiselt remarked, pointing to a series of spikes. "There's an unusually high amount of cortical activity synchronized with respiration. Put that together with the symptoms of this epidemic, the nature of Sebitow's research and his last words and the result is pretty frightening. You see, I fear Sebitow's last words were a warning."

"A warning against what?"

"Telencephalization!"

There was no sign of recognition in Caelen's eyes. "It's a neurophysiologist's term," Eiselt explained. "If a lame dog out on the street hadn't reminded me of it, the concept never would have occurred to me." "Forgive me, Decker, but Pm not following you."

Eiselt paused. "Maybe this will help you remember: the most common and effective means of illustrating telencephalization is to take an experimental animal and sever the spinal cord at midthorax, or at the neck. If that happened to a man, he'd lose the use of his legs in the first instance and also the use of his arms in the latter. But an animal with a severed spinal cord—a dog or possum, for instance—can still walk! His gait is often irregular but the point is *he can still get around while a man is rendered helpless*. Why? Because man has telencephalized his walking ability! As part of his evolution, the higher centers of man's nervous system have taken over many sensory and motor functions formerly performed by the lower, local centers.

"I have a theory that Sebitow might have developed a way to cause telencephalization, possibly for use as a rehabilitation technique . . . to let higher centers take over where damaged local centers are no longer effective. But I fear the city got a blast of the radiation he was using to induce this takeover and the symptoms we've seen led me to the conclusion that somehow the respiratory center has been telencephalized. The 'encephalogram seems to confirm this."

"But you said nothing was wrong with the respiratory center," Caelen rasped in a weak whisper.

"There's no pathology, but it seems that the voluntary areas of the forebrain are in command and are overriding the local peripheral sensors. Thus the diffuse respiratory malaise and broken breathing rhythm when you exercised. The voluntary areas of the cortex were starting to take over and they are nowhere near as efficient nor as sensitive as the local centers such as the pressoreceptors in the lungs and the chemoreceptors in the aorta and carotid arteries which work directly through the respiratory center without going near the cortex. But because of telencephalization, the respiratory center is no longer responsive to the local centers. And there lies the problem.

"It boils down to this: You and all the other victims are breathing on the border of consciousness! This means you *stop* breathing when *unconscious!* without oxygen the acidity of your blood goes up and the local chemoreceptors start screaming. But the respiratory center no longer responds and so impulses are finally relayed to the cortex; the cortex is roused and you wake up gasping for air. That's the theory. I want to monitor the voluntary areas to confirm or deny it; if activity there falls off as respiration falls off, then we'll know I'm right."

"What'll we do if you're right?" Caelen asked.

Rather than tell him that he didn't have the faintest idea, Eiselt pulled a blanket over him. "Try to sleep." The exhausted administrator closed his eyes. Eiselt watched him a minute, then went over to the drug cabinet and filled a syringe with a stimulant. Just in case.

As he sat and watched the oscilloscope, a dull roar filtered up from the street. Going to the window, he saw a shouting, gesticulating crowd marching along the street below. They were frightened, and they... were angry, and they wanted to know what was wrong. Kamedon had been running so smoothly ... now, chaos. Some areas were receiving no food while others received more than they could use; some factories were shut down while others received double quotas; and no one could be sure when he would next be paid. What was happening? The famous efficiency of Kamedon was breaking down and the people wanted to know why.

Someone broke a window. Somebody else followed suit. Fascinated, Eiselt watched the march turn into a mob scene in a matter of minutes.

He glanced over at Dr. Caelen and realized with a start that the man had stopped breathing. He cursed as he noted the reduced cortical activity on the 'scope. Telencephalization of the respiratory center—no doubt about it now. He put a hand on Caelen's shoulder and shook him. No response. Looking closer, he noticed a blue tinge to the man's lips. With frantic haste he found a vein and injected the stimulant. Then he began artificial respiration.

Slowly, as normal breathing returned, Dr. Caelen's eyelids opened to reveal two dull orbs. Cortical activity had increased on the oscilloscope.

Decker Eiselt's shoulders slumped with relief—and defeat. He was beaten. Telencephalization was an evolutionary process—although in this case the evolution was suicidal—and he had no way of combating it, no way of returning command to the local centers. The only hope for Dr. Caelen—and Kamedon—was the IMC. And Eiselt knew he would have to be the one to call them in.

They would be gracious rescuers, of course, and would do their work skillfully and competently. The IMC would find a solution, rectify the situation and then leave, no doubt refusing to accept payment, explaining that they were only too glad to have such an opportunity to expand the perimeters of neurophysiology.

But it would soon be known throughout the settled galaxy that Kamedon, the pride of the Restructurist movement, had found it necessary to call in the IMC. And pro-Federation propagandists were sure to waste no time in drawing an ironic comparison between Restructurist philosophy and the syndrome which had afflicted Morgan City. He could see it now: "Centralists suffering from overcentralization!" To put it mildly, the near future was going to be a most difficult period.

Outside, the roar of the mob redoubled.