THE GOAL
THIRD REVISED EDITION

1

I come through the gate this morning at 7:30 and I can see it from across the lot: the crimson Mercedes. It's parked beside the plant, next to the offices. And it's in *my* space. Who else would do that except Bill Peach? Never mind that the whole lot is practically empty at that hour. Never mind that there are spaces marked "Visitor.'' No, Bill's got to park in the space with my title on it. Bill likes to make subtle statements. So, okay, he's the division vice-president, and I'm just a mere plant manager. I guess he can park his damn Mercedes wherever he wants.

I put my Mazdanext to it (in the space marked "Controller''). A glance at the license as I walk around it assures me it has to be Bill's car because the plate says "NUMBER 1.'' And, as we all know, that's absolutely correct in terms of who Bill always looks out for. He wants his shot at CEO. But so do I. Too bad that I may never get the chance now.

Anyway, I'm walking up to the office doors. Already the adrenalin is pumping. I'm wondering what the hell Bill is doing here. I've lost any hope of getting any work done this morning. I usually go in early to catch up on all the stuff I'm too busy to do during the day, because I can really get a lot done before the phone rings and the meetings start, before the fires break out. But not today.

"Mr. Rogo!'' I hear someone calling.

I stop as four people come bursting out of a door on the side of the plant. I see Dempsey, the shift supervisor; Martinez, the union steward; some hourly guy; and a machining center foreman named Ray. And they're all talking at the same time. Dempsey is telling me we've got a problem. Martinez is shouting about how there is going to be a walkout. The hourly guy is saying something about harassment. Ray is yelling that we can't finish some damn thing because we don't have all the parts. Suddenly I'm in the middle of all this. I'm looking at them; they're looking at me. And I haven't even had a cup of coffee yet.

When I finally get everyone calmed down enough to ask what's going on, I learn that Mr. Peach arrived about an hour before, walked into my plant,

and demanded to be shown the status of Customer Order Number 41427.

Well, as fate would have it, nobody happened to know about Customer Order 41427. So Peach had everybody stepping and fetching to chase down the story on it. And it turns out to be a fairly big order. Also a late one. So what else is new? Everything in this plant is late. Based on observation, I'd say this plant has four ranks of priority for orders: Hot ...Very Hot ...Red Hot... and Do It NOW! We just can't keep ahead of anything.

As soon as he discovers 41427 is nowhere close to being shipped, Peach starts playing expeditor. He's storming around, yelling orders at Dempsey. Finally it's determined almost all the parts needed are ready and waiting—stacks of them. But they can't be assembled. One part of some sub-assembly is missing; it still has to be run through some other operation yet. If the guys don't have the part, they can't assemble, and if they can't assemble, naturally, they can't ship.

They find out the pieces for the missing subassembly are sitting over by one of the n/c machines, where they're waiting their turn to be run. But when they go to that department, they find the machinists are *not* setting up to run the part in question, but instead some other do-it-now job which somebody imposed upon them for some other product.

Peach doesn't give a damn about the other do-it-now job. All he cares about is getting 41427 out the door. So he tells Dempsey to direct his foreman, Ray, to instruct his master machinist to forget about the other super-hot gizmo and get ready to run the missing part for 41427. Whereupon the master machinist looks from Ray to Dempsey to Peach, throws down his wrench, and tells them they're all crazy. It just took him and his helper an hour and a half to set up for the *other* part that everyone needed so desperately. Now they want to forget about it and set up for something else instead? The hell with it! So Peach, always the diplomat, walks past my supervisor and my foreman, and tells the master machinist that if he doesn't do what he's told, he's fired. More words are exchanged. The machinist threatens to walk off the job. The union steward shows up. Everybody is mad. Nobody is working. And now I've got four upset people greeting me bright and early in front of an idle plant.

"So where is Bill Peach now?'' I ask.

"He's in your office,'' says Dempsey.

"Okay, would you go tell him I'll be in to talk to him in a minute,'' I ask.

Dempsey gratefully hurries toward the office doors. I turn to Martinez and the hourly guy, who I discover is the machinist. I tell them that as far as I'm concerned there aren't going to be any firings or suspensions—that the whole thing is just a misunderstanding. Martinez isn't entirely satisfied with that at first, and the machinist sounds as if he wants an apology from Peach. I'm not about to step into that one. I also happen to know that Martinez can't call a walkout on his own authority. So I say if the union wants to file a grievance, okay; I'll be glad to talk to the local president, Mike O'Donnell, later today, and we'll handle everything in due course. Realizing he can't do anything more before talking to O'Donnell anyway, Martinez finally accepts that, and he and the hourly guy start walking back to the plant.

"So let's get them back to work,'' I tell Ray.

"Sure, but uh, what should we be working on?'' asks Ray.

"The job we're set up to run or the one Peach wants?'' "Do the one Peach wants,'' I tell him.

"Okay, but we'll be wasting a set-up,'' says Ray. "So we waste it!'' I tell him. "Ray, I don't even know what the situation is. But for Bill to be here, there must be some kind of emergency. Doesn't that seem logical?''

"Yeah, sure,'' says Ray. "Hey, I just want to know what to do.''

"Okay, I know you were just caught in the middle of all this,'' I say to try to make him feel better. "Let's just get that setup done as quick as we can and start running that part.''

"Right,'' he says.

Inside, Dempsey passes me on his way back to the plant. He's just come from my office and he looks like he's in a hurry to get out of there. He shakes his head at me.

"Good luck,'' he says out of the corner of his mouth.

The door to my office is wide open. I walk in, and there he is. Bill Peach is sitting behind my desk. He's a stocky, barrel-chested guy with thick, steely-gray hair and eyes that almost match. As I put my briefcase down, the eyes

are locked onto me with a look that says *This is your neck, Rogo.*

"Okay, Bill, what's going on?'' I ask.

He says, "We've got things to talk about. Sit down.''

I say, "I'd like to, but you're in my seat.''

It may have been the wrong thing to say.

"You want to know why I'm here?'' he says. "I'm here to save your lousy skin.''

I tell him, "Judging from the reception I just got, I'd say you're here to ruin my labor relations.''

He looks straight at me and says, "If you can't make some things happen around here, you're not going to have any labor to worry about. Because you're not going to have this plant to worry about. In fact, you may not have a job to worry about, Rogo.''

"Okay, wait a minute, take it easy,'' I say. "Let's just talk about it. What's the problem with this order?''

First of all, Bill tells me that he got a phone call last night at home around ten o'clock from good old Bucky Burnside, president of one of UniCo's biggest customers. Seems that Bucky was having a fit over the fact that this order of his (41427) is seven weeks late. He proceeded to rake Peach over the coals for about an hour. Bucky apparently had gone out on a limb to sway the order over to us when everybody was telling him to give the business to one of our competitors. He had just had dinner with several of his customers, and they had dumped all over him because their orders were late—which, as it happens, was because of us. So Bucky was mad (and probably a little drunk). Peach was able to pacify him only by promising to deal with the matter personally and by guaranteeing that the order would be shipped by the end of today, no matter what mountains had to be moved.

I try to tell Bill that, yes, we were clearly wrong to have let this order slide, and I'll give it my personal attention, but did he have to come in here this morning and disrupt my whole plant?

So where was I last night, he asks, when he tried to call me at home? Under

the circumstances, I can't tell him I have a personal life. I can't tell him that the first two times the phone rang, I let it ring because I was in the middle of a fight with my wife, which, oddly enough, was about how little attention I've been giving her. And the third time, I didn't answer it because we were making up.

I decide to tell Peach I was just late getting home. He doesn't press the issue. Instead, he asks how come I don't know what's going on inside my own plant. He's sick and tired of hearing complaints about late shipments. Why can't I stay on top of things?

"One thing I do know,'' I tell him, "is that after the second round of layoffs you forced on us three months ago, along with the order for a twenty percent cutback, we're lucky to get anything out the door on time.''

"Al,'' he says quietly, "just build the damn products. You hear me?''

"Then give me the people I need!'' I tell him.

"You've got enough people! Look at your efficiencies, for god's sake! You've got room for improvement, Al,'' he says. "Don't come crying to me about not enough people until you show me you can effectively use what you've got.''

I'm about to say something when Peach holds up his hand for me to shut my mouth. He stands up and goes over to close the door. Oh shit, I'm thinking.

He turns by the door and tells me, "Sit down.''

I've been standing all this time. I take a seat in one of the chairs in front of the desk, where a visitor would sit. Peach returns behind the desk.

"Look, Al, it's a waste of time to argue about this. Your last operations report tells the story,'' says Peach.

I say, "Okay, you're right. The issue is getting Burnside's order shipped—''

Peach explodes. "Dammit, the issue is not Burnside's order! Burnside's order is just a symptom of the problem around here. Do you think I'd come down here just to expedite a late order? Do you think I don't have enough to do? I came down here to light a fire under you and everybody else in this plant. This isn't just a matter of customer service. Your plant is losing money.''

He pauses for a moment, as if he had to let that sink in. Then —bam—he pounds his fist on the desk top and points his finger at me.

"And if you can't get the orders out the door,'' he continues, "then I'll show you how to do it. And if you still can't do it, then I've got no use for you *or* this plant.''

"Now wait a minute, Bill—''

"Dammit, I don't have a minute!'' he roars. "I don't have time for excuses anymore. And I don't need explanations. I need performance. I need shipments. I need income!''

"Yes, I know that, Bill.''

"What you may not know is that this division is facing the worst losses in its history. We're falling into a hole so deep we may never get out, and your plant is the anchor pulling us in.''

I feel exhausted already. Tiredly I ask him, "Okay, what do you want from me? I've been here six months. I admit it's gotten worse instead of better since I've been here. But I'm doing the best I can.''

"If you want the bottom line, Al, this is it: You've got three months to turn this plant around,'' Peach says.

"And suppose it can't be done in that time?'' I ask.

"Then I'm going to go to the management committee with a recommendation to close the plant,'' he says.

I sit there speechless. This is definitely worse than anything I expected to hear this morning. And, yet, it's not really that surprising. I glance out the window. The parking lot is filling with the cars of the people coming to work first shift. When I look back, Peach has stood up and is coming around the desk. He sits down in the chair next to me and leans forward. Now comes the reassurance, the pep talk.

"Al, I know that the situation you inherited here wasn't the best. I gave you this job because I thought you were the one who could change this plant from a loser to . . . well, a small winner at least. And I still think that. But if you want

to go places in this company, you've got to deliver results.''

"But I need time, Bill.''

"Sorry, you've got three months. And if things get much worse, I may not even be able to give you that.''

I sit there as Bill glances at his watch and stands up, discussion ended.

He says, "If I leave now, I'll only miss my first meeting.''

I stand up. He walks to the door.

Hand on the knob, he turns and says with a grin, "Now that I've helped you kick some ass around here, you won't have any trouble getting Bucky's order shipped for me today, will you?''

"We'll ship it, Bill,'' I say.

"Good,'' he says with wink as he opens the door.

A minute later, I watch from the window as he gets into his Mercedes and drives toward the gate.

Three months. That's all I can think about.

I don't remember turning away from the window. I don't know how much time has passed. All of a sudden, I'm aware that I'm sitting at my desk and I'm staring into space. I decide I'd better go see for myself what's happening out in the plant. From the shelf by the door, I get my hard hat and safety glasses and head out. I pass my secretary.

"Fran, I'll be out on the floor for a little while,'' I tell her as I go by.

Fran looks up from a letter she's typing and smiles.

"Okey-dokey,'' she says. "By the way, was that Peach's car I saw in your space this morning?''

"Yes, it was.''

"Nice car,'' she says and she laughs. "I thought it might be yours when I first

saw it.''

Then I laugh. She leans forward across the desk.

"Say, how much would a car like that cost?'' she asks.

"I don't know exactly, but I think it's around sixty thousand dollars,'' I tell her.

Fran catches her breath. "You're kidding me! That much? I had no idea a car could cost that much. Wow. Guess I won't be trading in my Chevette on one of those very soon.''

She laughs and turns back to her typing.

Fran is an "okey-dokey'' lady. How old is she? Early forties I'd guess, with two teen-aged kids she's trying to support. Her ex-husband is an alcoholic. They got divorced a long time ago . . . since then, she's wanted nothing to do with a man. Well, almost nothing. Fran told me all this herself on my second day at the plant. I like her. I like her work, too. We pay her a good wage . . . at least we do now. Anyway, she's still got three months.

Going into the plant is like entering a place where satans and angels have married to make kind of a gray magic. That's what it always feels like to me. All around are things that are mundane and miraculous. I've always found manufacturing plants to be fascinating places—even on just a visual level. But most people don't see them the way I do.

Past a set of double doors separating the office from the plant, the world changes. Overhead is a grid of lamps suspended from the roof trusses, and everything is cast in the warm, orange hues of sodium-iodine light. There is a huge chain-link cage which has row after row of floor-to-roof racks loaded with bins and cartons filled with parts and materials for everything we make. In a skinny aisle between two racks rides a man in the basket of a forklift crane that runs along a track on the ceiling. Out on the floor, a reel of shiny steel slowly unrolls into the machine that every few seconds says "Ca-chunk.''

Machines. The plant is really just one vast room, acres of space, filled with machines. They are organized in blocks and the blocks are separated by aisles. Most of the machines are painted in solid Mardi Gras colors—orange, purple, yellow, blue. From some of the newer machines, ruby numbers shine from digital displays. Robotic arms perform programs of mechanical dance.

Here and there, often almost hidden among the machines, are the people. They look over as I walk by. Some of them wave; I wave back. An electric cart whines past, an enormous fat guy driving it. Women at long tables work with rainbows of wire. A grimy guy in amorphous coveralls adjusts his face mask and ignites a welding torch. Behind glass, a buxom, red-haired woman pecks the keys on a computer terminal with an amber display.

Mixed with the sights is the noise, a din with a continuous underlying chord made by the whirr of fans, motors, the air in the ventilators—it all sounds like an endless breath. At random comes a BOOM of something inexplicable. Behind me ring the alarm bells of an overhead crane rumbling up its track. Relays click. The siren sounds. From the P.A. system, a disembodied voice talks like God, intermittently and incomprehensibly, over everything.

Even with all that noise, I hear the whistle. Turning, I see the unmistakable shape of Bob Donovan walking up the aisle. He's some distance away. Bob is what you might call a mountain of a man, standing as he does at six-foot-four. He weighs in at about 250 pounds, a hefty portion of which is beer gut. He isn't the prettiest guy in the world ...I think his barber was trained by the Marines. And he doesn't talk real fancy; I suspect it's a point of pride with him. But despite a few rough edges, which he guards closely, Bob is a good guy. He's been production manager here for nine years. If you need something to happen, all you do is talk to Bob and if it can be done, it will be by the next time you mention it.

It takes a minute or so for us to reach each other. As we get closer, I can see he isn't very cheerful. I suppose it's mutual.

"Good morning,'' says Bob.

"I'm not sure what's good about it,'' I say. "Did you hear about our visitor?''

"Yeah, it's all over the plant,'' says Bob.

"So I guess you know about the urgency for shipping a certain order number 41427?'' I ask him.

He starts to turn red. "That's what I need to talk to you about.''

"Why? What's up?''

"I don’t know if word reached you yet, but Tony, that master machinist Peach yelled at, quit this morning,’’ says Bob.

"Aw, shit,’’ I mutter.

"I don’t think I have to tell you that guys like that are not a dime a dozen. We’re going to have a tough time finding a replacement,’’ says Bob.

"Can we get him back?’’

"Well, we may not want him back,’’ says Bob. "Before he quit, he did the set-up that Ray told him to do, and put the machine on automatic to do its run. The thing is, he didn’t tighten two of the adjusting nuts. We got little bits of machine tool all over the floor now.’’

"How many parts do we have to scrap?’’

"Well, not that many. It only ran for a little while.’’

"Will we have enough to fill that order?’’ I ask him.

"I’ll have to check,’’ he says. "But, see, the problem is that the machine itself is down and it may stay down for some time.’’

"Which one is it?’’ I ask.

"The NCX-10,’’ he says.

I shut my eyes. It’s like a cold hand just reached inside me and grabbed the bottom of my stomach. That machine is the only one of its type in the plant. I ask Bob how bad the damage is. He says, "I don’t know. They’ve got the thing half torn apart out there. We’re on the phone with the manufacturer right now.’’

I start walking fast. I want to see it for myself. God, are we in trouble. I glance over at Bob, who is keeping pace with me.

"Do you think it was sabotage?’’ I ask.

Bob seems surprised. "Well, I can’t say. I think the guy was just so upset he couldn’t think straight. So he screwed it up.’’

I can feel my face getting hot. The cold hand is gone. Now I'm so pissed off at Bill Peach that I'm fantasizing about calling him on the phone and screaming in his ear. It's his fault! And in my head I see him. I see him behind my desk and hear him telling me how he's going to show me how to get the orders out the door. Right, Bill. You really showed me how to do it.

2

Isn’t it strange to feel your own world is falling apart while those of the people close to you are rock steady? And you can’t figure out why they’re not affected the way you are. About 6:30, I slip away from the plant to run home and grab some dinner. As I come through the door, Julie looks up from the television.

"Hi,’’ she says. "Like my hair?’’

She turns her head. The thick, straight brown hair she used to have is now a mass of frizzed ringlets. And it isn’t all the same color anymore. It’s lighter in places.

"Yeah, looks great,’’ I say automatically.

"The hairdresser said it sets off my eyes,’’ she says, batting her long lashes at me. She has big, pretty blue eyes; they don’t need to be "set off’’ in my opinion, but what do I know?

"Nice,’’ I say.

"Gee, you’re not very enthusiastic,’’ she says.

"Sorry, but I’ve had a rough day.’’

"Ah, poor baby,’’ she says. "But I’ve got a great idea! We’ll go out to dinner and you can forget all about it.’’

I shake my head. "I can’t. I’ve got to eat something fast and get back to the plant.’’

She stands up and puts her hands on her hips. I notice she’s wearing a new outfit.

"Well you’re a lot of fun!’’ she says. "And after I got rid of the kids, too.’’

"Julie, I’ve got a crisis on my hands. One of my most expensive machines

went down this morning, and I need it to process a part for a rush order. I've got to stay on top of this one,'' I tell her.

"Okay. Fine. There is nothing to eat, because I thought we were going out,'' she says. "Last night, you said we were going out.''

Then I remember. She's right. It was part of the promises when we were making up after the fight.

"I'm sorry. Look, maybe we can go out for an hour or so,'' I tell her.

"That's your idea of a night on the town?'' she says. "Forget it, Al!''

"Listen to me,'' I tell her. "Bill Peach showed up unexpectedly this morning. He's talking about closing the plant.''

Her face changes. Did it brighten?

"Closing the plant... really?'' she asks.

"Yeah, it's getting very bad.''

"Did you talk to him about where your next job would be?'' she asks.

After a second of disbelief, I say, "No, I didn't talk to him about my next job. My job is *here*—in this town, at this plant.''

She says, "Well, if the plant is going to close, aren't you interested in where you're going to live next? I am.''

"He's only talking about it.''

"Oh,'' she says.

I feel myself glaring at her. I say, "You really want to get out of this town as fast as you can, don't you?''

"It isn't my home town, Al. I don't have the same sentimental feelings for it you do,'' she says.

"We've only been here six months,'' I say.

"Is that all? A mere six months?'' she says. "Al, I have no friends here. There's nobody except you to talk to, and you're not home most of the time. Your family is very nice, but after an hour with your mother, I go crazy. So it doesn't feel like six months to me.''

"What do you want me to do? I didn't ask to come here. The company sent me to do a job. It was the luck of the draw,'' I say.

"Some luck.''

"Julie, I do not have time to get into another fight with you,'' I tell her.

She's starting to cry.

"Fine! Go ahead and leave! I'll just be here by myself,'' she crys. "Like every night.''

"Aw, Julie.''

I finally go put my arms around her. We stand together for a few minutes, both of us quiet. When she stops crying, she steps back and looks up at me.

"I'm sorry,'' she says. "If you have to go back to the plant, then you'd better go.''

"Why don't we go out tomorrow night?'' I suggest.

She turns up her hands. "Fine . . . whatever.''

I turn, then look back. "Will you be okay?''

"Sure. I'll find something to eat in the freezer,'' she says. I've forgotten about dinner by now. I say, "Okay, I'll probably pick up something on my way back to the plant. See you later tonight.''

Once I'm in the car, I find I've lost my appetite.

Ever since we moved to Bearington, Julie has been having a hard time. Whenever we talk about the town, she always complains about it, and I always find myself defending it.

It's true I was born and raised in Bearington, so I do feel at home here. I know all the streets. I know the best places to go to buy things, the good bars and the places you stay out of, all that stuff. There is a sense of ownership I have for the town, and more affection for it than for some other burg down the highway. It was home for eighteen years.

But I don't think I have too many illusions about it. Bearington is a factory town. Anyone passing through probably wouldn't see anything special about the place. Driving along, I look around and have much the same reaction. The neighborhood where we live looks like any other American suburb. The houses are fairly new. There are shopping centers nearby, a litter of fast-food restaurants, and over next to the Interstate is a big mall. I can't see much difference here from any of the other suburbs where we've lived.

Go to the center of town and it *is* a little depressing. The streets are lined with old brick buildings that have a sooty, crumbling look to them. A number of store fronts are vacant or covered with plywood. There are plenty of railroad tracks, but not many trains.

On the corner of Main and Lincoln is Bearington's one highrise office building, a lone tower on the skyline. When it was being built some ten years ago, the building was considered to be a very big deal around here, all fourteen stories of it. The fire department used it as an excuse to go buy a brand new fire engine, just so it would have a ladder long enough to reach to the top. (Ever since then, I think they've secretly been waiting for a fire to break out in the penthouse just to use the new ladder.) Local boosters immediately claimed that the new office tower was some kind of symbol of Bearington's vitality, a sign of re-birth in an old industrial town. Then a couple of years ago, the building management erected an enormous sign on the roof which says in red block letters: "Buy Me!'' It gives a phone number. From the Interstate, it looks like the whole town is for sale. Which isn't too far from the truth.

On my way to work each day, I pass another plant along the road to ours. It sits behind a rusty chain-link fence with barbed wire running along the top. In front of the plant is a paved parking lot—five acres of concrete with tufts of brown grass poking through the cracks. Years have gone by since any cars have parked there. The paint has faded on the walls and they've got a chalky look to them. High on the long front wall you can still make out the company name; there's darker paint where the letters and logo

had once been before they were removed.

The company that owned the plant went south. They built a new plant somewhere in North Carolina. Word has it they were trying to run away from a bad situation with their union. Word also has it that the union probably will catch up with them again in about five years or so. But meanwhile they'll have bought themselves five years of lower wages and maybe fewer hassles from the work force. And five years seem like eternity as far as modern management planning is concerned. So Bearington got another industrial dinosaur carcass on its outskirts and about 2,000 people hit the street.

Six months ago, I had occasion to go inside the plant. At the time, we were just looking for some cheap warehouse space nearby. Not that it was my job, but I went over with some other people just to look the place over. (Dreamer that I was when I first got here, I thought maybe someday we'd need more space to expand. What a laugh that is now.) It was the silence that really got to me. Everything was so quiet. Your footsteps echoed. It was weird. All the machines had been removed. It was just a huge empty place.

Driving by it now, I can't help thinking, that's going to be us in three months. It gives me a sick feeling.

I hate to see this stuff happening. The town has been losing major employers at the rate of about one a year ever since the mid-1970s. They fold completely, or they pull out and go elsewhere. There doesn't seem to be any end to it. And now it may be our turn.

When I came back to manage this plant, the Bearington *Herald* did a story on me. I know, big deal. But I was kind of a minor celebrity for a while. The local boy had made it big. It was sort of a high-school fantasy come true. I hate to think that the next time my name is in the paper, the story might be about the plant closing. I'm starting to feel like a traitor to everybody.

Donovan looks like a nervous gorilla when I get back to the plant. With all the running around he's done today, he must have lost five pounds. As I walk up the aisle toward the NCX-10, I watch him shifting his weight from one leg to the other. Then he paces for a few seconds and stops. Suddenly he darts across the aisle to talk to someone. And then he takes off to check on something. I give him a shrill, two-finger whistle, but he doesn't hear it. I have to follow him through two departments before I can catch up with him—back at the NCX-10. He looks surprised to see me.

"We going to make it?'' I ask him.

"We're trying,'' he says.

"Yeah, but can we do it?''

"We're doing our best,'' he says.

"Bob, are we going to ship the order tonight or not?'' "Maybe.''

I turn away and stand there looking at the NCX-10. Which is a lot to look at. It's a big hunk of equipment, our most expensive n/c machine. And it's painted a glossy, distinctive lavender. (Don't ask me why.) On one side is a control board filled with red, green, and amber lights, shiny toggle switches, a jet black keyboard, tape drives, and a computer display. It's a sexy-looking machine. And the focus of it all is the metal-working being done in the middle of it, where a vise holds a piece of steel. Shavings of metal are being sliced away by a cutting tool. A steady wash of turquoise lubricant splashes over the work and carries away the chips. At least the damn thing is working again.

We were lucky today. The damage wasn't as bad as we had first thought. But the service technician didn't start packing his tools until 4:30. By then, it was already second shift.

We held everybody in assembly on overtime, even though overtime is against current division policy. I don't know where we'll bury the expense, but we've to go get this order shipped tonight. I got four phone calls today just from our marketing manager, Johnny Jons. He too has been getting his ear chewed— from Peach, from his own sales people, and from the customer. We absolutely must ship this order tonight.

So I'm hoping nothing else goes wrong. As soon as each part is finished, it's individually carried over to where it's fitted into the subassembly. And as soon as that happens, the foreman over there is having each subassembly carted down to final assembly. You want to talk about efficiency? People hand-carrying things one at a time, back and forth . . . our output of parts per employee must be ridiculous. It's crazy. In fact, I'm wondering, where did Bob get all the people?

I take a slow look around. There is hardly anybody working in the departments that don't have something to do with 41427. Donovan has

stolen every body he could grab and put them all to work on this order. This is not the way it's supposed to be done.

But the order ships.

I glance at my watch. It's a few minutes past 11:00 P.M. We're on the shipping dock. The doors on the back of the tractor-trailer are being closed. The driver is climbing up into his seat. He revs the engine, releases the brakes, and eases out into the night.

I turn to Donovan. He turns to me.

"Congratulations,'' I tell him.

"Thanks, but don't ask me how we did it,'' he says.

"Okay, I won't. What do you say we find ourselves some dinner?''

For the first time all day, Donovan smiles. Way off in the distance, the truck shifts gears.

We take Donovan's car because it's closer. The first two places we try are closed. So then I tell Donovan just to follow my directions. We cross the river at 16th Street and drive down Bessemer into South Flat until we get to the mill. Then I tell Donovan to hang a right and we snake our way through the side streets. The houses back in there are built wall to wall, no yards, no grass, no trees. The streets are narrow and everyone parks in the streets, so it makes for some tedious maneuvering. But finally we pull up in front of Sednikk's Bar and Grill.

Donovan takes a look at the place and says, "You sure this is where we want to be?''

"Yeah, yeah. Come on. They've got the best burgers in town,'' I tell him.

Inside, we take a booth toward the rear. Maxine recognizes me and comes over to make a fuss. We talk for a minute and then Donovan and I order some burgers and fries and beer.

Donovan looks around and says, "How'd you know about this place?''

I say, "Well, I had my first shot-and-a-beer over there at the bar. I think it was

the third stool on the left, but it’s been a while.’’

Donovan asks, "Did you start drinking late in life, or did you grow up in this town?’’

"I grew up two blocks from here. My father owned a corner grocery store. My brother runs it today.’’

"I didn’t know you were from Bearington,’’ says Donovan.

"With all the transfers, it’s taken me about fifteen years to get back here,’’ I say.

The beers arrive.

Maxine says, "These two are on Joe.’’

She points to Joe Sednikk who stands behind the bar. Donovan and I wave out thanks to him.

Donovan raises his glass, and says, "Here’s to getting 41427 out the door.’’

"I’ll drink to that,’’ I say and clink my glass against his.

After a few swallows, Donovan looks much more relaxed. But I’m still thinking about what went on tonight.

"You know, we paid a hell of a price for that shipment,’’ I say. "We lost a good machinist. There’s the repair bill on the NCX-10. Plus the overtime.’’

"Plus the time we lost on the NCX-10 while it was down,’’ adds Donovan. Then he says, "But you got to admit that once we got rolling, we really moved. I wish we could do that every day.’’

I laugh. "No thanks. I don’t need days like this one.’’

"I don’t mean we need Bill Peach to walk into the plant every day. But we *did* ship the order,’’ says Donovan.

"I’m all for shipping orders, Bob, but not the way we did it tonight,’’ I tell him.

"It went out the door, didn’t it?’’

"Yes, it did. But it was the way that it happened that we can't allow.''

"I just saw what had to be done, put everybody to work on it, and the hell with the rules,'' he says.

"Bob, do you know what our efficiencies would look like if we ran the plant like that every day?'' I ask. "We can't just dedicate the entire plant to one order at a time. The economies of scale would disappear. Our costs would go—well, they'd be even worse than they are now. We can't run the plant just by the seatof-the-pants.''

Donovan becomes quiet. Finally he says, "Maybe I learned too many of the wrong things back when I was an expeditor.''

"Listen, you did a hell of a job today. I mean that. But we set policy for a purpose. You should know that. And let me tell you that Bill Peach, for all the trouble he caused to get one order shipped, would be back here pounding on our heads at the end of the month if we didn't manage the plant for efficiency.''

He nods slowly, but then he asks, "So what do we do the next time this happens?''

I smile.

"Probably the same damn thing,'' I tell him. Then I turn and say, "Maxine, give us two more here, please. No, on second thought, we're going to save you a lot of walking. Make it a pitcher.''

So we made it through today's crisis. We won. Just barely. And now that Donovan is gone and the effects of the alcohol are wearing off, I can't see what there was to celebrate. We managed to ship one very late order today. Whoopee.

The real issue is I've got a manufacturing plant on the critical list. Peach has given it three months to live before he pulls the plug.

That means I have two, maybe three more monthly reports in which to change his mind. After that, the sequence of events will be that he'll go to corporate management and present the numbers. Everybody around the table will look at Granby. Granby will ask a couple of questions, look at the

numbers one more time, and nod his head. And that will be it. Once the executive decision has been made, there will be no changing it.

They'll give us time to finish our backlog. And then 600 people will head for the unemployment lines—where they will join their friends and former co-workers, the *other* 600 people whom we have already laid off.

And so the UniWare Division will drop out of yet another market in which it can't compete. Which means the world will no longer be able to buy any more of the fine products we can't make cheap enough or fast enough or good enough or something enough to beat the Japanese. Or most anybody else out there for that matter. That's what makes us another fine division in the UniCo "family'' of businesses (which has a record of earnings growth that looks like Kansas), and that's why we'll be just another fine company in the Who-Knows-What Corporation after the big boys at headquarters put together some merger with some other loser. That seems to be the essence of the company's strategic plan these days.

What's the matter with us?

Every six months it seems like some group from corporate is coming out with some new program that's the latest panacea to all our problems. Some of them seem to work, but none of them does any good. We limp along month after month, and it never gets any better. Mostly it gets worse.

Okay. Enough of the bitching, Rogo. Try to calm down. Try to think about this rationally. There's nobody around. It's late. I am alone finally... here in the coveted corner office, throne room of my empire, such as it is. No interruptions. The phone is not ringing. So let's try to analyze the situation. Why can't we consistently get a quality product out the door on time at the cost that can beat the competition?

Something is wrong. I don't know what it is, but something basic is very wrong. I must be missing something.

I'm running what *should* be a good plant. Hell, it is a good plant. We've got the technology. We've got some of the best n/c machines money can buy. We've got robots. We've got a computer system that's supposed to do everything but make coffee.

We've got good people. For the most part we do. Okay, we're short in a couple of areas, but the people we have are good for the most part, even

though we sure could use more of them. And I don't have too many problems with the union. They're a pain in the ass sometimes, but the competition has unions too. And, hell, the workers made some concessions last time—not as many as we'd have liked, but we have a livable contract.

I've got the machines. I've got the people. I've got all the materials I need. I know there's a market out there, because the competitors' stuff is selling. So what the hell is it?

It's the damn competition. That's what's killing us. Ever since the Japanese entered our markets, the competition has been incredible. Three years ago, they were beating us on quality and product design. We've just about matched them on those. But now they're beating us on price and deliveries. I wish I knew their secret.

What can I possibly do to be more competitive?

I've done cost reduction. No other manager in this division has cut costs to the degree I have. There is nothing left to trim.

And, despite what Peach says, my efficiencies are pretty damn good. He's got other plants with worse, I know that. But the better ones don't have the competition I do. Maybe I could push efficiencies some more, but ...I don't know. It's like whipping a horse that's already running as fast as it can.

We've just got to do something about late orders. Nothing in this plant ships until it's expedited. We've got stacks and stacks of inventory out there. We release the materials on schedule, but nothing comes out the far end when it's supposed to.

That's not uncommon. Just about every plant I know of has expeditors. And you walk through just about any plant in America about our size and you'll find work-in-process inventory on the same scale as what we have. I don't know what it is. On the one hand, this plant is no worse than most of the ones I've seen— and, in fact, it's better than many. But we're losing money.

If we could just get our backlog out the door. Sometimes it's like little gremlins out there. Every time we start to get it right, they sneak around between shifts when nobody is looking and they change things just enough so everything gets screwed up. I swear it's got to be gremlins.

Or maybe I just don't know enough. But, hell, I've got an engineering degree.

I’ve got an MBA. Peach wouldn’t have named me to the job if he hadn’t thought I was qualified. So it can’t be me. Can it?

Man, how long has it been since I started out down there in industrial engineering as a smart kid who knew everything— fourteen, fifteen years? How many long days have there been since then?

I used to think if I worked hard I could do anything. Since the day I turned twelve I’ve worked. I worked after school in my old man’s grocery store. I worked through high school. When I was old enough, I spent my summers working in the mills around here. I was always told that if I worked hard enough it would pay off in the end. That’s true, isn’t it? Look at my brother; he took the easy way out by being the first born. Now he owns a grocery store in a bad neighborhood across town. But look at me. I worked hard. I sweated my way through engineering school. I got a job with a big company. I made myself a stranger to my wife and kids. I took all the crap that UniCo could give me and said, "I can’t get enough! Give me more!’’ Boy, am I glad I did! Here I am, thirty-eight years old, and I’m a crummy plant manager! Isn’t that wonderful? I’m really having fun now.

Time to get the hell out of here. I’ve had enough fun for one day.

3

I wake up with Julie on top of me. Unfortunately, Julie is not being amorous; she is reaching for the night table where the digital alarm clock says 6:03 A.M. The alarm buzzer has been droning for three minutes. Julie smashes the button to kill it. With a sigh, she rolls off of me. Moments later, I hear her breathing resume a steady pace; she is asleep again. Welcome to a brand new day.

About forty-five minutes later, I'm backing the Mazda out of the garage. It's still dark outside. But a few miles down the road the sky lightens. Halfway to the city, the sun rises. By then, I'm too busy thinking to notice it at first. I glance to the side and it's floating out there beyond the trees. What makes me mad sometimes is that I'm always running so hard that—like most other people, I guess—I don't have time to pay attention to all the daily miracles going on around me. Instead of letting me eyes drink in the dawn, I'm watching the road and worrying about Peach. He's called a meeting at headquarters for all the people who directly report to him—in essence, his plant managers and his staff. The meeting, we are told, is to begin promptly at 8:00 A.M. The funny thing is that Peach is not saying what the meeting is about. It's a big secret—you know: hush-hush, like maybe there's a war on or something. He has instructed us to be there at eight and to bring with us reports and other data that'll let us go through a thorough assessment of all the division's operations.

Of course, all of us have found out what the meeting is about. At least we have a fairly good idea. According to the grapevine, Peach is going to use the meeting to lay some news on us about how badly the division performed in the first quarter. Then he's going to hit us with a mandate for a new productivity drive, with targeted goals for each plant and commitments and all that great stuff. I suppose that's the reason for the commandment to be there at eight o'clock on the button with numbers in hand; Peach must've thought it would lend a proper note of discipline and urgency to the proceedings.

The irony is that in order to be there at such an early hour, half the people attending will have had to fly in the night before. Which means hotel bills and extra meals. So in order to announce to us how badly the division is

doing, Peach is going to pay out a couple of grand more than he would have had to pay if he'd begun the meeting an hour or two later.

I think that Peach may be starting to lose it. Not that I suspect him of drifting toward a breakdown or anything. It's just that everything seems to be an over-reaction on his part these days. He's like a general who knows he is losing the battle, but forgets his strategy in his desperation to win.

He was different a couple of years ago. He was confident. He wasn't afraid to delegate responsibility. He'd let you run your own show—as long as you brought in a respectable bottom line. He tried to be the "enlightened'' manager. He wanted to be open to new ideas. If some consultant came in and said, "Employees have to feel good about their work in order to be productive,'' Peach would try to listen. But that was when sales were better and budgets were flush.

What does he say now?

"I don't give a damn if they feel good,'' he says. "If it costs an extra nickel, we're not paying for it.''

That was what he said to a manager who was trying to sell Peach on the idea of a physical fitness center where employees could work out, the premise being that everyone would do better work because healthy employees are happy employees, etc. Peach practically threw him out of his office.

And now he's walking into my plant and wreaking havoc in the name of improving customer service. That wasn't even the first fight I've had with Peach. There have been a couple of others, although none as serious as yesterday's. What really bugs me is I used to get along very well with Peach. There was a time when I thought we were friends. Back when I was on his staff, we'd sit in his office at the end of the day sometimes and just talk for hours. Once in a while, we'd go out and get a couple of drinks together. Everybody thought I was brown-nosing the guy. But I think he liked me precisely because I wasn't. I just did good work for him. We hit it off together.

Once upon a time, there was a crazy night in Atlanta at the annual sales meeting, when Peach and I and a bunch of wackos from marketing stole the piano from the hotel bar and had a sing-along in the elevator. Other hotel guests who were waiting for an elevator would see the doors open, and there we'd be, midway through the chorus of some Irish drinking song with Peach

sitting there at the keyboard tickling those ivories. (He's a pretty good piano player, too). After an hour, the hotel manager finally caught up with us. By then, the crowd had grown too big for the elevator, and we were up on the roof singing to the entire city. I had to pull Bill out of this fight with the two bouncers whom the manager had enlisted to kill the party. What a night that was. Bill and I ended up toasting each other with orange juice at dawn in some greasy-spoon diner on the wrong end of town.

Peach was the one who let me know that I really had a future with this company. He was the guy who pulled me into the picture when I was just a project engineer, when all I knew was how to try hard. He was the one who picked me to go to headquarters. It was Peach who set it up so I could go back and get my MBA.

Now we're screaming at each other. I can't believe it.

By 7:50, I'm parking my car in the garage under the UniCo building. Peach and his division staff occupy three floors of the building. I get out of the car and get my briefcase from the trunk. It weighs about ten pounds today, because it's full of reports and computer printouts. I'm not expecting to have a nice day. With a frown on my face, I start to walk to the elevator.

"Al!'' I hear from behind me.

I turn; it's Nathan Selwin coming toward me. I wait for him. "How's it going?'' he asks.

"Okay. Good to see you again,'' I tell him. We start walking together. "I saw the memo on your appointment to Peach's staff. Congratulations.''

"Thanks,'' he says. "Of course, I don't know if it's the best place to be right now with everything that's going on.''

"How come? Bill keeping you working nights?''

"No, it's not that,'' he says. Then he pauses and looks at me. "Haven't you heard the news?''

"What about?''

He stops suddenly and looks around. There is nobody else around us.

"About the division,'' he says in a low voice.

I shrug; I don't know what he's talking about.

"The whole division is going to go on the block,'' he says. "Everybody on Fifteen is crapping in their pants. Peach got the word from Granby a week ago. He's got till the end of the year to improve performance, or the whole division goes up for sale. And I don't know if it's true, but I heard Granby specifically say that if the division goes, Peach goes with it.''

"Are you sure?''

Nathan nods and adds, "Apparently it's been in the making for quite a while.''

We start walking again.

My first reaction is that it's no wonder Peach has been acting like a madman lately. Everything he's worked for is in jeopardy. If some other corporation buys the division, Peach won't even have a job. The new owners will want to clean house and they're sure to start at the top.

And what about me; will I have a job? Good question, Rogo. Before hearing this, I was going on the assumption that Peach would probably offer me some kind of position if the plant is shut down. That's usually the way it goes. Of course, it may not be what I want. I know there aren't any UniWare plants out there in need of a manager. But I figured maybe Peach would give me my old staff job back—although I also know it's already been filled and I've heard that Peach is very satisfied with the guy. Come to think of it, he did kind of threaten yesterday with his opening remarks that I might not have a job.

Shit, I could be on the street in three months!

"Listen, Al, if anybody asks you, you didn't hear any of this from me,'' says Nat.

And he's gone. I find myself standing alone in the corridor on the fifteenth floor. I don't even remember having gotten on the elevator, but here I am. I vaguely recall Nat talking to me on the way up, saying something about everybody putting out their resum´es.

I look around, feel stupid, wonder where I'm supposed to be now, and then I

remember the meeting. I head down the hall where I see some others going into a conference room.

I go in and take a seat. Peach is standing at the far end of the table. A slide projector sits in front of him. He's starting to talk. A clock on the wall indicates it's exactly eight o'clock.

I look around at the others. There are about twenty of them, most of them looking at Peach. One of them, Hilton Smyth, is looking at me. He's a plant manager, too, and he's a guy I've never liked much. For one thing, I resent his style—he's always promoting some new thing he's doing, and most of the time what he's doing isn't any different from the things everyone else is doing. Anyway, he's looking at me as if he's checking me out. Is it because I look a little shaken? I wonder what he knows. I stare back at him until he turns toward Peach.

When I'm finally able to tune into what Peach is saying, I find he's turning the discussion over to the division controller, Ethan Frost, a thin and wrinkled old guy who, with a little makeup, could double for the Grim Reaper.

The news this morning befits the messenger. The first quarter has just ended, and it's been a terrible one everywhere. The division is now in real danger of a shortfall in cash. All belts must be tightened.

When Frost is done, Peach stands and proceeds to deliver some stern talk about how we're going to meet this challenge. I try to listen, but after his first couple of sentences, my mind drops out. All I hear are fragments.

". . . imperative for us to minimize the downside risk . . .'' ". . . acceptable to our current marketing posture . . .'' "... without reducing strategic expense...'' ". . . required sacrifices...'' ". . . productivity improvements at all locations...''

Graphs from the slide projector begin to flash on the screen. A relentless exchange of measurements between Peach and the others goes on and on. I make an effort, but I just can't concentrate.

"... first quarter sales down twenty-two percent compared to a year ago . . .'' ". . . total raw materials' costs increased...'' ". . . direct labor ratios of hours applied to hours paid had a three-week high . . .'' ". . . now if you look at numbers of hours applied to production versus standard, we're off by over twelve percent on those efficiencies . . .''

I’m telling myself that I’ve got to get hold of myself and pay attention. I reach into my jacket to get a pen to take some notes.

"And the answer is clear,’’ Peach is saying. "The future of our business depends upon our ability to increase productivity.’’

But I can’t find a pen. So I reach into my other pocket. And I pull out the cigar. I stare at it. I don’t smoke anymore. For a few seconds I’m wondering where the hell this cigar came from.

And then I remember.

4

Two weeks ago, I'm wearing the same suit as now. This is back in the good days when I think that everything will work out. I'm traveling, and I'm between planes at O'Hare. I've got some time, so I go to one of the airline lounges. Inside, the place is jammed with business types like me. I'm looking for a seat in this place, gazing over the three-piece pinstripes and the women in conservative blazers and so on, when my eye pauses on the yarmulke worn by the man in the sweater. He's sitting next to a lamp, reading, his book in one hand and his cigar in the other. Next to him there happens to be an empty seat. I make for it. Not until I've almost sat down does it strike me I think I know this guy.

Running into someone you know in the middle of one of the busiest airports in the world carries a shock with it. At first, I'm not sure it's really him. But he looks too much like the physicist I used to know for him to be anyone but Jonah. As I start to sit down, he glances up at me from his book, and I see on his face the same unspoken question: Do I know you?

"Jonah?'' I ask him.

"Yes?''

"I'm Alex Rogo. Remember me?''

His face tells me that he doesn't quite.

"I knew you some time ago,'' I tell him. "I was a student. I got a grant to go and study some of the mathematical models you were working on. Remember? I had a beard back then.''

A small flash of recognition finally hits him. "Of course! Yes, I do remember you. 'Alex,' was it?''

"Right.''

A waitress asks me if I'd like something to drink. I order a scotch and soda and ask Jonah if he'll join me. He decides he'd better not; he has to leave

shortly.

"So how are you these days?'' I ask.

"Busy,'' he says. "Very busy. And you?''

"Same here. I'm on my way to Houston right now,'' I say. "What about you?''

"New York,'' says Jonah.

He seems a little bored with this line of chit-chat and looks as if he'd like to finish the conversation. A second of quiet falls between us. But, for better or worse, I have this tendency (which I've never been able to bring under control) of filling silence in a conversation with my own voice.

"Funny, but after all those plans I had back then of going into research, I ended up in business,'' I say. "I'm a plant manager now for UniCo.''

Jonah nods. He seems more interested. He takes a puff on his cigar. I keep talking. It doesn't take much to keep me going.

"In fact, that's why I'm on my way to Houston. We belong to a manufacturers' association, and the association invited UniCo to be on a panel to talk about robotics at the annual conference. I got picked by UniCo, because my plant has the most experience with robots.''

"I see,'' says Jonah. "Is this going to be a technical discussion?''

"More business oriented than technical,'' I say. Then I remember I have something I can show him. "Wait a second....''

I crack open my briefcase on my lap and pull out the advance copy of the program the association sent me.

"Here we are," I say, and read the listing to him. " 'Robotics: Solution to America's Productivity Crisis in the new millenium . . . a panel of users and experts discusses the coming impact of industrial robots on American manufacturing.' "

But when I look back to him, Jonah doesn't seem very impressed. I figure, well, he's an academic person; he's not going to understand the business world.

"You say your plant uses robots?'' he asks.

"In a couple of departments, yes,'' I say.

"Have they really increased productivity at your plant?''

"Sure they have,'' I say. "We had—what?'' I scan the ceiling for the figure. "I think it was a thirty-six percent improvement in one area.''

"Really... thirty-six percent?'' asks Jonah. "So your company is making thirty-six percent more money from your plant just from installing some robots? Incredible.''

I can't hold back a smile.

"Well...no,'' I say. "We all wish it were that easy! But it's a lot more complicated than that. See, it was just in one department that we had a thirty-six percent improvement.'' Jonah looks at his cigar, then extinguishes it in the ashtray. "Then you didn't really increase productivity,'' he says. I feel my smile freeze.

"I'm not sure I understand,'' I say.

Jonah leans forward conspiratorially and says, "Let me ask you something—just between us: Was your plant able to ship even one more product per day as a result of what happened in the department where you installed the robots?''

I mumble, "Well, I'd have to check the numbers . . .''

"Did you fire anybody?'' he asks.

I lean back, looking at him. What the hell does he mean by that?

"You mean did we lay anybody off? Because we installed the robots?'' I say. "No, we have an understanding with our union that nobody will be laid off because of productivity improvement. We shifted the people to other jobs. Of course, when there's a business downturn, we lay people off.''

"But the robots themselves didn't reduce your plant's people expense,'' he says.

"No,'' I admit.

"Then, tell me, did your inventories go down?'' asks Jonah.

I chuckle.

"Hey, Jonah, what is this?'' I say to him.

"Just tell me,'' he says. "Did inventories go down?''

"Offhand, I have to say I don't think so. But I'd really have to check the numbers.''

"Check your numbers if you'd like,'' says Jonah. "But if your inventories haven't gone down . . . and your employee expense was not reduced... and if your company isn't selling more products—which obviously it can't, if you're not shipping more of them—then you can't tell me these robots increased your plant's productivity.''

In the pit of my stomach, I'm getting this feeling like you'd probably have if you were in an elevator and the cable snapped.

"Yeah, I see what you're saying, in a way,'' I tell him. "But my efficiencies went up, my costs went down—''

"Did they?'' asks Jonah. He closes his book.

"Sure they did. In fact, those efficiencies are averaging well above ninety percent. And my cost per part went down considerably. Let me tell you, to stay competitive these days, we've got to do everything we can to be more efficient and reduce costs.''

My drink arrives; the waitress puts it on the table beside me. I hand her a ten and wait for her to give me the change.

"With such high efficiencies, you must be running your robots constantly,'' says Jonah.

"Absolutely,'' I tell him. "We have to. Otherwise, we'd lose our savings on our cost per part. And efficiencies would go down. That applies not only to the robots, but to our other production resources as well. We have to keep

producing to stay efficient and maintain our cost advantage.''

"Really?'' he says.

"Sure. Of course, that's not to say we don't have our problems.''

"I see,'' says Jonah. Then he smiles. "Come on! Be honest. Your inventories are going through the roof, are they not?''

I look at him. How does he know?

"If you mean our work-in-process—''

"All of your inventories,'' he says.

"Well, it depends. Some places, yes, they are high,'' I say.

"And everything is always late?'' asks Jonah. "You can't ship anything on time?''

"One thing I'll admit,'' I tell him, "is that we have a heck of a problem meeting shipping dates. It's a serious issue with customers lately.''

Jonah nods, as if he had predicted it.

"Wait a minute here... how come you know about these things?'' I ask him.

He smiles again.

"Just a hunch,'' says Jonah. "Besides, I see those symptoms in a lot of the manufacturing plants. You're not alone.''

I say, "But aren't you a physicist?''

"I'm a scientist,'' he says. "And right now you could say I'm doing work in the science of organizations—manufacturing organizations in particular.''

"Didn't know there was such a science.''

"There is now,'' he says.

"Whatever it is you're into, you put your finger on a couple of my biggest

problems, I have to give you that,'' I tell him. "How come—''

I stop because Jonah is exclaiming something in Hebrew. He's reached into a pocket of his trousers to take out an old watch.

"Sorry, Alex, but I see I'm going to miss my plane if I don't hurry,'' he says.

He stands up and reaches for his coat.

"That's too bad,'' I say. "I'm kind of intrigued by a couple of things you've said.''

Jonah pauses.

"Yes, well, if you could start to think about what we've been discussing, you probably could get your plant out of the trouble it's in.''

"Hey, maybe I gave you the wrong impression,'' I tell him. "We've got a few problems, but I wouldn't say the plant is in *trouble.''*

He looks me straight in the eye. He knows what's going on, I'm thinking.

"But tell you what,'' I hear myself saying, "I've got some time to kill. Why don't I walk you down to your plane? Would you mind?''

"No, not at all,'' he says. "But we have to hurry.''

I get up and grab my coat and briefcase. My drink is sitting there. I take a quick slurp off the top and abandon it. Jonah is already edging his way toward the door. He waits for me to catch up with him. Then the two of us step out into the corridor where people are rushing everywhere. Jonah sets off at a fast pace. It takes an effort to keep up with him.

"I'm curious,'' I tell Jonah, "what made you suspect something might be wrong with my plant?''

"You told me yourself,'' Jonah says.

"No, I didn't.''

"Alex,'' he says, "it was clear to me from your own words that you're not running as efficient a plant as you think you are. You are running exactly the

opposite. You are running a very *in* efficient plant.''

"Not according to the measurements,'' I tell him. "Are you trying to tell me my people are wrong in what they're reporting . . . that they're lying to me or something?''

"No,'' he says. "It is very unlikely your people are lying to you. But your measurements definitely are.''

"Yeah, okay, sometimes we massage the numbers here and there. But everybody has to play that game.''

"You're missing the point,'' he says. "You *think* you're running an efficient plant... but your thinking is wrong.''

"What's wrong with my thinking? It's no different from the thinking of most other managers.''

"Yes, exactly,'' says Jonah.

"What's that supposed to mean?'' I ask; I'm beginning to feel somewhat insulted by this.

"Alex, if you're like nearly everybody else in this world, you've accepted so many things without question that you're not really thinking at all,'' says Jonah.

"Jonah, I'm thinking all the time,'' I tell him. "That's part of my job.''

He shakes his head.

"Alex, tell me again why you believe your robots are such a great improvement.''

"Because they increased productivity,'' I say.

"And what is productivity?''

I think for a minute, try to remember.

"According to the way my company is defining it,'' I tell him, "there's a formula you use, something about the value added per employee equals....''

Jonah is shaking his head again.

"Regardless of how your company defines it, that is not what productivity really is,'' he says. "Forget for just a minute about the formulas and all that, and just tell me in your own words, from your experience, what does it mean to be productive?''

We rush around a corner. In front of us, I see, are the metal detectors and the security guards. I had intended to stop and say good-bye to him here, but Jonah doesn't slow down.

"Just tell me, what does it mean to be productive?'' he asks again as he walks through the metal detector. From the other side he talks to me. "To *you* personally, what does it mean?''

I put my briefcase on the conveyor and follow him through. I'm wondering, what does he want to hear?

On the far side, I'm telling him, "Well, I guess it means that I'm accomplishing something.''

"Exactly!'' he says. "But you are accomplishing something in terms of what?''

"In terms of goals,'' I say.

"Correct!'' says Jonah.

He reaches under his sweater into his shirt pocket and pulls out a cigar. He hands it to me.

"My compliments,'' he says. "When you are productive you are accomplishing something in terms of your goal, right?''

"Right,'' I say as I retrieve my briefcase.

We're rushing past gate after gate. I'm trying to match Jonah stride for stride.

And he's saying, "Alex, I have come to the conclusion that productivity is the act of bringing a company closer to its goal. Every action that brings a company closer to its goal is productive. Every action that does not bring a company closer to its goal is not productive. Do you follow me?''

"Yeah, but . . . really, Jonah, that's just simple common sense,'' I say to him.

"It's simple logic is what it is,'' he says.

We stop. I watch him hand his ticket across the counter.

"But it's too simplified,'' I tell him. "It doesn't tell me anything. I mean, if I'm moving toward my goal I'm productive and if I'm not, then I'm not productive —so what?''

"What I'm telling you is, productivity is meaningless unless you know what your goal is,'' he says.

He takes his ticket and starts to walk toward the gate.

"Okay, then,'' I say. "You can look at it this way. One of my company's goals is to increase efficiencies. Therefore, whenever I increase efficiencies, I'm being productive. It's logical.''

Jonah stops dead. He turns to me.

"Do you know what your problem is?'' he asks me.

"Sure,'' I say. "I need better efficiencies.''

"No, that is not your problem,'' he says. "Your problem is you don't know what the goal is. And, by the way, there is only one goal, no matter what the company.''

That stumps me for a second. Jonah starts walking toward the gate again. It seems everyone else has now gone on board. Only the two of us are left in the waiting area. I keep after him.

"Wait a minute! What do you mean, I don't know what the goal is? I know what the goal is,'' I tell him.

By now, we're at the door of the plane. Jonah turns to me. The stewardess inside the cabin is looking at us.

"Really? Then, tell me, what is the goal of your manufacturing organization?'' he asks.

"The goal is to produce products as efficiently as we can,'' I tell him.

"Wrong,'' says Jonah. "That's not it. What is the real goal?'' I stare at him blankly.

The stewardess leans through the door.

"Are either of you going to board this aircraft?''

Jonah says to her, "Just a second, please.'' Then he turns to me. "Come on, Alex! Quickly! Tell me the real goal, if you know what it is.''

"Power?'' I suggest.

He looks surprised. "Well... not bad, Alex. But you don't get power just by virtue of manufacturing something.''

The stewardess is pissed off. "Sir, if you're not getting on this aircraft, you have to go back to the terminal,'' she says coldly.

Jonah ignores her. "Alex, you cannot understand the meaning of productivity unless you know what the goal is. Until then, you're just playing a lot of games with numbers and words.''

"Okay, then it's market share,'' I tell him. "That's the goal.''

"Is it?'' he asks.

He steps into the plane.

"Hey! Can't you tell me?'' I call to him.

"Think about it, Alex. You can find the answer with your own mind,'' he says.

He hands the stewardess his ticket, looks at me and waves good-bye. I raise my hand to wave back and discover I'm still holding the cigar he gave me. I put it in my suit jacket pocket. When I look up again, he's gone. An impatient gate-agent appears and tells me flatly she is going to close the door.

5

It’s a good cigar.

For a connoisseur of tobacco, it might be a little dry, since it spent several weeks inside my suit jacket. But I sniff it with pleasure during Peach’s big meeting, while I remember that other, stranger, meeting with Jonah.

Or was it really more strange than this? Peach is up in front of us tapping the center of a graph with a long wood pointer. Smoke whirls slowly in the beam of the slide projector. Across from me, someone is poking earnestly at a calculator. Everyone except me is listening intently, or jotting notes, or offering comments.

". . . consistent parameters . . . essential to gain...matrix of advantage...extensive pre-profit recovery . . . operational indices... provide tangential proof. . . .’’

I have no idea what’s going on. Their words sound like a different language to me—not a foreign language exactly, but a language I once knew and only vaguely now recall. The terms seem familiar to me. But now I’m not sure what they really mean. They are just words.

You’re just playing a lot of games with numbers and words.

For a few minutes there in Chicago’s O’Hare, I did try to think about what Jonah had said. He’d made a lot of sense to me somehow; he’d had some good points. But it was like somebody from a different world had talked to me. I had to shrug it off. I had to go to Houston and talk about robots. It was time to catch my own plane.

Now I’m wondering if Jonah might be closer to the truth than I first thought. Because as I glance from face to face, I get this gut hunch that none of us here has anything more than a witch doctor’s understanding of the medicine we’re practicing. Our tribe is dying and we’re dancing in our ceremonial smoke to exorcise the devil that’s ailing us.

What is the real goal? Nobody here has even asked anything that basic.

Peach is chanting about cost opportunities and "productivity'' targets and so on. Hilton Smyth is saying hallelujah to whatever Peach proclaims. Does anyone genuinely understand what we're doing?

At ten o'clock, Peach calls a break. Everyone except me exits for the rest rooms or for coffee. I stay seated until they are out of the room.

What the hell am I doing here? I'm wondering what good it is for me—or any of us—to be sitting here in this room. Is this meeting (which is scheduled to last for most of the day) going to make my plant competitive, save my job, or help anybody do anything of benefit to anyone?

I can't handle it. I don't even know what productivity is. So how can this be anything except a total waste? And with that thought I find myself stuffing my papers back into my briefcase. I snap it closed. And then I quietly get up and walk out.

I'm lucky at first. I make it to the elevator without anyone saying anything to me. But while I'm waiting there, Hilton Smyth comes strolling past.

"You're not bailing out on us, are you Al?'' he asks.

For a second, I consider ignoring the question. But then I realize Smyth might deliberately say something to Peach.

"Have to,'' I say to him. "I've got a situation that needs my attention back at the plant.''

"What? An emergency?''

"You can call it that.''

The elevator opens its doors. I step in. Smyth is looking at me with a quizzical expression as he walks by. The doors close.

It crosses my mind that there is a risk of Peach firing me for walking out of his meeting. But that, to my current frame of mind as I walk through the garage to my car, would only shorten three months of anxiety leading up to what I suspect might be inevitable.

I don't go back to the plant right away. I drive around for a while. I point the car down one road and follow it until I'm tired of it, then take another road. A

couple of hours pass. I don't care where I am; I just want to be out. The freedom is kind of exhilarating until it gets boring.

As I'm driving, I try to keep my mind off business. I try to clear my head. The day has turned out to be nice. The sun is out. It's warm. No clouds. Blue sky. Even though the land still has an early spring austerity, everything yellow-brown, it's a good day to be playing hooky.

I remember looking at my watch just before I reach the plant gates and seeing that it's past 1 P.M. I'm slowing down to make the turn through the gate, when—I don't know how else to say it—it just doesn't feel right. I look at the plant. And I put my foot down on the gas and keep going. I'm hungry; I'm thinking maybe I should get some lunch.

But I guess the real reason is I just don't want to be found yet. I need to think and I'll never be able to do it if I go back to the office now.

Up the road about a mile is a little pizza place. I see they're open, so I stop and go in. I'm conservative; I get a medium pizza with double cheese, pepperoni, sausage, mushrooms, green peppers, hot peppers, black olives and onion, and—mmmmmmmm —a sprinkling of anchovies. While I'm waiting, I can't resist the Munchos on the stand by the cash register, and I tell the Sicilian who runs the place to put me down for a couple of bags of beer nuts, some taco chips, and—for later—some pretzels. Trauma whets my appetite.

But there's one problem. You just can't wash down beer nuts with soda. You need beer. And guess what I see in the cooler. Of course, I don't usually drink during the day . . . but I look at the way the light is hitting those frosty cold cans. . . .

"Screw it.''

I pull out a six of Bud.

Twenty-threedollars and sixty-two cents and I'm out of there.

Just before the plant, on the opposite side of the highway, there is a gravel road leading up a low hillside. It's an access road to a substation about half a mile away. So on impulse, I turn the wheel sharply. TheMazdagoes bouncing off the highway onto the gravel and only a fast hand saves my pizza from the floor. We raise some dust getting to the top.

I park the car, unbutton my shirt, take off my tie and coat to save them from the inevitable, and open up my goodies.

Some distance below, down across the highway, is my plant. It sits in a field, a big gray steel box without windows. Inside, I know, there are about 400 people at work on day shift. Their cars are parked in the lot. I watch as a truck backs between two others sitting at the unloading docks. The trucks bring the materials which the machines and people inside will use to make something. On the opposite side, more trucks are being filled with what they have produced. In simplest terms, that's what's happening. I'm supposed to manage what goes on down there.

I pop the top on one of the beers and go to work on the pizza.

The plant has the look of a landmark. It's as if it has always been there, as if it will always be there. I happen to know the plant is only about fifteen years old. And it may not be here as many years from now.

So what is the goal?

What are we supposed to be doing here?

What keeps this place working?

Jonah said there was only one goal. Well, I don't see how that can be. We do a lot of things in the course of daily operations, and they're all important. Most of them anyway . . . or we wouldn't do them. What the hell, they all could be goals.

I mean, for instance, one of the things a manufacturing organization must do is buy raw materials. We need these materials in order to manufacture, and we have to obtain them at the best cost, and so purchasing in a cost-effective manner is very important to us.

The pizza, by the way, is primo. I'm chowing down on my second piece when some tiny voice inside my head asks me, But is this the goal? Is cost-effective purchasing the reason for the plant's existence?

I have to laugh. I almost choke.

Yeah, right. Some of the brilliant idiots in Purchasing sure do act as if that's

the goal. They're out there renting warehouses to store all the crap they're buying so cost-effectively. What is it we have now? A thirty-two-month supply of copper wire? A sevenmonth inventory of stainless steel sheet? All kinds of stuff. They've got millions and millions tied up in what they've bought —and at terrific prices.

No, put it that way, and economical purchasing is definitely not the goal of this plant.

What else do we do? We employ people—by the hundreds here, and by the tens of thousands throughout UniCo. We, the people, are supposed to be UniCo's "most important asset,'' as some P.R. flack worded it once in the annual report. Brush off the bull and it is true the company couldn't function without good people of various skills and professions.

I personally am glad it provides jobs. There is a lot to be said for a steady paycheck. But supplying jobs to people surely isn't why the plant exists. After all, how many people have we laid off so far?

And anyway, even if UniCo offered lifetime employment like some of the Japanese companies, I still couldn't say the goal is jobs. A lot of people seem to think and act as if that were the goal (empire-building department managers and politicians just to name two), but the plant wasn't built for the purpose of paying wages and giving people something to do.

Okay, so why was the plant built in the first place?

It was built to produce products. Why can't that be the goal? Jonah said it wasn't. But I don't see why it isn't the goal. We're a manufacturing company. That means we have to manufacture something, doesn't it? Isn't that the whole point, to produce products? Why else are we here?

I think about some of the buzzwords I've been hearing lately.

What about quality?

Maybe that's it. If you don't manufacture a quality product all you've got at the end is a bunch of expensive mistakes. You have to meet the customer's requirements with a quality product, or before long you won't have a business. UniCo learned its lesson on that point.

But we've already learned that lesson. We've implemented a major effort to

improve quality. Why isn't the plant's future secure? And if quality were truly the goal, then how come a company like Rolls Royce very nearly went bankrupt?

Quality alone cannot be the goal. It's important. But it's not the goal. Why? Because of costs?

If low-cost production is essential, then efficiency would seem to be the answer. Okay . . . maybe it's the two of them together: quality and efficiency. They do tend to go hand-inhand. The fewer errors made, the less re-work you have to do, which can lead to lower costs and so on. Maybe that's what Jonah meant.

Producing a quality product efficiently: that must be the goal. It sure sounds good. "Quality and efficiency.'' Those are two nice words. Kind of like "Mom and apple pie."

I sit back and pop the top on another beer. The pizza is now just a fond memory. For a few moments I feel satisfied.

But something isn't sitting right. And it's more than just indigestion from lunch. To efficiently produce quality products sounds like a good goal. But can that goal keep the plant working?

I'm bothered by some of the examples that come to mind. If the goal is to produce a quality product efficiently, then how come Volkswagen isn't still making Bugs? That was a quality product that could be produced at low cost. Or, going back a ways, how come Douglas didn't keep making DC-3's? From everything I've heard, the DC-3 was a fine aircraft. I'll bet if they had kept making them, they could turn them out today a lot more efficiently than DC-10's.

It's not enough to turn out a quality product on an efficient basis. The goal has to be something else.

But what?

As I drink my beer, I find myself contemplating the smooth finish of the aluminum beer can I hold in my hand. Mass production technology really is something. To think that this can until recently was a rock in the ground. Then we come along with some know-how and some tools and turn the rock into a lightweight, workable metal that you can use over and over again. It's

pretty amazing—

Wait a minute, I'm thinking. That's it!

Technology: that's really what it's all about. We have to stay on the leading edge of technology. It's essential to the company. If we don't keep pace with technology, we're finished. So that's the goal.

Well, on second thought . . . that isn't right. If technology is the real goal of a manufacturing organization, then how come the most responsible positions aren't in research and development? How come R&D is always off to the side in every organization chart I've ever seen? And suppose we did have the latest of every kind of machine we could use—would it save us? No, it wouldn't. So technology is important, but it isn't the goal.

Maybe the goal is some combination of efficiency, quality and technology. But then I'm back to saying we have a lot of important goals. And that really isn't saying anything, aside from the fact that it doesn't square with what Jonah told me.

I'm stumped.

I gaze down the hillside. In front of the big steel box of the plant there is a smaller box of glass and concrete which houses the offices. Mine is the office on the front left corner. Squinting at it, I can almost see the stack of phone messages my secretary is bringing in my wheelbarrow.

Oh well. I lift my beer for a good long slug. And as I tilt my head back, I see them.

Out beyond the plant are two other long, narrow buildings. They're our warehouses. They're filled to the roof with spare parts and unsold merchandise we haven't been able to unload yet. Twenty million dollars in finished-goods inventory: quality products of the most current technology, all produced efficiently, all sitting in their boxes, all sealed in plastic with the warranty cards and a whiff of the original factory air—and all waiting for someone to buy them.

So that's it. UniCo obviously doesn't run this plant just to fill a warehouse. The goal is sales.

But if the goal is sales, why didn't Jonah accept market share as the goal?

Market share is even more important as a goal than sales. If you have the highest market share, you've got the best sales in your industry. Capture the market and you've got it made. Don't you?

Maybe not. I remember the old line, "We're losing money, but we're going to make it up with volume.'' A company will sometimes sell at a loss or at a small amount over cost—as UniCo has been known to do—just to unload inventories. You can have a big share of the market, but if you're not making money, who cares?

Money. Well, of course... money is the big thing. Peach is going to shut us down because the plant is costing the company too much money. So I have to find ways to reduce the money that the company is losing....

Wait a minute. Suppose I did some incredibly brilliant thing and stemmed the losses so we broke even. Would that save us? Not in the long run, it wouldn't. The plant wasn't built just so it could break even. UniCo is not in business just so it can break even. The company exists to make money.

I see it now.

The goal of a manufacturing organization is to make money.

Why else did J. Bartholomew Granby start his company back in 1881 and go to market with his improved coal stove? Was it for the love of appliances? Was it a magnanimous public gesture to bring warmth and comfort to millions? Hell, no. Old J. Bart did it to make a bundle. And he succeeded—because the stove was a gem of a product in its day. And then investors gave him more money so they could make a bundle and J. Bart could make an even bigger one.

But is making money the only goal? What are all these other things I've been worrying about?

I reach for my briefcase, take out a yellow legal pad and take a pen from my coat pocket. Then I make a list of all the items people think of as being goals: cost-effective purchasing, employing good people, high technology, producing products, producing quality products, selling quality products, capturing market share. I even add some others like communications and customer satisfaction.

All of those are essential to running the business successfully. What do they

all do? They enable the company to make money. But they are not the goals themselves; they're just the means of achieving the goal.

How do I know for sure?

Well, I don't. Not absolutely. But adopting "making money'' as the goal of a manufacturing organization looks like a pretty good assumption. Because, for one thing, there isn't one item on that list that's worth a damn if the company isn't making money.

Because what happens if a company doesn't make money? If the company doesn't make money by producing and selling products, or by maintenance contracts, or by selling some of its assets, or by some other means . . . the company is finished. It will cease to function. Money must be the goal. Nothing else works in its place. Anyway, it's the one assumption I have to make.

If the goal is to make money, then (putting it in terms Jonah might have used), an action that moves us toward making money is productive. And an action that takes away from making money is non-productive. For the past year or more, the plant has been moving away from the goal more than toward it. So to save the plant, I have to make it productive; I have to make the plant make money for UniCo. That's a simplified statement of what's happening, but it's accurate. At least it's a logical starting point.

Through the windshield, the world is bright and cold. The sunlight seems to have become much more intense. I look around as if I have just come out of a long trance. Everything is familiar, but seems new to me. I take my last swallow of beer. I suddenly feel I have to get going.

6

By my watch, it's about 4:30 when I park the Mazda in the plant lot. One thing I've effectively managed today is to evade the office. I reach for my briefcase and get out of the car. The glass box of the office in front of me is silent as death. Like an ambush. I know they're all inside waiting for me, waiting to pounce. I decide to disappoint everyone. I decide to take a detour through the plant. I just want to take a fresh look at things.

I walk down to a door into the plant and go inside. From my briefcase, I get the safety glasses I always carry. There is a rack of hard hats by one of the desks over by the wall. I steal one from there, put it on, and walk inside.

As I round a corner and enter one of the work areas, I happen to surprise three guys sitting on a bench in one of the open bays. They're sharing a newspaper, reading and talking with each other. One of them sees me. He nudges the others. The newspaper is folded away with the grace of a snake disappearing in the grass. All three of them nonchalantly become purposeful and go off in three separate directions.

I might have walked on by another time. But today it makes me mad. Dammit, the hourly people know this plant is in trouble. With the layoffs we've had, they have to know. You'd think they'd all try to work harder to save this place. But here we've got three guys, all of them making probably ten or twelve bucks an hour, sitting on their asses. I go and find their supervisor.

After I tell him that three of his people are sitting around with nothing to do, he gives me some excuse about how they're mostly caught up on their quotas and they're waiting for more parts.

So I tell him, "If you can't keep them working, I'll find a department that can. Now find something for them to do. You use your people, or lose 'em—you got it?''

From down the aisle, I look over my shoulder. The super now has the three guys moving some materials from one side of the aisle to the other. I know it's probably just something to keep them busy, but what the hell; at least those guys are working. If I hadn't said something, who knows how long

they'd have sat there?

Then it occurs to me: those three guys are doing something now, but is that going to help us make money? They might be working, but are they productive?

For a moment, I consider going back and telling the supervisor to make those guys actually produce. But, well . . . maybe there really isn't anything for them to work on right now. And even though I could perhaps have those guys shifted to someplace where they could produce, how would I know if that work is helping us make money?

That's a weird thought.

Can I assume that making people work and making money are the same thing? We've tended to do that in the past. The basic rule has been just keep everybody and everything out here working all the time; keep pushing that product out the door. And when there isn't any work to do, make some. And when we can't make work, shift people around. And when you still can't make them work, lay them off.

I look around and most people *are* working. Idle people in here are the exception. Just about everybody is working nearly all the time. And we're not making money.

Some stairs zig-zag up one of the walls, access to one of the overhead cranes. I climb them until I am halfway to the roof and can look out over the plant from one of the landings.

Every moment, lots and lots of things are happening down there. Practically everything I'm seeing is a variable. The complexity in this plant—in *any* manufacturing plant—is mind-boggling if you contemplate it. Situations on the floor are always changing. How can I possibly control what goes on? How the hell am I supposed to know if any action in the plant is productive or non-productive toward making money?

The answer is supposed to be in my briefcase, which is heavy in my hand. It's filled with all those reports and printouts and stuff that Lou gave me for the meeting.

We do have lots of measurements that are supposed to tell us if we're productive. But what they really tell us are things like whether somebody

down there "worked'' for all the hours we paid him or her to work. They tell us whether the output per hour met our standard for the job. They tell us the "cost of products,'' they tell us "direct labor variances,'' all that stuff. But how do I really know if what happens here is making money for us, or whether we're just playing accounting games? There must be a connection, but how do I define it?

I shuffle back down the stairs.

Maybe I should just dash off a blistering memo on the evil of reading newspapers on the job. Think that'll put us back in the black?

By the time I finally set foot inside my office, it is past five o'clock and most of the people who might have been waiting for me are gone. Fran was probably one of the first ones out the door. But she has left me all their messages. I can barely see the phone under them. Half of the messages seem to be from Bill Peach. I guess he caught my disappearing act.

With reluctance, I pick up the phone and dial his number. But God is merciful. It rings for a straight two minutes; no answer. I breathe quietly and hang up.

Sitting back in my chair, looking out at the reddish-gold of late afternoon, I keep thinking about measurements, about all the ways we use to evaluate performance: meeting schedules and due dates, inventory turns, total sales, total expenses. Is there a simplified way to know if we're making money?

There is a soft knock at the door.

I turn. It's Lou.

As I mentioned earlier, Lou is the plant controller. He's a

paunchy, older man who is about two years away from retirement. In the best accountants' tradition, he wears horn-rimmed bifocal glasses. Even though he dresses in expensive suits, somehow he always seems to look a little frumpled. He came here from corporate about twenty years ago. His hair is snow white. I think his reason for living is to go to the CPA conventions and bust loose. Most of the time, he's very mild-mannered—until you try to put something over on him. Then he turns into Godzilla.

"Hi,'' he says from the door.

I roll my hand, motioning him to come in.

"Just wanted to mention to you that Bill Peach called this afternoon,'' says Lou. "Weren't you supposed to be in a meeting with him today?''

"What did Bill want?'' I ask, ignoring the question.

"He needed some updates on some figures,'' he says. "He seemed kind of miffed that you weren't here.''

"Did you get him what he needed?'' I ask.

"Yeah, most of it,'' Lou says. "I sent it to him; he should get it in the morning. Most of it was like the stuff I gave you.''

"What about the rest?''

"Just a few things I have to pull together,'' he says. "I should have it sometime tomorrow.''

"Let me see it before it goes, okay?'' I say. "Just so I know.''

"Oh, sure,'' says Lou.

"Hey, you got a minute?''

"Yeah, what's up?'' he asks, probably expecting me to give him the rundown on what's going on between me and Peach.

"Sit down,'' I tell him.

Lou pulls up a chair.

I think for a second, trying to phrase this correctly. Lou waits expectantly.

"This is just a simple, fundamental question,'' I say.

Lou smiles. "Those are the kind I like.''

"Would you say the goal of this company is to make money?''

He bursts out laughing.

"Are you kidding?'' he asks. "Is this a trick question?''

"No, just tell me.''

"Of course it's to make money!'' he says.

I repeat it to him: "So the goal of the company is to make money, right?''

"Yeah,'' he says. "We have to produce products, too.''

"Okay, now wait a minute,'' I tell him. "Producing products is just a means to achieve the goal.''

I run through the basic line of reasoning with him. He listens. He's a fairly bright guy, Lou. You don't have to explain every little thing to him. At the end of it all, he agrees with me.

"So what are you driving at?''

"How do we know if we're making money?''

"Well, there are a lot of ways,'' he says.

For the next few minutes, Lou goes on about total sales, and market share, and profitability, and dividends paid to stockholders, and so on. Finally, I hold up my hand.

"Let me put it this way,'' I say. "Suppose you're going to rewrite the textbooks. Suppose you don't have all those terms and you have to make them up as you go along. What would be the minimum number of measurements you would need in order to know if we are making money?''

Lou puts a finger alongside his face and squints through his bifocals at his shoe.

"Well, you'd have to have some kind of absolute measurement,'' he says. "Something to tell you in dollars or yen or whatever just how much money you've made.''

"Something like net profit, right?'' I ask.

"Yeah, net profit,'' he says. "But you'd need more than just that. Because an absolute measurement isn't going to tell you much.''

"Oh yeah?'' I say. "If I know how much money I've made, why do I need to know anything else? You follow me? If I add up what I've made, and I subtract my expenses, and I get my net profit—what else do I need to know? I've made, say, $10 million, or $20 million, or whatever.''

For a fraction of a second, Lou gets a glint in his eye like I'm real dumb.

"All right,'' he says. "Let's say you figure it out and you come up with $10 million net profit . . . an absolute measurement. Offhand, that sounds like a lot of money, like you really raked it in. But how much did you start with?''

He pauses for effect.

"You see? How much did it take to make that $10 million? Was it just a million dollars? Then you made ten times more money than you invested. Ten to one. That's pretty goddamned good. But let's say you invested a billion dollars. And you only made a lousy ten million bucks? That's pretty bad.''

"Okay, okay,'' I say. "I was just asking to be sure.''

"So you need a relative measurement, too,'' Lou continues. "You need something like return on investment... ROI, some comparison of the money made relative to the money invested.''

"All right, but with those two, we ought to be able to tell how well the company is doing overall, shouldn't we?'' I ask.

Lou nearly nods, then he gets a faraway look.

"Well....'' he says.

I think about it too.

"You know,'' he says, "it is possible for a company to show net profit and a good ROI and still go bankrupt.''

"You mean if it runs out of cash,'' I say.

"Exactly,'' he says. "Bad cash flow is what kills most of the businesses that go under.''

"So you have to count cash flow as a third measurement?'' He nods.

"Yeah, but suppose you've got enough cash coming in every month to meet expenses for a year,'' I tell him. "If you've got enough of it, then cash flow doesn't matter.''

"But if you don't, nothing else matters,'' says Lou. "It's a measure of survival: stay above the line and you're okay; go below and you're dead.''

We look each other in the eye.

"It's happening to us, isn't it?'' Lou asks.

I nod.

Lou looks away. He's quiet.

Then he says, "I knew it was coming. Just a matter of time.''

He pauses. He looks back to me.

"What about us?'' he asks. "Did Peach say anything?''

"They're thinking about closing us down.''

"Will there be a consolidation?'' he asks.

What he's really asking is whether he'll have a job.

"I honestly don't know, Lou,'' I tell him. "I imagine some people might be transferred to other plants or other divisions, but we didn't get into those kinds of specifics.''

Lou takes a cigarette out of the pack in his shirt pocket. I watch him stamp the end of it repeatedly on the arm of his chair.

"Two lousy years to go before retirement,'' he mutters.

"Hey, Lou,'' I say, trying to lift him out of despair, "the worst it would probably mean for you would be an early retirement.''

"Dammit!'' he says. "I don't *want* an early retirement!''

We're both quiet for some time. Lou lights his cigarette. We sit there.

Finally I say, "Look, I haven't given up yet.''

"Al, if Peach says we're finished—''

"He didn't say that. We've still got time.''

"How much?'' he asks.

"Three months,'' I say.

He all but laughs. "Forget it, Al. We'll never make it.''

"I said I'm not giving up. Okay?''

For a minute, he doesn't say anything. I sit there knowing I'm not sure if I'm telling him the truth. All I've been able to do so far is figure out that we have to make the plant make money. Fine, Rogo, now *how* do we do it? I hear Lou blow a heavy breath of smoke.

With resignation in his voice, he says, "Okay, Al. I'll give you all the help I can. But....''

He leaves the sentence unfinished, waves his hand in the air.

"I'm going to need that help, Lou,'' I tell him. "And the first thing I need from you is to keep all this to yourself for the time being. If the word gets out, we won't be able to get anyone to lift a finger around here.''

"Okay, but you know this won't stay a secret for long,'' he says.

I know he's right.

"So how do you plan on saving this place?'' Lou asks.

"The first thing I'm trying to do is get a clear picture of what we have to do to stay in business,'' I say.

"Oh, so that's what all this stuff with the measurements is about,'' he says. "Listen, Al, don't waste your time with all that. The system is the system. You want to know what's wrong? I'll tell you what the problem is.''

And he does. For about an hour. Most of it I've heard before, it's the kind of thing everybody's heard: It's all the union's fault; if everybody would just work harder; nobody gives a damn about quality; look at foreign labor—we can't compete on costs alone; and so on, and so on. He even tells me what sorts of selfflagellation we should administer in order to chasten ourselves. Mostly Lou is blowing off steam. That's why I let him talk.

But I sit there wondering. Lou actually is a bright guy. We're all fairly bright; UniCo has lots of bright, well-educated people on the payroll. And I sit here listening to Lou pronounce his opinions, which all sound good as they roll off his tongue, and I wonder why it is that we're slipping minute by minute toward oblivion, if we're really so smart.

Sometime after the sun has set, Lou decides to go home. I stay. After Lou has gone, I sit there at my desk with a pad of paper in front of me. On the paper, I write down the three measurements which Lou and I agreed are central to knowing if the company is making money: net profit, ROI and cash flow.

I try to figure out if there is one of those three measurements which can be favored at the expense of the other two and allow me to pursue the goal. From experience, I happen to know there are a lot of games the people at the top can play. They can make the organization deliver a bigger net profit this year at the expense of net profit in years to come (don't fund any R&D, for instance; that kind of thing). They can make a bunch of no-risk decisions and have any one of those measurements look great while the others stink. Aside from that, the ratios between the three might have to vary according to the needs of the business.

But then I sit back.

If I were J. Bart Granby III sitting high atop my company's corporate tower, and if my control over the company were secure, I wouldn't want to play any of those games. I wouldn't want to see one measurement increase while the other two were ignored. I would want to see increases in net profit *and* return

on investment *and* cash flow—all three of them. And I would want to see all three of them increase all the time.

Man, think of it. We'd *really* be making money if we could have all of the measurements go up simultaneously and forever.

So this is the goal:

To make money by increasing net profit, while simultaneously increasing return on investment, and simultaneously increasing cash flow.

I write that down in front of me.

I feel like I'm on a roll now. The pieces seem to be fitting together. I have found one clear-cut goal. I've worked out three related measurements to evaluate progress toward the goal. And I have come to the conclusion that simultaneous increases in all three measurements are what we ought to be trying to achieve. Not bad for a day's work. I think Jonah would be proud of me.

Now then, I ask myself, how do I build a direct connection between the three measurements and what goes on in my plant? If I can find some logical relationship between our daily operations and the overall performance of the company then I'll have a basis for knowing if something is productive or non-productive . . . moving toward the goal or away from it.

I go to the window and stare into the blackness.

Half an hour later, it is as dark in my mind as it is outside the window.

Running through my head are ideas about profit margins and capital investments and direct labor content, and it's all very conventional. It's the same basic line of thinking everyone has been following for a hundred years. If I follow it, I'll come to the same conclusions as everyone else and that means I'll have no truer understanding of what's going on than I do now.

I'm stuck.

I turn away from the window. Behind my desk is a bookcase; I pull out a textbook, flip through it, put it back, pull out another, flip through it, put it back.

Finally, I’ve had it. It’s late.

I check my watch—and I’m shocked. It’s past ten o’clock. All of a sudden, I realize I never called Julie to let her know I wasn’t going to be home for dinner. She’s really going to be pissed off at me; she always is when I don’t call.

I pick up the phone and dial. Julie answers.

"Hi,’’ I say. "Guess who had a rotten day.’’

"Oh? So what else is new?’’ she says. "It so happens my day wasn’t too hot either.’’

"Okay, then we both had rotten days,’’ I tell her. "Sorry I didn’t call before. I got wrapped up in something.’’

Long pause.

"Well, I couldn’t get a babysitter anyway,’’ she says.

Then it dawns on me; our postponed night out was supposed to be tonight.

"I’m sorry, Julie. I really am. It just completely slipped my mind,’’ I tell her.

"I made dinner,’’ she says. "When you hadn’t shown up after two hours, we ate without you. Yours is in the microwave if you want it.’’

"Thanks.’’

"Remember your daughter? The little girl who’s in love with you?’’ Julie asks.

"You don’t have to be sarcastic.’’

"She waited by the front window for you all evening until I made her go to bed.’’

I shut my eyes.

"Why?’’ I ask.

"She’s got a surprise to show you,’’ says Julie.

I say, "Listen, I'll be home in about an hour.''

"No rush,'' says Julie.

She hangs up before I can say good-bye.

Indeed, there is no point in rushing home at this stage of the game. I get my hard hat and glasses and take a walk out into the plant to pay a visit to Eddie, my second shift supervisor, and see how everything is going.

When I get there, Eddie is not in his office; he's out dealing with something on the floor. I have him paged. Finally, I see him coming from way down at the other end of the plant. I watch him as he walks down. It's a five-minute wait.

Something about Eddie has always irritated me. He's a competent supervisor. Not outstanding, but he's okay. His work is not what bothers me. It's something else.

I watch Eddie's steady gait. Each step is very regular.

Then it hits me. That's what irritates me about Eddie: it's the way he walks. Well, it's more than that; Eddie's walk is symbolic of the kind of person he is. He walks a little bit pigeon-toed. It's as if he's literally walking a straight and narrow line. His hands cross stiffly in front of him, seeming to point at each foot. And he does all this like he read in a manual someplace that this is how walking is supposed to be done.

As he approaches, I'm thinking that Eddie has probably never done anything improper in his entire life—unless it was expected of him. Call him Mr. Regularity.

We talk about some of the orders going through. As usual, everything is out of control. Eddie, of course, doesn't realize this. To him, everything is normal. And if it's normal, it must be right.

He's telling me—in elaborate detail—about what is running tonight. Just for the hell of it, I feel like asking Eddie to define what he's doing tonight in terms of something like net profit.

I want to ask him, "Say, Eddie, how's our impact on ROI been in the last hour? By the way, what's your shift done to improve cash flow? Are we

making money?''

It's not that Eddie hasn't heard of those terms. It's just that those concerns are not part of his world. His world is one measured in terms of parts per hour, man-hours worked, numbers of orders filled. He knows labor standards, he knows scrap factors, he knows run times, he knows shipping dates. Net profit, ROI, cash flow—that's just headquarters talk to Eddie. It's absurd to think I could measure Eddie's world by those three. For Eddie, there is only a vague association between what happens on his shift and how much money the company makes. Even if I could open Eddie's mind to the greater universe, it would still be very difficult to draw a clear connection between the values here on the plant floor and the values on the many floors of UniCo headquarters. They're too different.

In the middle of a sentence, Eddie notices I'm looking at him funny.

"Something wrong?'' asks Eddie.

When I get home, the house is dark except for one light. I try to keep it quiet as I come in. True to her word, Julie has left me some dinner in the microwave. As I open the door to see what delectable treat awaits me (it seems to be some variety of mystery meat) I hear a rustling behind me. I turn around, and there stands my little girl, Sharon, at the edge of the kitchen.

"Well! If it isn't Miz Muffet!'' I exclaim. "How is the tuffet these days?''

She smiles. "Oh... not bad.''

"How come you're up so late?'' I ask.

She comes forward holding a manila envelope. I sit down at the kitchen table and put her on my knee. She hands the envelope to me to open.

"It's my report card,'' she says.

"No kidding?''

"You have to look at it,'' she tells me.

And I do.

"You got all A's!'' I say.

I give her a squeeze and big kiss.

"That's terrific!'' I tell her. "That's very good, Sharon. I'm really proud of you. And I'll bet you were the only kid in your class to do this well.''

She nods. Then she has to tell me everything. I let her go on, and half an hour later, she's barely able to keep her eyes open. I carry her up to her bed.

But tired as I am, I can't sleep. It's past midnight now. I sit in the kitchen, brooding and picking at dinner. My kid is getting A's in the second grade while I'm flunking out in business.

Maybe I should just give up, use what time I've got to try to land another job. According to what Selwin said, that's what everyone at headquarters is doing. Why should I be different?

For a while, I try to convince myself that a call to a headhunter is the smart thing to do. But, in the end, I can't. A job with another company would get Julie and me out of town, and maybe fortune would bring me an even better position than I've got now (although I doubt it; my track record as a plant manager hasn't exactly been stellar.) What turns me against the idea of looking for another job is I'd feel I were running away. And I just can't do that.

It's not that I feel I owe my life to the plant or the town or the company, but I do feel some responsibility. And aside from that, I've invested a big chunk of my life in UniCo. I want that investment to pay off. Three months is better than nothing for a last chance.

My decision is, I'm going to do everything I can for the three months.

But that decided, the big question arises: what the hell can I really do? I've already done the best I can with what I know. More of the same is not going to do any good.

Unfortunately, I don't have a year to go back to school and re-study a lot of theory. I don't even have the time to read the magazines, papers, and reports piling up in my office. I don't have the time or the budget to screw around with consultants, making studies and all that crap. And anyway, even if I did have the time and money, I'm not sure any of those would give me a much better insight than what I've got now.

I have the feeling there are some things I'm not taking into account. If I'm ever going to get us out of this hole, I can't take anything for granted; I'm going to have to watch closely and think carefully about what is basically going on . . . take it one step at a time.

I slowly realize that the only tools I have—limited as they may be—are my own eyes and ears, my own hands, my own voice, my own mind. That's about it. I am all I have. And the thought keeps coming to me: I don't know if that's enough.

When I finally crawl into bed, Julie is a lump under the sheets. She is exactly the way I left her twenty-one hours ago. She's sleeping. Lying beside her on the mattress, still unable to sleep, I stare at the dark ceiling.

That's when I decide to try to find Jonah again.

Two steps after rolling out of bed in the morning, I don't like moving at all. But in the midst of a morning shower, memory of my predicament returns. When you've only got three months to work with, you don't have much time to waste feeling tired. I rush past Julie—who doesn't have much to say to me—and the kids, who already seem to sense that something is wrong, and head for the plant.

The whole way there I'm thinking about how to get in touch with Jonah. That's the problem. Before I can ask for his help, I've got to find him.

The first thing I do when I get to the office is have Fran barricade the door against the hordes massing outside for frontal attack. Just as I reach my desk, Fran buzzes me; Bill Peach is on the line.

"Great,'' I mutter.

I pick up the phone.

"Yes, Bill.''

"Don't you *ever* walk out of one of my meetings again,'' rumbles Peach. "Do you understand me?''

"Yes, Bill.''

"Now, because of your untimely absence yesterday, we've got some things

to go over,'' he says.

A few minutes later, I've pulled Lou into the office to help me with the answers. Then Peach has dragged in Ethan Frost and we're having a four-way conversation.

And that's the last chance I have to think about Jonah for the rest of the day. After I'm done with Peach, half a dozen people come into my office for a meeting that has been postponed since last week.

The next thing I know, I look out the window and it's dark outside. The sun has set and I'm still in the middle of my sixth meeting of the day. After everyone has gone, I take care of some paperwork. It's past seven when I hop in the car to go home.

While waiting in traffic for a long light to turn green, I finally have the opportunity to remember how the day began. That's when I get back to thinking about Jonah. Two blocks later, I remember my old address book.

I pull over at a gas station and use the pay phone to call Julie.

"Hello,'' she answers.

"Hi, it's me,'' I say. "Listen, I've got to go over to my mother's for something. I'm not sure how long I'll be, so why don't you go ahead and eat without me.''

"The next time you want dinner—''

"Look, don't give me any grief, Julie; this is important.''

There is a second of silence before I hear the click.

It's always a little strange going back to the old neighborhood, because everywhere I look is some kind of memory waiting just out of sight in my mind's eye. I pass the corner where I had the fight with Bruno Krebsky. I drive down the street where we played ball summer after summer. I see the alley where I made out for the first time with Angelina. I go past the utility pole upon which I grazed the fender of my old man's Chevy (and subsequently had to work two months in the store for free to pay for the repair). All that stuff. The closer I get to the house, the more memories come crowding in, and the more I get this feeling that's kind of warm and uncomfortably tense.

Julie hates to come here. When we first moved to town, we used to come down every Sunday to see my mother and Danny and his wife, Nicole. But there got to be too many fights about it, so we don't make the trip much anymore.

I park the Mazda by the curb in front of the steps to my mother's house. It's a narrow, brick row house, about the same as any other on the street. Down at the corner is my old man's store, the one my brother owns today. The lights are off down there; Danny closes at six. Getting out of my car, I feel conspicuous in my suit and tie.

My mother opens the door.

"Oh my god,'' she says. She clutches her hands over her heart. "Who's dead?''

"Nobody died, Mom,'' I say.

"It's Julie, isn't it,'' she says. "Did she leave you?''

"Not yet,'' I say.

"Oh,'' she says. "Well, let me see...it isn't Mothers' Day...''

"Mom, I'm just here to look for something.''

"Look for something? Look for what?'' she asks, turning to let me in. "Come in, come in. You're letting all the cold inside. Boy, you gave me a scare. Here you are in town and you never come to see me anymore. What's the matter? You too important now for your old mother?''

"No, of course not, Mom. I've been very busy at the plant,'' I say.

"Busy, busy,'' she says leading the way to the kitchen. "You hungry?''

"No, listen, I don't want to put you to any trouble,'' I say.

She says, "Oh, it's no trouble. I got some ziti I can heat up. You want a salad too?''

"No, listen, a cup of coffee will be fine. I just need to find my old address book,'' I tell her. "It's the one I had when I was in college. Do you know where

it might be?''

We step into the kitchen.

"Your old address book...'' she muses as she pours a cup of coffee from the percolator. "How about some cake? Danny brought some day-old over last night from the store.''

"No thanks, Mom. I'm fine,'' I say. "It's probably in with all my old notebooks and stuff from school.''

She hands me the cup of coffee. "Notebooks . . .''

"Yeah, you know where they might be?''

Her eyes blink. She's thinking.

"Well... no. But I put all that stuff up in the attic,'' she says.

"Okay, I'll go look there,'' I say.

Coffee in hand, I head for the stairs leading to the second floor and up into the attic.

"Or it might all be in the basement,'' she says.

Three hours later—after dusting through the drawings I made in the first grade, my model airplanes, an assortment of musical instruments my brother once attempted to play in his quest to become a rock star, my yearbooks, four steamer trunks filled with receipts from my father's business, old love letters, old snapshots, old newspapers, old you-name-it—the address book is still at large. We give up on the attic. My mother prevails upon me to have some ziti. Then we try the basement.

"Oh, look!'' says my mother.

"Did you find it?'' I ask.

"No, but here's a picture of your Uncle Paul before he was arrested for embezzlement. Did I ever tell you that story?''

After another hour, we've gone through everything, and I've had a refresher

course in all there is to know about Uncle Paul. Where the hell could it be?

"Well, I don't know,'' says my mother. "Unless it could be in your old room.''

We go upstairs to the room I used to share with Danny. Over in the corner is the old desk where I used to study when I was a kid. I open the top drawer. And, of course, there it is.

"Mom, I need to use your phone.''

My mother's phone is located on the landing of the stairs between the floors of the house. It's the same phone that was installed in 1936 after my father began to make enough money from the store to afford one. I sit down on the steps, a pad of paper on my lap, briefcase at my feet. I pick up the receiver, which is heavy enough to bludgeon a burglar into submission. I dial the number, the first of many.

It's one o'clock by now. But I'm calling Israel, which happens to be on the other side of the world from us. And vice versa. Which roughly means their days are our nights, our nights are their mornings, and consequently, one in the morning is not such a bad time to call.

Before long, I've reached a friend I made at the university, someone who knows what's become of Jonah. He finds me another number to call. By two o'clock, I've got the tablet of paper on my lap covered with numbers I've scribbled down, and I'm talking to some people who work with Jonah. I convince one of them to give me the number where I can reach him. By three o'clock, I've found him. He's in London. After several transfers here and there across some office of some company, I'm told that he will call me when he gets in. I don't really believe that, but I doze by the phone. And forty-five minutes later, it rings.

"Alex?''

It's his voice.

"Yes, Jonah,'' I say.

"I got a message you had called.''

"Right,'' I say. "You remember our meeting in O'Hare.'' "Yes, of course I

remember it,'' he says. "And I presume you have something to tell me now.''

I freeze for a moment. Then I realize he's referring to his question, what is the goal?

"Right,'' I say.

"Well?''

I hesitate. My answer seems so ludicrously simple I am suddenly afraid that it must be wrong, that he will laugh at me. But I blurt it out.

"The goal of a manufacturing organization is to make money,'' I say to him. "And everything else we do is a means to achieve the goal.''

But Jonah doesn't laugh at me.

"Very good, Alex. Very good,'' he says quietly.

"Thanks,'' I tell him. "But, see, the reason I called was to ask you a question that's kind of related to the discussion we had at O'Hare.''

"What's the problem?'' he asks.

"Well, in order to know if my plant is helping the company make money, I have to have some kind of measurements,'' I say. "Right?''

"That's correct,'' he says.

"And I know that up in the executive suite at company headquarters, they've got measurements like net profit and return on investment and cash flow, which they apply to the overall organization to check on progress toward the goal.''

"Yes, go on,'' says Jonah.

"But where I am, down at the plant level, those measurements don't mean very much. And the measurements I use inside the plant . . . well, I'm not absolutely sure, but I don't think they're really telling the whole story,'' I say.

"Yes, I know exactly what you mean,'' says Jonah.

"So how can I know whether what's happening in my plant is truly productive or non-productive?'' I ask.

For a second, it gets quiet on the other end of the line. Then I hear him say to somebody with him, "Tell him I'll be in as soon as I'm through with this call.''

Then he speaks to me.

"Alex, you have hit upon something very important,'' he says. "I only have time to talk to you for a few minutes, but perhaps I can suggest a few things which might help you. You see, there is more than one way to express the goal. Do you understand? The goal stays the same, but we can state it in different ways, ways which mean the same thing as those two words, 'making money.'''

"Okay,'' I answer, "so I can say the goal is to increase net profit, while simultaneously increasing both ROI and cash flow, and that's the equivalent of saying the goal is to make money.'' "Exactly,'' he says. "One expression is the equivalent of the other. But as you have discovered, those conventional measurements you use to express the goal do not lend themselves very well to the daily operations of the manufacturing organization. In fact, that's why I developed a different set of measurements.'' "What kind of measurements are those?'' I ask. "They're measurements which express the goal of making money perfectly well, but which also permit you to develop operational rules for running your plant,'' he says. "There are three of them. Their names are throughput, inventory and operational expense.''

"Those all sound familiar,'' I say.

"Yes, but their definitions are not,'' says Jonah. "In fact, you will probably want to write them down.''

Pen in hand, I flip ahead to a clean sheet of paper on my tablet and tell him to go ahead.

"Throughput,'' he says, "is the rate at which the system generates money through *sales.''*

I write it down word for word.

Then I ask, "But what about production? Wouldn't it be more correct to say —''

"No,'' he says. "Through *sales*—not production. If you produce something, but don't sell it, it's not throughput. Got it?'' "Right. I thought maybe because I'm plant manager I could substitute—''

Jonah cuts me off.

"Alex, let me tell you something,'' he says. "These definitions, even though they may sound simple, are worded very precisely. And they should be; a measurement not clearly defined is worse than useless. So I suggest you consider them carefully as a group. And remember that if you want to change one of them, you will have to change at least one of the others as well.'' "Okay,'' I say warily.

"The next measurement is inventory,'' he says. "Inventory is all the money that the system has invested in purchasing things which it intends to sell.''

I write it down, but I'm wondering about it, because it's very different from the traditional definition of inventory.

"And the last measurement?'' I ask.

"Operational expense,'' he says. "Operational expense is all the money the system spends in order to turn inventory into throughput.''

"Okay,'' I say as I write. "But what about the labor invested in inventory? You make it sound as though labor is operational expense?''

"Judge it according to the definitions,'' he says.

"But the value added to the product by direct labor has to be a part of inventory, doesn't it?''

"It might be, but it doesn't have to be,'' he says.

"Why do you say that?''

"Very simply, I decided to define it this way because I believe it's better not to take the *value* added into account,'' he says. "It eliminates the confusion over whether a dollar spent is an investment or an expense. That's why I defined inventory and operational expense the way I just gave you.''

"Oh,'' I say. "Okay. But how do I relate these measurements to my plant?''

"Everything you manage in your plant is covered by those measurements,'' he says.

"Everything?'' I say. I don't quite believe him. "But going back to our original conversation, how do I use these measurements to evaluate productivity?''

"Well, obviously you have to express the goal in terms of the measurements,'' he says, adding, "Hold on a second, Alex.'' Then I hear him tell someone, "I'll be there in a minute.''

"So how do I express the goal?'' I ask, anxious to keep the conversation going.

"Alex, I really have to run. And I know you are smart enough to figure it out on your own; all you have to do is think about it,'' he says. "Just remember we are always talking about the organization as a whole—not about the manufacturing department, or about one plant, or about one department within the plant. We are not concerned with local optimums.''

"Local optimums?'' I repeat.

Jonah sighs. "I'll have to explain it to you some other time.''

"But, Jonah, this isn't enough,'' I say. "Even if I can define the goal with these measurements, how do I go about deriving operational rules for running my plant?''

"Give me a phone number where you can be reached,'' he says.

I give him my office number.

"Okay, Alex, I really do have to go now,'' he says.

"Right,'' I say. "Thanks for—''

I hear the click from far away.

"—talking to me.''

I sit there on the steps for some time staring at the three definitions. At some

point, I close my eyes. When I open them again, I see beams of sunlight below me on the living room rug. I haul myself upstairs to my old room and the bed I had when I was a kid. I sleep the rest of the morning with my torso and limbs painstakingly arranged around the lumps in the mattress.

Five hours later, I wake up feeling like a waffle.

9

It’s eleven o’clock when I wake up. Startled by what time it is, I fall onto my feet and head for the phone to call Fran, so she can let everyone know I haven’t gone AWOL.

"Mr. Rogo’s office,’’ Fran answers.

"Hi, it’s me,’’ I say.

"Well, hello stranger,’’ she says. "We were just about ready to start checking the hospitals for you. Think you’ll make it in today?’’

"Uh, yeah, I just had something unexpected come up with my mother, kind of an emergency,’’ I say.

"Oh, well, I hope everything’s all right.’’

"Yeah, it’s, ah, taken care of now. More or less. Anything going on that I should know about?’’

"Well...let’s see,’’ she says, checking (I suppose) my message slips. "Two of the testing machines in G-aisle are down, and Bob Donovan wants to know if we can ship without testing.’’

"Tell him absolutely not,’’ I say.

"Okay,’’ says Fran. "And somebody from marketing is calling about a late shipment.’’

My eyes roll over.

"And there was a fist fight last night on second shift . . . Lou still needs to talk to you about some numbers for Bill Peach ...a reporter called this morning asking when the plant was going to close; I told him he’d have to talk to you . . . and a woman from corporate communications called about shooting a video tape here about productivity and robots with Mr. Granby,’’ says Fran.

"With *Granby?''*

"That's what she said,'' says Fran.

"What's the name and number?''

She reads it to me.

"Okay, thanks. See you later,'' I tell Fran.

I call the woman at corporate right away. I can hardly believe the chairman of the board is going to come to the plant. There must be some mistake. I mean, by the time Granby's limo pulls up to the gate, the whole plant might be closed.

But the woman confirms it; they want to shoot Granby here sometime in the middle of next month.

"We need a robot as a suitable background for Mr. Granby's remarks,'' says the woman.

"So why did you pick Bearington?'' I ask her.

"The director saw a slide of one of yours and he likes the color. He thinks Mr. Granby will look good standing in front of it,'' she says.

"Oh, I see,'' I tell her. "Have you talked to Bill Peach about this?''

"No, I didn't think there was any need for that,'' she says. "Why? Is there a problem?''

"You might want to run this past Bill in case he has any other suggestions,'' I tell her. "But it's up to you. Just let me know when you have an exact date so I can notify the union and have the area cleaned up.''

"Fine. I'll be in touch,'' she says.

I hang up and sit there on the steps muttering, "So ...he likes the color.''

"What was that all about on the phone just now?'' my mother asks. We're sitting together at the table. She's obliged me to have something to eat before I leave.

I tell her about Granby coming.

"Well that sounds like a feather in your cap, the head man— what's his name again?'' asks my mother.

"Granby.''

"Here he's coming all the way to your factory to see you,'' she says. "It must be an honor.''

"Yeah, it is in a way,'' I tell her. "But actually he's just coming to have his picture taken with one of my robots.''

My mother's eyes blink.

"Robots? Like from out-of-space?'' she asks.

"No, not from outer space. These are industrial robots. They're not like the ones on television.''

"Oh.'' Her eyes blink again. "Do they have faces?''

"No, not yet. They mostly have arms . . . which do things like welding, stacking materials, spray painting, and so on. They're run by computer and you can program them to do different jobs,'' I explain.

Mom nods, still trying to picture what these robots are.

"So why's this Granby guy want to have his picture taken with a bunch of robots who don't even have faces?'' she asks.

"I guess because they're the latest thing, and he wants to tell everybody in the corporation that we ought to be using more of them so that—''

I stop and glance away for a second, and see Jonah sitting there smoking his cigar.

"So that what?'' asks my mother.

"Uh...so that we can increase productivity,'' I mumble, waving my hand in the air.

And Jonah says, have they really increased productivity at your plant? Sure they have, I say. We had—what?—a thirty-six percent improvement in one area. Jonah puffs his cigar.

"Is something the matter?'' my mother asks.

"I just remembered something, that's all.''

"What? Something bad?'' she asks.

"No, an earlier conversation I had with the man I talked to last night,'' I say.

My mother puts her hand on my shoulder.

"Alex, what's wrong?'' she's asking. "Come on, you can tell me. I know something's wrong. You show up out of the blue on my doorstep, you're calling people all over the place in the middle of the night. What is it?''

"See, Mom, the plant isn't doing so well . . . and, ah... well, we're not making any money.''

My mother's brow darkens.

"Your big plant not making any money?'' she asks. "But you're telling me about this fancy guy Granby coming, and these robot things, whatever they are. And you're not making any money?''

"That's what I said, Mom.''

"Don't these robot things work?''

"Mom—''

"If they don't work, maybe the store will take them back.''

"Mom, will you forget about the robots!''

She shrugs. "I was just trying to help.''

I reach over and pat her hand.

"Yes, I know you were,'' I say. "Thanks. Really, thanks for everything. Okay? I've got to get going now. I've really got a lot of work to do.''

I stand up and go to get my briefcase. My mother follows. Did I get enough to eat? Would I like a snack to take with me for later in the day? Finally, she takes my sleeve and holds me in one place.

"Listen to me, Al. Maybe you've got some problems. I know you do, but this running all over the place, staying up all night isn't good for you. You've got to stop worrying. It's not going to help you. Look what worrying did to your father,'' she says. "It killed him.''

"But, Mom, he was run over by a bus.''

"So if he hadn't been so busy worrying he would have looked before he crossed the street.''

I sigh. "Yeah, well, Mom, you may have a point. But it's more complicated than you think.''

"I mean it! No worrying!'' she says. "And this Granby fellow, if he's making trouble for you, you let me know. I'll call him and tell him what a worker you are. And who should know better than a mother? You leave him to me. I'll straighten him out.''

I smile. I put my arm around her shoulders.

"I bet you would, Mom.''

"You know I would.''

I tell Mom to call me as soon as her phone bill arrives in the mail, and I'll come over and pay it. I give her a hug and a kiss good-bye, and I'm out of there. I walk out into the daylight and get into the Mazda. For a moment, I consider going straight to the office. But a glance at the wrinkles in my suit and a rub of the stubble on my chin convinces me to go home and clean up first.

Once I'm on my way, I keep hearing Jonah's voice saying to me: "So your company is making thirty-six percent more money from your plant just by installing some robots? Incredible.'' And I remember that I was the one who was smiling. I was the one who thought *he* didn't understand the

realities of manufacturing. Now I feel like an idiot.

Yes, the goal is to make money. I know that now. And, yes, Jonah, you're right; productivity did not go up thirty-six percent just because we installed some robots. For that matter, did it go up at all? Are we making *any* more money because of the robots? And the truth is, I don't know. I find myself shaking my head.

But I wonder how Jonah knew? He seemed to know right away that productivity hadn't increased. There were those questions he asked.

One of them, I remember as I'm driving, was whether we had been able to sell any more products as a result of having the robots. Another one was whether we had reduced the number of people on the payroll. Then he had wanted to know if inventories had gone down. Three basic questions.

When I get home, Julie's car is gone. She's out some place, which is just as well. She's probably furious at me. And I simply do not have time to explain right now.

After I'm inside, I open my briefcase to make a note of those questions, and I see the list of measurements Jonah gave me last night. From the second I glance at those definitions again, it's obvious. The questions match the measurements.

That's how Jonah knew. He was using the measurements in the crude form of simple questions to see if his hunch about the robots was correct: did we sell any more products (i.e., did our throughput go up?); did we lay off anybody (did our operational expense go down?); and the last, exactly what he said: did our inventories go down?

With that observation, it doesn't take me long to see how to express the goal through Jonah's measurements. I'm still a little puzzled by the way he worded the definitions. But aside from that, it's clear that every company would want to have its throughput go up. Every company would also want the other two, inventory and operational expense, to go down, if at all possible. And certainly it's best if they all occur simultaneously—just as with the trio that Lou and I found.

So the way to express the goal is this?

Increase throughput while simultaneously reducing both inventory and operating expense.

That means if the robots have made throughput go up and the other two go down, they've made money for the system. But what's really happened since they started working?

I don't know what effect, if any, they've had on throughput. But off the top of my head, I know inventories have generally increased over the past six or seven months, although I can't say for sure if the robots are to blame. The robots *have* increased our depreciation, because they're new equipment, but they haven't directly taken away any jobs from the plant; we simply shifted people around. Which means the robots had to increase operational expense.

Okay, but efficiencies have gone up because of the robots. So maybe that's been our salvation. When efficiencies go up, the cost-per-part has to come down.

But did the cost really come down? How could the cost-perpart go down if operational expense went up?

By the time I make it to the plant, it's one o'clock, and I still haven't thought of a satisfactory answer. I'm still thinking about it as I walk through the office doors. The first thing I do is stop by Lou's office.

"Have you got a couple minutes?'' I ask.

"Are you kidding?'' he says. "I've been looking for you all morning.''

He reaches for a pile of paper on the corner of his desk. I know it's got to be the report he has to send up to division.

"No, I don't want to talk about that right now,'' I tell him. "I've got something more important on my mind.''

I watch his eyebrows go up.

"More important than this report for Peach?''

"Infinitely more important than that,'' I tell him.

Lou shakes his head as he leans back in his swivel chair and gestures for me to have a seat.

"What can I do for you?''

"After those robots out on the floor came on line, and we got most of the bugs out and all that,'' I say, "what happened to our sales?''

Lou's eyebrows come back down again; he's leaning forward and squinting at me over his bifocals.

"What kind of question is that?'' he asks.

"A smart one, I hope,'' I say. "I need to know if the robots had any impact on our sales. And specifically if there was any increase after they came on line.''

"Increase? Just about all of our sales have been level or in a downhill slide since last year.''

I'm a little irritated.

"Well, would you mind just checking?'' I ask.

He holds up his hands in surrender.

"Not at all. Got all the time in the world.''

Lou turns to his computer, and after looking through some files, starts printing out handfuls of reports, charts, and graphs. We both start leafing through. But we find that in every case where a robot came on line, there was no increase in sales for any product for which they made parts, not even the slightest blip in the curve. For the heck of it, we also check the shipments made from the plant, but there was no increase there either. In fact, the only increase is in overdue shipments—they've grown rapidly over the last nine months.

Lou looks up at me from the graphs.

"Al, I don't know what you're trying to prove,'' he says. "But if you want to broadcast some success story on how the robots are going to save the plant with increased sales, the evidence just doesn't exist. The data practically say the opposite.''

"That’s exactly what I was afraid of,’’ I say.

"What do you mean?’’

"I’ll explain it in a minute. Let’s look at inventories,’’ I tell him. "I want to find out what happened to our work-in-process on parts produced by the robots.’’

Lou gives up.

"I can’t help you there,’’ he says. "I don’t have anything on inventories by part number.’’

"Okay, let’s get Stacey in on this.’’

Stacey Potazenik manages inventory control for the plant. Lou makes a call and pulls her out of another meeting.

Stacey is a woman in her early 40’s. She’s tall, thin, and brisk in her manner. Her hair is black with strands of gray and she wears big, round glasses. She is always dressed in jackets and skirts; never have I seen her in a blouse with any kind of lace, ribbon or frill. I know almost nothing about her personal life. She wears a ring, but she’s never mentioned a husband. She rarely mentions anything about her life outside the plant. I do know she works hard.

When she comes in to see us, I ask her about work-in-process on those parts passing through the robot areas.

"Do you want exact numbers?’’ she asks.

"No, we just need to know the trends,’’ I say.

"Well, I can tell you without looking that inventories went up on those parts,’’ Stacey says.

"Recently?’’

"No, it’s been happening since late last summer, around the end of the third quarter,’’ she says. "And you can’t blame me for it—even though everyone always does—because I fought it every step of the way.’’

"What do you mean?’’

"You remember, don’t you? Or maybe you weren’t here then. But when the reports came in, we found the robots in welding were only running at something like thirty percent efficiency. And the other robots weren’t much better. Nobody would stand for that.’’

I look over at Lou.

"We had to do something,’’ he says. "Frost would have had my head if I hadn’t spoken up. Those things were brand new and very expensive. They’d never pay for themselves in the projected time if we kept them at thirty percent.’’

"Okay, hold on a minute,’’ I tell him. I turn back to Stacey. "What did you do then?’’

She says, "What *could* I do? I had to release more materials to the floor in all the areas feeding the robots. Giving the robots more to produce increased their efficiencies. But ever since then, we’ve been ending each month with a surplus of those parts.’’

"But the important thing was that efficiencies did go up,’’ says Lou, trying to add a bright note. "Nobody can find fault with us on that.’’

"I’m not sure of that at all any more,’’ I say. "Stacey, why are we getting that surplus? How come we aren’t consuming those parts?’’

"Well, in a lot of cases, we don’t have any orders to fill at present which would call for those parts,’’ she says. "And in the cases where we do have orders, we just can’t seem to get enough of the other parts we need.’’

"How come?’’

"You’d have to ask Bob Donovan about that,’’ Stacey says.

"Lou, let’s have Bob paged,’’ I say.

Bob comes into the office with a smear of grease on his white shirt over the bulge of his beer gut, and he’s talking nonstop about what’s going on with the breakdown of the automatic testing machines.

"Bob,’’ I tell him, "forget about that for now.’’

"Something else wrong?'' he asks.

"Yes, there is. We've just been talking about our local celebrities, the robots,'' I say.

Bob glances from side to side, wondering, I suppose, what we've been saying.

"What are you worried about them for?'' he asks. "The robots work pretty good now.''

"We're not so sure about that,'' I say. "Stacey tells me we've got an excess of parts built by the robots. But in some instances we can't get enough of certain other parts to assemble and ship our orders.''

Bob says, "It isn't that we can't *get* enough parts—it's more that we can't seem to get them when we need them. That's true even with a lot of the robot parts. We'll have a pile of something like, say, a CD-50 sit around for months waiting for control boxes. Then we'll get the control boxes, but we won't have something else. Finally we get the something else, and we build the order and ship it. Next thing you know, you're looking around for a CD-50 and you can't find any. We'll have tons of CD-45's and 80's, but no 50's. So we wait. And by the time we get the 50's again, all the control boxes are gone.''

"And so on, and so on, and so on,'' says Stacey.

"But, Stacey, you said the robots were producing a lot of parts for which we don't have product orders,'' I say. "That means we're producing parts we don't need.''

"Everybody tells me we'll use them eventually,'' she says. Then she adds, "Look, it's the same game everybody plays. Whenever efficiencies take a drop, everybody draws against the future forecast to keep busy. We build inventory. If the forecast doesn't hold up, there's hell to pay. Well, that's what's happening now. We've been building inventory for the better part of a year, and the market hasn't helped us one damn bit.''

"I know, Stacey, I know,'' I tell her. "And I'm not blaming you or anybody. I'm just trying to figure this out.''

Restless, I get up and pace.

I say, "So the bottom line is this: to give the robots more to do, we released more materials.''

"Which, in turn, increased inventories,'' says Stacey.

"Which has increased our costs,'' I add.

"But the cost of those parts went down,'' says Lou.

"Did it?'' I ask. "What about the added carrying cost of inventory? That's operational expense. And if that went up, how could the cost of parts go down?''

"Look, it depends on volume,'' says Lou.

"Exactly,'' I say. *"Sales* volume... that's what matters. And when we've got parts that can't be assembled into a product and sold because we don't have the other components, or because we don't have the orders, then we're increasing our costs.'' "Al,'' says Bob, "are you trying to tell us we got screwed by the robots?''

I sit down again.

"We haven't been managing according to the goal,'' I mutter.

Lou squints. "The goal? You mean our objectives for the month?''

I look around at them.

"I think I need to explain a few things.''

10

An hour and a half later, I've gone over it all with them. We're in the conference room, which I've commandeered because it has a whiteboard. On that whiteboard, I've drawn a diagram of the goal. Just now I've written out the definitions of the three measurements.

All of them are quiet. Finally, Lou speaks up and says, "Where the heck did you get these definitions anyway?''

"My old physics teacher gave them to me.''

"Who?'' asks Bob.

"Your old physics teacher?'' asks Lou.

"Yeah,'' I say defensively. "What about it?''

"So what's his name?'' asks Bob.

"Or what's 'her' name,'' says Stacey.

"His name is Jonah. He's from Israel.''

Bob says, "Well, what I want to know is, how come in throughput he says 'sales'? We're manufacturing. We've got nothing to do with sales; that's marketing.''

I shrug. After all, I asked the same question over the phone. Jonah said the definitions were precise, but I don't know how to answer Bob. I turn toward the window. Then I see what I should have remembered.

"Come here,'' I say to Bob.

He lumbers over. I put a hand on his shoulder and point out the window. "What are those?'' I ask him.

"Warehouses,'' he says.

"For what?''

"Finished goods.''

"Would the company stay in business if all it did was manufacture products to fill those warehouses?''

"Okay, okay,'' Bob says sheepishly, seeing the meaning now. "So we got to sell the stuff to make money.''

Lou is still staring at the board.

"Interesting, isn't it, that each one of those definitions contains the word *money,''* he says. "Throughput is the money coming in. Inventory is the money currently inside the system. And operational expense is the money we have to pay out to make throughput happen. One measurement for the incoming money, one for the money still stuck inside, and one for the money going out.''

"Well, if you think about all the investment represented by what we've got sitting out there on the floor, you know for sure that inventory is money,'' says Stacey. "But what bothers me is that I don't see how he's treating value added to materials by direct labor.''

"I wondered the same thing, and I can only tell you what he told me,'' I say.

"Which is?''

"He said he thinks that it's just better if value added isn't taken into account. He said that it gets rid of the 'confusion' about what's an investment and what's an expense, I say.

Stacey and the rest of us think about this for a minute. The room gets quiet again.

Then Stacey says, "Maybe Jonah feels direct labor shouldn't be a part of inventory because the time of the employees isn't what we're really selling. We 'buy' time from our employees, in a sense, but we don't sell that time to a customer—unless we're talking about service.''

"Hey, hold it,'' says Bob. "Now look here: if we're selling the product, aren't

we also selling the time invested in that product?''

"Okay, but what about idle time?'' I ask.

Lou butts in to settle it, saying, "All this is, if I understand it correctly, is a different way of doing the accounting. All employee time—whether it's direct or indirect, idle time or operating time, or whatever—is *operational expense,* according to Jonah. You're still accounting for it. It's just that his way is simpler, and you don't have to play as many games.''

Bob puffs out his chest. "Games? We, in operations, are honest, hard-working folk who do not have time for games.''

"Yeah, you're too busy turning idle time into process time with the stroke of a pen,'' says Lou.

"Or turning process time into more piles of inventory,'' says Stacey.

They go on bantering about this for a minute. Meanwhile, I'm thinking there might be something more to this besides simplification. Jonah mentioned *confusion* between investment and expense; are we confused enough now to be doing something we shouldn't? Then I hear Stacey talking.

"But how do we know the value of our finished goods?'' she asks.

"First of all, the market determines the value of the product,'' says Lou. "And in order for the corporation to make money, the value of the product—and the price we're charging—has to be greater than the combination of the investment in inventory and the total operational expense per unit of what we sell.''

I see by the look on Bob's face that he's very skeptical. I ask him what's bothering him.

"Hey, man, this is crazy,'' Bob grumbles.

"Why?'' asks Lou.

"It won't work!'' says Bob. "How can you account for everything in the whole damn system with three lousy measurements?''

"Well,'' says Lou as he ponders the board. "Name something that won't fit in

one of those three.''

"Tooling, machines...'' Bob counts them on with his fingers. "This building, the whole plant!''

"Those are in there,'' says Lou.

"Where?'' asks Bob.

Lou turns to him. "Look, those things are part one and part the other. If you've got a machine, the depreciation on that machine is operational expense. Whatever portion of the investment still remains in the machine, which could be sold, is inventory.''

"Inventory? I thought inventory was products, and parts and so on,'' says Bob. "You know, the stuff we're going to sell.''

Lou smiles. "Bob, the whole plant is an investment which can be sold—for the right price and under the right circumstances.''

And maybe sooner than we'd like, I think.

Stacey says, "So investment is the same thing as inventory.''

"What about lubricating oil for the machines?'' asks Bob.

"It's operational expense,'' I tell him. "We're not going to sell that oil to a customer.''

"How about scrap?'' he asks.

"That's operational expense, too.''

"Yeah? What about what we sell to the scrap dealer?''

"Okay, then it's the same as a machine,'' says Lou. "Any money we've lost is operational expense; any investment that we can sell is inventory.''

"The carrying costs have to be operational expense, don't they?'' asks Stacey.

Lou and I both nod.

Then I think about the "soft'' things in business, things like knowledge—knowledge from consultants, knowledge gained from our own research and development. I throw it out to them to see how they think those things should be classified.

Money for knowledge has us stumped for a while. Then we decide it depends, quite simply, upon what the knowledge is used for. If it's knowledge, say, which gives us a new manufacturing process, something that helps turn inventory into throughput, then the knowledge is operational expense. If we intend to sell the knowledge, as in the case of a patent or a technology license, then it's inventory. But if the knowledge pertains to a product which UniCo itself will build, it's like a machine—an investment to make money which will depreciate in value as time goes on. And, again, the investment that can be sold is inventory; the depreciation is operational expense.

"I got one for you,'' says Bob. "Here's one that doesn't fit: Granby's chauffeur.''

"What?''

"You know, the old boy in the black suit who drives J. Bart Granby's limo for him,'' says Bob.

"He's operational expense,'' says Lou.

"Like hell he is! You tell me how Granby's chauffeur turns inventory into throughput,'' says Bob, and looks around as if he's really got us on this one. "I bet his chauffeur doesn't even know that inventory and throughput exist.''

"Unfortunately, neither do some of our secretaries,'' says Stacey.

I say, "You don't have to have your hands on the product in order to turn inventory into throughput. Every day, Bob, you're out there helping to turn inventory into throughput. But to the people on the floor, it probably looks like all you do is walk around and make life complicated for everyone.''

"Yeah, no appreciation from nobody,'' Bob pouts, "but you still haven't told me how the chauffeur fits in.''

"Well, maybe the chauffeur helps Granby have more time to think and deal

with customers, etc., while he's commuting here and there,'' I suggest.

"Bob, why don't you ask Mr. Granby next time you two have lunch,'' says Stacey.

"That's not as funny as you think,'' I say. "I just heard this morning that Granby may be coming here to make a video tape on robots.''

"Granby's coming here?'' asks Bob.

"And if Granby's coming, you can bet Bill Peach and all the others will be tagging along,'' says Stacey.

"Just what we need,'' grumbles Lou.

Stacey turns to Bob. "You see now why Al's asking questions about the robots. We've got to look good for Granby.''

"We do look good,'' says Lou. "The efficiencies there are quite acceptable; Granby will not be embarrassed by appearing with the robots on tape.''

But I say, "Dammit, I don't care about Granby and his videotape. In fact, I will lay odds that the tape will never be shot here anyway, but that's beside the point. The problem is that everybody—including me until now—has thought these robots have been a big productivity improvement. And we just learned that they're not productive in terms of the goal. The way we've been using them, they're actually *counter*productive.''

Everyone is silent.

Finally, Stacey has the courage to say, "Okay, so somehow we've got to make the robots productive in terms of the goal.''

"We've got to do more than that,'' I say. I turn to Bob and Stacey. "Listen, I've already told Lou, and I guess this is as good a time as any to tell the both of you. I know you'll hear it eventually anyhow.''

"Hear what?'' asks Bob.

"We've been given an ultimatum by Peach—three months to turn the plant around or he closes us down for good,'' I say.

Both of them are stunned for a few moments. Then they're both firing questions at me. I take a few minutes and tell them what I know—avoiding the news about the division; I don't want to send them into panic.

Finally, I say, "I know it doesn't seem like a lot of time. It isn't. But until they kick me out of here, I'm not giving up. What you decide to do is your own business, but if you want out, I suggest you leave now. Because for the next three months, I'm going to need everything you can give me. If we can make this place show any progress, I'm going to go to Peach and do whatever I have to to make him give us more time.''

"Do you really think we can do it?'' asks Lou.

"I honestly don't know,'' I say. "But at least now we can see some of what we're doing wrong.''

"So what can we do that's different?'' asks Bob.

"Why don't we stop pushing materials through the robots and try to reduce inventories?'' suggests Stacey.

"Hey, I'm all for lower inventory,'' says Bob. "But if we don't produce, our efficiencies go down. Then we're right back where we started.''

"Peach isn't going to give us a second chance if all we give him is lower efficiencies,'' says Lou. "He wants higher efficiencies, not lower.''

I run my fingers through my hair.

Then Stacey says, "Maybe you should try calling this guy, Jonah, again. He seems like he's got a good handle on what's what.''

"Yeah, at least we could find out what he has to say,'' says Lou.

"Well, I talked to him last night. That's when he gave me all this stuff,'' I say, waving to the definitions on the board. "He was supposed to call me...''

I look at their faces.

"Well, okay, I'll try him again,'' I say and reach for my briefcase to get the London number.

I put through a call from the phone in the conference room with the three of them listening expectantly around the table. But he isn't there anymore. Instead I end up talking to some secretary.

"Ah, yes, Mr. Rogo,'' she says. "Jonah tried to call you, but your secretary said you were in a meeting. He wanted to talk to you before he left London today, but I'm afraid you've missed him.''

"Where is he going to be next?'' I ask.

"He was flying to New York. Perhaps you can catch him at his hotel,'' she says.

I take down the name of the hotel and thank her. Then I get the number in New York from directory assistance, and expecting only to be able to leave a message for him, I try it. The switchboard puts me through.

"Hello?'' says a sleepy voice.

"Jonah? This is Alex Rogo. Did I wake you?''

"As a matter of fact, you did.''

"Oh, I'm sorry—I'll try not to keep you long. But I really need to talk to you at greater length about what we were discussing last night,'' I tell him.

"Last night?'' he asks. "Yes, I suppose it was 'last night' your time.''

"Maybe we could make arrangements for you to come to my plant and meet with me and my staff,'' I suggest.

"Well, the problem is I have commitments lined up for the next three weeks, and then I'm going back to Israel,'' he says.

"But, you see, I can't wait that long,'' I say. "I've got some major problems I have to solve and not a lot of time. I understand now what you meant about the robots and productivity. But my staff and I don't know what the next step should be and . . . uh, well, maybe if I explained a few things to you—''

"Alex, I would like to help you, but I also need to get some sleep. I'm exhausted,'' he says. "But I have a suggestion: if your schedule permits, why don't I meet with you here tomorrow morning at seven for breakfast at my

hotel.''

"Tomorrow?''

"That's right,'' he says. "We'll have about an hour and we can talk. Otherwise...''

I look around at the others, all of them watching me anxiously. I tell Jonah to hold on for a second.

"He wants me to come to New York tomorrow,'' I tell them. "Can anybody think of a reason why I shouldn't go?''

"Are you kidding?'' says Stacey.

"Go for it,'' says Bob.

"What have you got to lose?'' says Lou.

I take my hand off the mouthpiece. "Okay, I'll be there,'' I say.

"Excellent!'' Jonah says with relief. "Until then, good night.''

When I get back to my office, Fran looks up with surprise from her work.

"So there you are!'' she says and reaches for the message slips. "This man called you twice from London. He wouldn't say whether it was important or not.''

I say, "I've got a job for you: find a way to get me to New York tonight.''

11

But Julie does not understand.

"Thanks for the advance notice,'' she says.

"If I'd known earlier, I'd have told you,'' I say. "Everything is unexpected with you lately,'' she says. "Don't I always tell you when I know I've got trips coming up?''

She fidgets next to the bedroom door. I'm packing an overnight bag which lies open on the bed. We're alone; Sharon is down the street at a friend's house, and Davey is at band practice.

"When is this going to end?'' she asks.

I stop midway through taking some underwear from a drawer. I'm getting irritated by the questions because we just went over the whole thing five minutes ago. Why is it so hard for her to understand?

"Julie, I don't know.'' I say. "I've got a lot of problems to solve.''

More fidgeting. She doesn't like it. It occurs to me that maybe she doesn't trust me or something.

"Hey, I'll call you as soon as I get to New York,'' I tell her. "Okay?''

She turns as if she might walk out of the room.

"Fine. Call,'' she says, "but I might not be here.''

I stop again.

"What do you mean by that?''

"I might be out someplace,'' she says.

"Oh,'' I say. "Well, I guess I'll have to take my chances.''

"I guess you will,'' she says, furious now, on her way out the door.

I grab an extra shirt and slam the drawer shut. When I finish packing, I go looking for her. I find her in the living room. She stands by the window, biting the end of her thumb. I take her hand and kiss the thumb. Then I try to hug her.

"Listen, I know I've been undependable lately,'' I say. "But this is important. It's for the plant—''

She shakes her head, pulls away. I follow her into the kitchen. She stands with her back to me.

"Everything is for your job,'' she says. "It's all you think about. I can't even count on you for dinner. And the kids are asking me why you're like this—''

There is a tear forming in the corner of her eye. I reach to wipe it away, but she brushes my hand aside.

"No!'' she says. "Just go catch your plane to wherever it is you're going.''

"Julie—''

She walks past me.

"Julie, this is not fair!'' I yell at her.

She turns to me.

"That's right,'' she says. *"You* are not being fair. To me or to your children.''

She goes upstairs without looking back. And I don't even have time to settle this; I'm already late for my flight, I pick up my bag in the hall, sling it over my shoulder, and grab my briefcase on my way out the door.

At 7:10 the next morning, I'm waiting in the hotel lobby for Jonah. He's a few minutes late, but that's not what's on my mind as I pace the carpeted floor. I'm thinking about Julie. I'm worried about her... about us. After I checked into my room last night, I tried to call home. No answer. Not even one of the kids picked up the phone. I walked around the room for half an hour, kicked a few things, and tried calling again. Still no answer. From then

until two in the morning, I dialed the number every fifteen minutes. Nobody home. At one point I tried the airlines to see if I could get on a plane back, but nothing was flying in that direction at that hour. I finally fell asleep. My wake-up call got me out of bed at six o'clock. I tried the number twice before I left my room this morning. The second time, I let it ring for five minutes. Still no answer.

"Alex!''

I turn. Jonah is walking toward me. He's wearing a white shirt—no tie, no jacket—and plain trousers.

"Good morning,'' I say as we shake hands. I notice his eyes are puffy, like those of someone who hasn't had a lot of sleep; I think that mine probably look the same.

"Sorry I'm late,'' he says. "I had dinner last night with some associates and we got into a discussion which went, I believe, until three o'clock in the morning. Let's get a table for breakfast.''

I walk with him into the restaurant and the maitre d' leads us to a table with a white linen cloth.

"How did you do with the measurements I defined for you over the telephone?'' he asks after we've sat down.

I switch my mind to business, and tell him how I expressed the goal with his measurements. Jonah seemed very pleased.

"Excellent,'' he says. "You have done very well.''

"Well, thanks, but I'm afraid I need more than a goal and some measurements to save my plant.''

"To save your plant?'' he asks.

I say, "Well... yes, that's why I'm here. I mean, I didn't just call you to talk philosophy.''

He smiles. "No, I didn't think you tracked me down purely for the love of truth. Okay, Alex, tell me what's going on.''

"This is confidential,'' I say to him. Then I explain the situation with the plant and the three-month deadline before it gets closed. Jonah listens attentively. When I've finished, he sits back.

"What do you expect from me?'' he asks.

"I don't know if there is one, but I'd like you to help me find the answer that will let me keep my plant alive and my people working,'' I say.

Jonah looks away for a moment.

"I'll tell you *my* problem,'' he says. "I have an unbelievable schedule. That's why we're meeting at this ungodly hour, incidentally. With the commitments I already have, there is no way I can spend the time to do all the things you probably would expect from a consultant.''

I sigh, very disappointed. I say, "Okay, if you're too busy—''

"Wait, I'm not finished,'' he says. "That doesn't mean you can't save your plant. I don't have time to solve your problems for you. But that wouldn't be the best thing for you anyway—''

"What do you mean?'' I interrupt.

Jonah holds up his hands. "Let me finish!'' he says. "From what I've heard, I think you can solve your own problems. What I will do is give you some basic rules to apply. If you and your people follow them intelligently, I think you will save your plant. Fair enough?''

"But, Jonah, we've only got three months,'' I say.

He nods impatiently. "I know, I know,'' he says. "Three months is more than enough time to show improvement ...if you are diligent, that is. And if you aren't, then nothing I say could save you anyway.''

"Oh, you can count on our diligence, for sure,'' I say.

"Shall we try it then?'' he asks.

"Frankly, I don't know what else to do,'' I say. Then I smile. "I guess I'd better ask what this is going to cost me. Do you have some kind of standard rate or something?''

"No, I don't,'' he says. "But I'll make a deal with you. Just pay me the value of what you learn from me.''

"How will I know what that is?''

"You should have a reasonable idea after we've finished. If your plant folds, then obviously the value of your learning won't have been much; you won't owe me anything. If, on the other hand, you learn enough from me to make billions, then you should pay me accordingly,'' he says.

I laugh. What have I got to lose?

"Okay, fair enough,'' I say finally.

We shake hands across the table.

A waiter interrupts to ask if we're ready to order. Neither of us have opened the menus, but it turns out we both want coffee. The waiter informs us there's a ten-dollar minimum for sitting in the dining room. So Jonah tells him to bring us both our own pots of coffee and a quart of milk. He gives us a dirty look and vanishes.

"Now then,'' Jonah says. "Where shall we begin . . .''

"I thought maybe first we could focus on the robots,'' I tell him.

Jonah shakes his head.

"Alex, forget about your robots for now. They're like some new industrial toy everybody's discovered. You've got much more fundamental things to concern yourself with,'' he says.

"But you're not taking into account how important they are to us,'' I tell him. "They're some of our most expensive equipment. We absolutely have to keep them productive.''

"Productive with respect to what?'' he asks with an edge in his voice.

"Okay, right...we have to keep them productive in terms of the goal,'' I say. "But I need high efficiencies to make those things pay for themselves, and I only get the efficiencies if they're making parts.''

Jonah is shaking his head again.

"Alex, you told me in our first meeting that your plant has very good efficiencies overall. If your efficiencies are so good, then why is your plant in trouble?''

He takes a cigar out of his shirt pocket and bites the end off of it.

"Okay, look, I have to care about efficiencies if only for the reason that my management cares about them,'' I tell him.

"What's more important to your management, Alex: efficiencies or money?'' he asks.

"Money, of course. But isn't high efficiency essential to making money?'' I ask him.

"Most of the time, your struggle for high efficiencies is taking you in the opposite direction of your goal.''

"I don't understand,'' I say. "And even if I did, my management wouldn't.''

But Jonah lights his cigar and says between puffs, "Okay, let's see if I can help you understand with some basic questions and answers. First tell me this: when you see one of your workers standing idle with nothing to do, is that good or bad for the company?''

"It's bad, of course,'' I say.

"Always?''

I feel this is a trick question.

"Well, we have to do maintenance—''

"No, no, no, I'm talking about a production employee who is idle because there is no product to be worked on.''

"Yes, that's always bad,'' I say.

"Why?''

I chuckle. "Isn't it obvious? Because it's a waste of money! What are we supposed to do, pay people to do nothing? We can't afford to have idle time. Our costs are too high to tolerate it. It's inefficiency, it's low productivity—no matter how you measure it.''

He leans forward as if he's going to whisper a big secret to me.

"Let me tell you something,'' he says. "A plant in which everyone is working all the time is very inefficient.''

"Pardon me?''

"You heard me.''

"But how can you prove that?'' I ask.

He says, "You've already proven it in your own plant. It's right in front of your eyes. But you don't see it.''

Now I shake my head. I say, "Jonah, I don't think we're communicating. You see, in my plant, I don't have extra people. The only way we can get products out the door is to keep everyone working constantly.''

"Tell me, Alex, do you have excess inventories in your plant?'' he asks.

"Yes, we do,'' I say.

"Do you have a lot of excess inventories?''

"Well... yes.''

"Do you have *a lot* of a lot of excess inventories?''

"Yeah, okay, we do have a lot of a lot of excess, but what's the point?''

"Do you realize that the only way you can create excess inventories is by having excess manpower?'' he says.

I think about it. After a minute, I have to conclude he's right; machines don't set up and run themselves. People had to create the excess inventory.

"What are you suggesting I do?'' I ask. "Lay off more people? I'm practically down to a skeleton force now.''

"No, I'm not suggesting that you lay off more people. But I am suggesting that you question how you are managing the capacity of your plant. And let me tell you, it is not according to the goal.''

Between us, the waiter sets down two elegant silver pots with steam coming out of their spouts. He puts out a pitcher of cream and pours the coffee. While he does this, I find myself staring toward the window. After a few seconds, I feel Jonah reach over and touch my sleeve.

"Here's what's happening,'' he says. "Out there in the world at large, you've got a market demand for so much of whatever it is you're producing. And inside your company, you've got so many resources, each of which has so much capacity, to fill that demand. Now, before I go on, do you know what I mean by a 'balanced plant'?''

"You mean balancing a production line?'' I ask.

He says, "A balanced plant is essentially what every manufacturing manager in the whole western world has struggled to achieve. It's a plant where the capacity of each and every resource is balanced exactly with demand from the market. Do you know why managers try to do this?''

I tell him, "Well, because if we don't have enough capacity, we're cheating ourselves out of potential throughput. And if we have more than enough capacity, we're wasting money. We're missing an opportunity to reduce operational expense.''

"Yes, that's exactly what everybody thinks,'' says Jonah. "And the tendency for most managers is to trim capacity wherever they can, so no resource is idle, and everybody has something to work on.''

"Yeah, sure, I know what you're talking about,'' I say. "We do that at our plant. In fact, it's done at every plant I've ever seen.''

"Do you run a balanced plant?'' he asks.

"Well, it's as balanced as we can make it. Of course, we've got some machines sitting idle, but generally that's just outdated equipment. As for people, we've trimmed our capacity as much as we can,'' I explain. "But

nobody ever runs a perfectly balanced plant.''

"Funny, I don't know of any balanced plants either,'' he says. "Why do you think it is that nobody after all this time and effort has ever succeeded in running a balanced plant?''

"I can give you a lot of reasons. The number one reason is that conditions are always changing on us,'' I say.

"No, actually that isn't the number one reason,'' he says.

"Sure it is! Look at the things I have to contend with—my vendors, for example. We'll be in the middle of a hot order and discover that the vendor sent us a bad batch of parts. Or look at all the variables in my work force—absenteeism, people who don't care about quality, employee turnover, you name it. And then there's the market itself. The market is always changing. So it's no wonder we get too much capacity in one area and not enough in another.''

"Alex, the real reason you cannot balance your plant is much more basic than all of those factors you mentioned. All of those are relatively minor.''

"Minor?''

"The real reason is that the closer you come to a balanced plant, the closer you are to bankruptcy.''

"Come on!'' I say. "You've got to be kidding me.''

"Look at this obsession with trimming capacity in terms of the goal,'' he says. "When you lay off people, do you increase sales?''

"No, of course not,'' I say.

"Do you reduce your inventory?'' he asks.

"No, not by cutting people,'' I say. "What we do by laying off workers is cut our expenses.''

"Yes, exactly,'' Jonah says. "You improve only one measurement, operational expense.''

"Isn’t that enough?’’

"Alex, the goal is not to reduce operational expense by itself. The goal is not to improve one measurement in isolation. The goal is to reduce operational expense and reduce inventory while simultaneously increasing throughput,’’ says Jonah.

"Fine. I agree with that,’’ I say. "But if we reduce expenses, and inventory and throughput stay the same, aren’t we better off?’’

"Yes, *if* you do not increase inventory and/or reduce throughput,’’ he says.

"Okay, right. But balancing capacity doesn’t affect either one,’’ I say.

"Oh? It doesn’t? How do you know that?’’

"We just said—’’

"I didn’t say anything of the sort. I asked you. And you *assumed* that if you trim capacity to balance with market demand you won’t affect throughput or inventory,’’ he says. "But, in fact, that assumption—which is practically universal in the western business world—is totally wrong.’’

"How do you know it’s wrong?’’

"For one thing, there is a mathematical proof which could clearly show that when capacity is trimmed exactly to marketing demands, no more and no less, throughput goes down, while inventory goes through the roof,’’ he says. "And because inventory goes up, the *carrying cost* of inventory—which is operational expense—goes up. So it’s questionable whether you can even fulfill the intended reduction in your total operational expense, the one measurement you expected to improve.’’

"How can that be?’’

"Because of the combinations of two phenomena which are found in every plant,’’ he says. "One phenomenon is called ‘dependent events.’ Do you know what I mean by that term? I mean that an event, or a series of events, must take place before another can begin... the subsequent event *depends* upon the ones prior to it. You follow?’’

"Yeah, sure,’’ I say. "But what’s the big deal about that?’’ "The big deal

occurs when dependent events are in combination with another phenomenon called ‘statistical fluctuations,’’’ he says. "Do you know what those are?’’

I shrug. "Fluctuations in statistics, right?’’

"Let me put it this way,’’ he says. "You know that some types of information can be determined precisely. For instance, if we need to know the seating capacity in this restaurant, we can determine it precisely by counting the number of chairs at each table.’’

He points around the room.

"But there are other kinds of information we cannot precisely predict. Like how long it will take the waiter to bring us our check. Or how long it will take the chef to make an omelet. Or how many eggs the kitchen will need today. These types of information vary from one instance to the next. They are subject to *statistical fluctuations.’’*

"Yeah, but you can generally get an idea of what all those are going to be based on experience,’’ I say.

"But only within a range. Last time, the waiter brought the check in five minutes and 42 seconds. The time before it only took two minutes. And today? Who knows? Could be three, four hours,’’ he says, looking around. "Where the hell is he?’’ "Yeah, but if the chef is doing a banquet and he knows how many people are coming and he knows they’re all having omelets, then he knows how many eggs he’s going to need,’’ I say. "Exactly?’’ asks Jonah. "Suppose he drops one on the floor?’’ "Okay, so he has a couple extra.’’

"Most of the factors critical to running your plant successfully cannot be determined precisely ahead of time,’’ he says. The arm of the waiter comes between us as he puts the totaled check on the table. I pull it to my side of the table. "All right, I agree,’’ I say. "But in the case of a worker doing the same job day in, day out, those fluctuations average out over a period of time. Frankly, I can’t see what either one of those two phenomena have to do with anything.’’

Jonah stands up, ready to leave.

"I’m not talking about the one or the other alone,’’ he says, "but about the effect of the two of them together. Which is what I want you to think about,

because I have to go.''

"You're leaving?'' I ask.

"I have to,'' he says.

"Jonah, you can't just run off like this.''

"There are clients waiting for me,'' he says.

"Jonah, I don't have time for riddles. I need answers,'' I tell him.

He puts his hand on my arm.

"Alex, if I simply told you what to do, ultimately you would fail. You have to gain the understanding for yourself in order to make the rules work,'' he says.

He shakes my hand.

"Until next time, Alex. Call me when you can tell me what the combination of the two phenomena mean to your plant.''

Then he hurries away. Fuming inside, I flag down the waiter and hand him the check and some money. Without waiting for the change, I follow in the direction of Jonah out to the lobby.

I claim my overnight bag from the bellhop at the desk where I checked it, and sling it over my shoulder. As I turn, I see Jonah, still without jacket or tie, talking to a handsome man in a blue pinstripe suit over by the doors to the street. They go through the doors together, and I trudge along a few steps behind them. The man leads Jonah to a black limousine waiting at the curb. As they approach, a chauffeur hops out to open the rear door for them.

I hear the handsome man in the blue pinstripe saying as he gets into the limo behind Jonah, "After the facilities tour, we're scheduled for a meeting with the chairman and several of the board...'' Waiting inside for them is a silver-haired man who shakes Jonah's hand. The chauffeur closes the door and returns to the wheel. I can see only the vague silhouettes of their heads behind the dark glass as the big car quietly eases into traffic.

I get into a cab.

The drivers asks, "Where to, chief?’’

12

There is a guy I heard about in UniCo who came home from work one night, walked in, and said, "Hi, honey, I'm home!'' And his greeting echoed back to him from the empty rooms of his house. His wife had taken everything: the kids, the dog, the goldfish, the furniture, the carpets, the appliances, the curtains, the pictures on the wall, the toothpaste, everything. Well, just about everything—actually, she left him two things: his clothes (which were in a heap on the floor of the bedroom by the closet; she had even taken the hangers), and a note written in lipstick on the bathroom mirror which said, "Good-bye, you bastard!''

As I drive down the street to my house, that kind of vision is running through my mind, and has been periodically since last night. Before I pull into the driveway, I look at the lawn for the telltale signs of tracks left by the wheels of a moving van, but the lawn is unmarred.

I park the Mazda in front of the garage. On my way inside, I peek through the glass, Julie's Accord is parked inside, and I look at the sky and silently say, "Thank You.''

She's sitting at the kitchen table, her back to me as I come in. I startle her. She stands up right away and turns around. We stare at each other for a second. I can see that the rims of her eyes are red.

"Hi,'' I say.

"What are you doing home?'' Julie asks.

I laugh—not a nice laugh, an exasperated laugh. "What am *I* doing home? I'm looking for *you!''* I say. "Well, here I am. Take a good look,'' she says, frowning at me.

"Yeah, right, here you are now,'' I say. "But what I want to know is where you were last night.''

"I was out,'' she says.

"All night?''

She's prepared for the question.

"Gee, I'm surprised you even knew I was gone,'' she says. "Come on, Julie, let's cut the crap. I must have called the number here a hundred times last night. I was worried sick about you. I tried it again this morning and nobody answered. So I know you were gone all night,'' I say, "And, by the way, where were the kids?''

"They stayed with friends,'' she says.

"On a school night?'' I ask. "And what about you? Did you stay with a *friend?''*

She puts her hands on her hips.

"Yes, as a matter of fact, I did stay with a friend,'' she says. "Man or woman?''

Her eyes get hard on me. She takes a step forward. "You don't care if I'm home with the kids night after night,'' she says. "But if I go away for one night, all of a sudden you have to know where I've been, what I've done.''

"I just feel you owe me some explanation,'' I say. "How many times have you been late, or out of town, or who knows where?'' she asks.

"But that's business,'' I say. "And I always tell you where I've been if you ask. Now I'm asking.''

"There's nothing to tell,'' she says. "All that happened was I went out with Jane.''

"Jane?'' It takes me a minute to remember her. "You mean your friend from where we used to live? You drove all the way back there?''

"I just had to talk to someone,'' she says. "By the time we'd finished talking, I'd had too much to drink to drive home. Anyway, I knew the kids were okay until morning. So I just stayed at Jane's.''

"Okay, but why? How did this come over you all of a sudden?'' I ask her.

"Come over me? All of a sudden? Alex, you go off and leave me night after night. It's no wonder that I'm lonely. Nothing suddenly came over me. Ever since you got into management, your career has come first and everyone else takes whatever is left.''

"Julie, I've just tried to make a good living for you and the kids,'' I tell her.

"Is that all? Then why do you keep taking the promotions?'' "What am I supposed to do, turn them down?'' She doesn't answer.

"Look, I put in the hours because I have to, not because I want to,'' I tell her.

She still doesn't say anything.

"All right, look: I promise I'll make more time for you and the kids,'' I say. "Honest, I'll spend more time at home.'' "Al, it's not going to work. Even when you're home, you're at the office. Sometimes I've seen the kids tell you something two or three times before you hear them.''

"It won't be like that when I get out of the jam I'm in right now,'' I say.

"Do you hear what you're saying? 'When I get out of the jam I'm in right now.' Do you think it's going to change? You've said all that before, Al. Do you know how many times we've been over this?''

"Okay, you're right. We have been over it a lot of times. But, right now, there's nothing I can do,'' I say.

She looks up at the sky and says, "Your job has always been on the line. Always. So if you're such a marginal employee, why do they keep giving you promotions and more money?'' I pinch the bridge of my nose.

"How do I make you understand this,'' I say. "I'm not up for another promotion or pay raise this time. This time it's different.

Julie, you have no idea what kind of problems I've got at the plant.''

"And you have no idea what it's like here at home,'' she says. I say, "Okay, look, I'd like to spend more time at home, but the problem is getting the time.''

"I don't need all your time,'' she says. "But I do need some of it, and so do

the kids.''

"I know that. But to save this plant, I'm going to have to give it all I've got for the next couple of months.''

"Couldn't you at least come home for dinner most of the time?'' she asks. "The evenings are when I miss you the most. All of us do. It's empty around here without you, even with the kids for company.''

"Nice to know I'm wanted. But sometimes I even need the evenings. I just don't have enough time during the day to get to things like paperwork,'' I say.

"Why don't you bring the paperwork home,'' she suggests.

"Do it here. If you did that, at least we could see you. And maybe I could even help you with some of it.''

I lean back. "I don't know if I'll be able to concentrate, but . . . okay, let's try it.''

She smiles. "You mean it?''

"Sure, if it doesn't work, we can talk about it,'' I say. "Deal?'' "Deal,'' she says.

I lean toward her and ask, "Want to seal it with a handshake or a kiss?''

She comes around the table and sits on my lap and kisses me. "You know, I sure missed you last night,'' I tell her. "Did you?'' she says. "I really missed you too. I had no idea singles bars could be so depressing.''

"Singles bars?''

"It was Jane's idea,'' she says. "Honest.''

I shake my head. "I don't want to hear about it.'' "But Jane showed me some new dance steps,'' she says. "And maybe this weekend—''

I give her a squeeze. "If you want to do something this weekend, baby, I'm all yours.''

"Great,'' she says and whispers in my ear, "You know, it's Friday, so... why

don’t we start early?’’

She kissed me again.

And I say, "Julie, I’d really love to, but . . .’’

"But?’’

"I really should check in at the plant,’’ I say.

She stands up. "Okay, but promise me you’ll hurry home tonight.’’

"Promise,’’ I tell her. "Really, it’s going to be a great weekend.’’

13

I open my eyes Saturday morning to see a drab green blur. The blur turns out to be my son, Dave, dressed in his Boy Scout uniform. He is shaking my arm.

"Davey, what are you doing here?'' I ask.

He says, "Dad, it's seven o'clock!''

"Seven o'clock? I'm trying to sleep. Aren't you supposed to be watching television or something?''

"We'll be late,'' he says.

"We will be late? For what?''

"For the overnight hike!'' he says. "Remember? You promised me I could volunteer you to go along and help the troopmaster.''

I mutter something no Boy Scout should ever hear. But Dave isn't fazed.

"Come on. Just get in the shower,'' he says, as he pulls me out of bed. "I packed your gear last night. Everything's in the car already. We just have to get there by eight.''

I manage a last look at Julie, her eyes still shut, and the warm soft mattress as Davey drags me through the door.

An hour and ten minutes later, my son and I arrive at the edge of some forest. Waiting for us is the troop: fifteen boys outfitted in caps, neckerchiefs, merit badges, the works.

Before I have time to say, "Where's the troopmaster?'', the other few parents who happen to be lingering with the boys take off in their cars, all pedals to the metal. Looking around, I see that I am the only adult in sight.

"Our troopmaster couldn't make it,'' says one of the boys.

"How come?''

"He's sick,'' says another kid next to him.

"Yeah, his hemorrhoids are acting up,'' says the first. "So it looks like you're in charge now.''

"What are we supposed to do, Mr. Rogo?'' asks the other kid.

Well, at first I'm a little mad at having all this foisted upon me. But then the idea of having to supervise a bunch of kids doesn't daunt me—after all, I do that every day at the plant. So I gather everyone around. We look at a map and discuss the objectives for this expedition into the perilous wilderness before us.

The plan, I learn, is for the troop to hike through the forest following a blazed trail to someplace called "Devil's Gulch.'' There we are to bivouac for the evening. In the morning we are to break camp and make our way back to the point of departure, where Mom and Dad are supposed to be waiting for little Freddy and Johnny and friends to walk out of the woods.

First, we have to get to Devil's Gulch, which happens to be about ten miles away. So I line up the troop. They've all got their rucksacks on their backs. Map in hand, I put myself at the front of the line in order to lead the way, and off we go.

The weather is fantastic. The sun is shining through the trees. The skies are blue. It's breezy and the temperature is a little on the cool side, but once we get into the woods, it's just right for walking.

The trail is easy to follow because there are blazes (splotches of yellow paint) on the tree trunks every 10 yards or so. On either side, the undergrowth is thick. We have to hike in single file.

I suppose I'm walking at about two miles per hour, which is about how fast the average person walks. At this rate, I think to myself, we should cover ten miles in about five hours. My watch tells me it's almost 8:30 now. Allowing an hour and a half for breaks and for lunch, we should arrive at Devil's Gulch by three o'clock, no sweat.

After a few minutes, I turn and look back. The column of scouts has spread

out to some degree from the close spacing we started with. Instead of a yard or so between boys, there are now larger gaps, some a little larger than others. I keep walking.

But I look back again after a few hundred yards, and the column is stretched out much farther. And a couple of big gaps have appeared. I can barely see the kid at the end of the line.

I decide it's better if I'm at the end of the line instead of at the front. That way I know I'll be able to keep an eye on the whole column, and make sure nobody gets left behind. So I wait for the first boy to catch up to me, and I ask him his name.

"I'm Ron,'' he says.

"Ron, I want you to lead the column,'' I tell him, handing over the map. "Just keep following this trail, and set a moderate pace. Okay?''

"Right, Mr. Rogo.''

And he sets off at what seems to be a reasonable pace. "Everybody stay behind Ron!'' I call back to the others. "Nobody passes Ron, because he's got the map. Understand?''

Everybody nods, waves. Everybody understands.

I wait by the side of the trail as the troop passes. My son, Davey, goes by talking with a friend who walks close behind him. Now that he's with his buddies, Dave doesn't want to know me. He's too cool for that. Five or six more come along, all of them keeping up without any problems. Then there is a gap, followed by a couple more scouts. After them, another, even larger gap has occurred. I look down the trail. And I see this fat kid. He already looks a little winded. Behind him is the rest of the troop.

"What's your name?'' I ask as the fat kid draws closer.

"Herbie,'' says the fat kid.

"You okay, Herbie?''

"Oh, sure, Mr. Rogo,'' says Herbie. "Boy, it's hot out, isn't it?''

Herbie continues up the trail and the others follow. Some of them look as if they'd like to go faster, but they can't get around Herbie. I fall in behind the last boy. The line stretches out in front of me, and most of the time, unless we're going over a hill or around a sharp bend in the trail, I can see everybody. The column seems to settle into a comfortable rhythm.

Not that the scenery is boring, but after a while I begin to think about other things. Like Julie, for instance. I really had wanted to spend this weekend with her. But I'd forgotten all about this hiking business with Dave. "Typical of you,'' I guess she'd say. I don't know how I'm ever going to get the time I need to spend with her. The only saving grace about this hike is that she ought to understand I have to be with Dave.

And then there is the conversation I had with Jonah in New York. I haven't had any time to think about that. I'm rather curious to know what a physics teacher is doing riding around in limousines with corporate heavyweights. Nor do I understand what he was trying to make out of those two items he described. I mean, "dependent events'' ... "statistical fluctuations''—so what? They're both quite mundane.

Obviously we have dependent events in manufacturing. All it means is that one operation has to be done before a second operation can be performed. Parts are made in a sequence of steps. Machine A has to finish Step One before Worker B can proceed with Step Two. All the parts have to be finished before we can assemble the product. The product has to be assembled before we can ship it. And so on.

But you find dependent events in any process, and not just those in a factory. Driving a car requires a sequence of dependent events. So does the hike we're taking now. In order to arrive at Devil's Gulch, a trail has to be walked. Up front, Ron has to walk the trail before Davey can walk it. Davey has to walk the trail before Herbie can walk it. In order for me to walk the trail, the boy in front of me has to walk it first. It's a simple case of dependent events.

And statistical fluctuations?

I look up and notice that the boy in front of me is going a little faster than I have been. He's a few feet farther ahead of me than he was a minute ago. So I take some bigger steps to catch up. Then, for a second, I'm too close to him, so I slow down.

There: if I'd been measuring my stride, I would have recorded statistical

fluctuations. But, again, what's the big deal?

If I say that I'm walking at the rate of "two miles per hour,'' I don't mean I'm walking exactly at a constant rate of two miles per hour every instant. Sometimes I'll be going 2.5 miles per hour; sometimes maybe I'll be walking at only 1.2 miles per hour. The rate is going to fluctuate according to the length and speed of each step. But over time and distance, I should be *averaging* about two miles per hour, more or less.

The same thing happens in the plant. How long does it take to solder the wire leads on a transformer? Well, if you get out your stopwatch and time the operation over and over again, you might find that it takes, let's say, 4.3 minutes on the average. But the actual time on any given instance may range between 2.1 minutes up to 6.4 minutes. And nobody in advance can say, "This one will take 2.1 minutes... this one will take 5.8 minutes.'' Nobody can predict that information.

So what's wrong with that? Nothing as far as I can see. Anyway, we don't have any choice. What else are we going to use in place of an "average'' or an "estimate''?

I find I'm almost stepping on the boy in front of me. We've slowed down somewhat. It's because we're climbing a long, fairly steep hill. All of us are backed up behind Herbie.

"Come on, Herpes!'' says one of the kids.

Herpes?

"Yeah, Herpes, let's move it,'' says another.

"Okay, enough of that,'' I say to the persecutors.

Then Herbie reaches the top. He turns around. His face is red from the climb.

"Atta boy, Herbie!'' I say to encourage him. "Let's keep it moving!''

Herbie disappears over the crest. The others continue the climb, and I trudge behind them until I get to the top. Pausing there, I look down the trail.

Holy cow! Where's Ron? He must be half a mile ahead of us. I can see a couple of boys in front of Herbie, and everyone else is lost in the distance. I

cup my hands over my mouth.

"HEY! LET'S GO UP THERE! LET'S CLOSE RANKS!'' I yell. "DOUBLE TIME! DOUBLE TIME!''

Herbie eases into a trot. The kids behind him start to run. I jog after them. Rucksacks and canteens and sleeping bags are bouncing and shaking with every step. And Herbie—I don't know what this kid is carrying, but it sounds like he's got a junkyard on his back with all the clattering and clanking he makes when he runs. After a couple hundred yards, we still haven't caught up. Herbie is slowing down. The kids are yelling at him to hurry up. I'm huffing and puffing along. Finally I can see Ron off in the distance.

"HEY RON!'' I shout. "HOLD UP!''

The call is relayed up the trail by the other boys. Ron, who probably heard the call the first time, turns and looks back. Herbie, seeing relief in sight, slows to a fast walk. And so do the rest of us. As we approach, all heads are turned our way.

"Ron, I thought I told you to set a moderate pace,'' I say.

"But I did!'' he protests.

"Well, let's just all try to stay together next time,'' I tell them.

"Hey, Mr. Rogo, whadd'ya say we take five?'' asks Herbie.

"Okay, let's take a break,'' I tell them.

Herbie falls over beside the trail, his tongue hanging out. Everyone reaches for canteens. I find the most comfortable log in sight and sit down. After a few minutes, Davey comes over and sits down next to me.

"You're doing great, Dad,'' he says.

"Thanks. How far do you think we've come?''

"About two miles,'' he says.

"Is that all?'' I ask. "It feels like we ought to be there by now. We must have covered more distance than two miles.'' "Not according to the map Ron

has,'' he says.

"Oh,'' I say. "Well, I guess we'd better get a move on.'' The boys are already lining up.

"All right, let's go,'' I say.

We start out again. The trail is straight here, so I can see everyone. We haven't gone thirty yards before I notice it starting all over again. The line is spreading out; gaps between the boys are widening. Dammit, we're going to be running and stopping all day long if this keeps up. Half the troop is liable to get lost if we can't stay together.

I've got to put an end to this.

The first one I check is Ron. But Ron, indeed, is setting a steady, "average'' pace for the troop—a pace nobody should have any trouble with. I look back down the line, and all of the boys are walking at about the same rate as Ron. And Herbie? He's not the problem anymore. Maybe he felt responsible for the last delay, because now he seems to be making a special effort to keep up. He's right on the ass of the kid in front of him.

If we're all walking at about the same pace, why is the distance between Ron, at the front of the line, and me, at the end of the line, increasing?

Statistical fluctuations?

Nah, couldn't be. The fluctuations should be averaging out. We're all moving at about the same speed, so that should mean the distance between any of us will vary somewhat, but will even out over a period of time. The distance between Ron and me should also expand and contract within a certain range, but should average about the same throughout the hike.

But it isn't. As long as each of us is maintaining a normal, moderate pace like Ron, the length of the column is increasing. The gaps between us are expanding.

Except between Herbie and the kid in front of him.

So how is he doing it? I watch him. Every time Herbie gets a step behind, he runs for an extra step. Which means he's actually expending more energy than Ron or the others at the front of the line in order to maintain the same

relative speed. I'm wondering how long he'll be able to keep up his walk-run routine.

Yet... why can't we all just walk at the same pace as Ron and stay together?

I'm watching the line when something up ahead catches my eye. I see Davey slow down for a few seconds. He's adjusting his packstraps. In front of him, Ron continues onward, oblivious. A gap of ten... fifteen... twenty feet opens up. Which means the entire line has grown by 20 feet.

That's when I begin to understand what's happening.

Ron is setting the pace. Every time someone moves slower than Ron, the line lengthens. It wouldn't even have to be as obvious as when Dave slowed down. If one of the boys takes a step that's half an inch shorter than the one Ron took, the length of the whole line could be affected.

But what happens when someone moves faster than Ron? Aren't the longer or faster steps supposed to make up for the spreading? Don't the differences average out?

Suppose I walk faster. Can I shorten the length of the line? Well, between me and the kid ahead of me is a gap of about five feet. If he continues walking at the same rate, and if I speed up, I can reduce the gap—and maybe reduce the total length of the column, depending upon what's happening up ahead. But I can only do that until I'm bumping the kid's rucksack (and if I did that he'd sure as hell tell his mother). So I have to slow down to his rate.

Once I've closed the gap between us, I can't go any faster than the rate at which the kid in front of me is going. And he ultimately can't go any faster than the kid in front of him. And so on up the line to Ron. Which means that, except for Ron, each of our speeds depends upon the speeds of those in front of us in the line.

It's starting to make sense. Our hike is a set of dependent events...in combination with statistical fluctuations. Each of us is fluctuating in speed, faster and slower. But the ability to go faster than average is restricted. It depends upon all the others ahead of me in the line. So even if I could walk five miles per hour, I couldn't do it if the boy in front of me could only walk two miles per hour. And even if the kid directly in front of me could walk that fast, neither of us could do it unless all the boys in the line were moving at five miles per hour at the same time.