FOREFATHER FIGURE

Charles Sheffield

"Who are you?"

The words rang around the tiled walls. The naked figure on the table did not move. His chest rose and fell steadily, lifting with it the tangle of catheters and electrodes that covered the rib cage.

"Still no change." The woman who crouched over the oscilloscope made a tiny adjustment to the controls with her left hand. She was nervous, her eyes flicking to the screen, to the table, and to the man who stood by her side. "He's still in a sleep rhythm. Heart and blood pressure stable."

The man nodded. "Keep watching. Increase the level of stimulation. I think he's coming up, but it will take a while."

He turned back to the recumbent figure.

"Who are you? What is your name? Tell me, who are you?"

As the questions went on, the only sound in the big room, the woman ran her tongue over her lips, seemingly ready to respond herself to the insistent queries. She was big-boned and tall, her nervous manner an odd contrast to her round and impassive-looking face.

"Here he comes," she said abruptly.

There was a stir of movement from the body's left arm. It rose a couple of inches from the table, twitching the powerful sinews of the wrist and hand.

"Reduce the feedback." The man leaned over the table, peering down at the fluttering eyelids. "Who are you?"

There was a sigh, a grunt, the experimental run of air over the vocal chords. "Ah—Ah'm—Bayle." The voice was thick and choking, a mouthing through an unfamiliar throat and lips. "I'm Bayle. I'm Bayle Richards." The eyes opened suddenly, an unfocussed and startling blue.

"Got it. By God, I've got it." John Cramer flashed a fierce look of triumph at the woman and straightened up from the table. "I wondered if we ever would. "He laughed. "We don't need the stimulants now. Turn to a sedative—he'll need sleep in a few minutes. Let's see how well it took, then we'll end it for today."

He leaned again over the table. "Bayle Richards. Do you remember me? I'm John Cramer. Remember? John Cramer?"

The blue eyes rolled slowly, struggling to find a focus. After a few seconds they fixed on Cramer's face.

"John Cramer. Uh, I think so. Don't know what happened. John Cramer." He moved his arm and made a weak effort to sit up. "Think I remember. Not sure."

The eyes focussed more sharply, filled with alarm. "What happened to me? What's wrong with me?"

"Not a thing." Cramer was smiling broadly, nodding to the woman. "Bayle, you're going to be better than you ever were in all your life. You'll feel dizzy for a while. Do you have any pain?"

"My mouth, and my chest... stiff. What you do to me? Was I in an accident?"

"No. Bayle, you're fine. Don't you remember? This was mostly your idea."

The woman turned her head quickly at that. "John. That's not what he—"

"Shut up, Lana." He waved her to silence with an abrupt chop of his hand and returned his attention to the man. "Bayle, I'll tell you all about this later. Now you ought to get some rest. Just lie there quietly, and we'll get this plumbing off you."

As the sedatives began to take effect, Bayle Richard's eyes closed again. Cramer began to strip the electrodes and the monitoring sensors off the naked body, his fingers working rapidly and accurately.

"John." The woman stood up from the control console and moved to the table. "Don't you think you ought to slow down? I thought we were going to watch the monitors for a couple of hours, see if it was all normal. Suppose we get a new problem?"

"No chance of it." Cramer's voice was exultant. "Lana, don't try and tell my my business. This is a success, I feel it in my bones. Did you see any sign of instability on those monitors? Let's get him in full control, then we can start the second transfer." He laughed again. "We'll pull in those memories as soon as we can hook him up. Twenty-two thousand years, the carbon dating says. He'll tell a story, once we get him started."

His gaze moved over the figure on the table, revelling in the firm, unblemished skin and the smooth muscles. "Look at that body. Bayle, you never had it so good! Wait until he sees himself in a mirror."

Lana Cramer was automatically beginning to strip off the sensors and uncouple the I-V's. Her placid face was still troubled.

"John, do you think you're being fair to him? We still haven't explained what caused the trouble in the primary transfer—suppose that produces a complication when we try and connect with the memories?"

Cramer continued his systematic treatment of Bayle Richards, his manner confident and casual. He did not look up at her.

"Don't you worry about that, Lana. Thinking isn't your department. A week from now, we'll know more about Cro-Magnon man than anyone has ever known. Bayle Richards should have known the risks when he got into this. If he didn't, the more fool he is."

The image flashed up on the big screen, an accurate color reproduction. Cramer adjusted the focus.

"There, Bayle. That used to be you. Now you can see what a good trade you made."

Bayle Richards fidgeted as he examined the screen. He was dressed now in a grey suit that hung elegantly on his tall, thin frame, but somehow his air of discomfort extended beyond the clothing to the body itself. He moved as though the limbs themselves were a poor fit. He kept looking down at his hands, examining the smooth muscles in the palm and along the base of his thumbs. When he looked at the screen, his eyes were afraid.

"Was that really me? Why don't I have a clearer memory of it? It seems like something I dreamed."

"That was you, all right." Cramer looked at the screen with great satisfaction. The figure shown there was small and thin, with a sideways curve to the spine and a big head that sat crooked on the thin shoulders. Big brown eyes swam myopically out of the screen through thick-lensed glasses.

"You lived in that for twenty-six years, Bayle. You never had a good job, never had a woman. When

we've finished and you leave here, you'll have both—but we've got to run a few experiments before that happens."

"Experiments?" The expression of fear mirrored the world-view of the old Bayle Richards. It did not match the tall, poised body, with its clear eyes and regular features. "Dr. Cramer, I don't remember things right. Did I agree to some experiments?"

"You did. As a matter of fact, I could say that body is on loan to you—it won't be yours until we complete the experiments. I'll show you the contract that you signed, if you want it. Don't worry. We're not going to do anything bad to you, just explore some old memories."

"I don't seem to have memories, not real ones. I have little incidents in my head, but I can't put them together." Bayle Richards looked again at his hands.

"John." She had been sitting quietly, watching the two men. Now Lana Cramer leaned forward and placed her hand on her husband's arm. "John, do we have to do this now? I was wondering, wouldn't it be better to let Bayle take a couple of weeks to get comfortable first? Pierre will still be waiting, even if we took a month before we began."

The flash of irritation in John Cramer's eyes came and went so quickly that it was hard to catch. After a moment he patted Lana's hand reassuringly, but he did not look at her.

"Now then, dear, you know I can't do that." His tone was mildly reproving. "I told the Paris Institute that Pierre would be back there in thirty days. We have to begin work now, as soon as the equipment is set up. Bayle and I agreed to all this long ago."

"But he doesn't remember it."

John Cramer shrugged. He was of middle height, broad and well-built, with a heavy chin and thick, barred eyebrows.

"We have it all in writing—on videotape, too. You know we always wondered if all the memories would carry over, that's why we took such complete records."

"And I remember it," said Bayle Richards suddenly. "You showed me what I would look like, and I signed the paper. I can see it, see my hand doing it." He shuddered. "I was in pain all the time, from my back and my arm. God, no wonder I signed. I'd have signed anything."

"Maybe." Cramer's voice was soft but insistent. "Maybe you would have signed anything, I can't tell. But you did sign, and I approved this work because of that. Now we have to carry through on it, and do what you agreed to do. It's not anything that will harm you, Bayle—even Lana will agree with me there. But we have to get started soon, or we won't be finished in a month."

"But I must know some other things." Richards' voice showed that he had lost any real argument. "I haven't been told what you were doing, and I don't remember it. You said my memory will come back in patches, but when?"

John Cramer shrugged and stood up. "I can't say. We have no history on that. I don't see a problem, though, we can tell you anything you need to know. Or Lana can, I should say. I have to go now and get the equipment ready. We have approval to begin work tomorrow, and I don't want to lose time at the beginning."

"John!" Lana Cramer's voice halted him at the door. "I don't know some of the technical details myself. You're the only one who has the full picture."

Cramer shrugged. "I can't see why you'd want that much detail. If you do, call out some of the files onto the screen. I have a record of everything, and the index is set up to be used by anybody. I'll be back in a few hours."

After he was gone, Lana Cramer smiled uncertainly at Bayle Richards. "I'm sorry. That's just John, he never has enough time for anything, especially explanations. I'll do my best. What is it you want to know first?"

"Who am I?"

"What?" She was confused, suddenly carried back to the previous day, with Cramer's insistent "Who are you?" ringing through the operating theater.

"I want to know who I am." Richards leaned forward, stunning her with those startling, clear eyes. "I'm Bayle Richards, sure. But this isn't my body, my body was a wreck. I want to know who I am now. Where's the original owner?"

"You don't remember that"? It was the last thing you talked about with John before we began."

"I'm telling you, I don't remember it. I remember a bit about cloning, how it's done, but I don't remember anything about this body. Did I meet the owner?"

Lana paused. Maybe the personality was Bayle's, but he seemed to be picking up something from the physiology and glandular balance of his new body. The old Bayle had never been so insistent on answers. She looked at him again, seeing the fit of mind and body for the first time.

"I think it would be best if I show you. It may be a shock whatever we do. Come on."

She stood up and led the way out of the room. Moving along the corridor behind her, Bayle Richards seemed to be still experimenting with movement, feeling the flex of muscles in his long legs. She was a big woman, but he was half a head taller. It was a new experience. He could remember the old Bayle Richards, peering up at everyone. That sudden memory was so painful that he paused and stretched upwards, savoring the new look of the world.

Lana Cramer had stopped at a door near the end of the corridor and was working the combination, shielding it with her body. Watching her bent over, Richards felt another unfamiliar sensation, a surge of lust more powerful than the old body had ever known. He remembered Cramer's words, "never had a woman". Part of the reason for that was a lack of desire. The old body was too racked by pain and physical malfunction to support a strong sexual urge.

He moved forward as Lana swung open the heavy door. A gust of cold air met them as they entered the long, high-ceilinged room. The white tile walls gave off a breath of formaldehyde and methyl alcohol. The whole far wall was a bank of massive drawers, a couple of feet wide and high. Each of them bore its own neatly typed label.

Bayle Richards shivered with sudden recognition, as Lana turned to him.

"You remember what this is, Bayle?"

"Yes. Now I do. It's a morgue. You made me a clone from a dead man's body, right?"

"Sort of." Lana Cramer moved forward to one of the drawers and placed her finger on the button that would open it. "You don't remember it all yet? Bayle, I was hoping this would trigger it for you. You're a clone from a dead man all right."

"I don't mind that." He seemed relieved. No chance now that he would meet himself in a hospital corridor, or out on the street. "Show me the body, that won't worry me."

"It might." Lana remained with her finger on the button but she did not press it. "Bayle, I want to tell you before I show you, because this may be a shock. You heard John say that we had promised to get Pierre back to the Paris Institute in thirty days? Well, you are Pierre. And Pierre is the body inside here."

"Well? What difference does the nationality make?"

"It's not the nationality that matters, Bayle. John borrowed Pierre from Paris, and over there he's known as 'Vieux Pierre'—old Pierre. He comes from a sort of peaty salt march near the Dordogne River, just east of Bordeaux."

She pressed the button, and the drawer began to slowly slide open with a low hum of an electric motor.

"Pierre died fighting in the marsh, and fell over into a deep part. They found him when they were draining the marsh two years ago. For some reason, the chemical balance there in the marsh preserves animal tissue perfectly. When they got him out, Old Pierre had been lying there for twenty-two thousand years."

The body was a dark, uniform brown, wrinkled deeply all over like a dried fruit. Bayle had managed one long look before he moved back, nauseated, to lean against the wall. There was nothing horrifying in the appearance of the body itself. It was hard to think of it as human tissue. The shrunken skin suggested a model of painted papier mâché, a child's attempt to shape the human form with paste and paper. Bayle Richards's nausea came from a deeper cause, a sudden feeling that he had lurched back through time to the salt marsh where Pierre had met his violent end. A gaping hole in the throat—from man or beast?—told how he had died. Violently, and quickly.

"But how did Dr. Cramer do it?" he asked, looking across the table at Lana and again feeling the comfort of the long, straight spine and well-set head and neck. "I've heard of clones, but how could he clone from a dead man? He would need complete cells to do it—how could he get those from Pierre?"

"He didn't." Lana had seen how shaken he was by the sight of the mummified body. She had taken him back to their rooms in the hospital and given him coffee and brandy—tiny amounts of both. The stimulants were completely new to that body, and there would be no built-in tolerance for them. She felt guilty about how she had handled the situation. There had been no need to show Bayle Richards, she ought to have been able to do it all with more indirect explanations. He had taken the shock probably as well as anyone could, but there was still a look of perplexity in his eyes.

"John knew he couldn't do a direct cloning," she went on. "He transplanted the nucleic structures from a diploid cell in Pierre's arm to a denucleated ovum from a host female." She blushed a little as she spoke. "We did forced growth of that to maturity in the vitro-labs in the hospital basement. The chromosome transfer was tedious, but we've done it before with no problems."

"Your ovum?" Bayle had caught her look when she spoke of it.

"Yes. But it could have been anybody—none of my DNA got through to the final cell. You are all Pierre."

"Except for my mind. I have no memories of Pierre."

"Of course not. They are all carried in Pierre's brain, not in his DNA. That was John's next step. He had to do the memory transfer from you, the old Bayle, to the cloned body. That was the hard piece. He had built the scanning instrument to read out from you, and read into the new body, but he had problems with

Richards was sipping tentatively at the brandy, his nose wrinkling up in surprise. "If I didn't know I could drink this, my body would insist it was poison. Twenty-two thousand years, you say." He shook his head. "Lana, if I'm a cave man—I still have trouble accepting the idea at all—why don't I look like a cave man? The pictures I've seen looked more like my old body, all hunched over the chinless. I'm nothing like that."

"You're probably remembering pictures people drew of Neanderthal man. But you're Cro-Magnon. From all we can tell, he had a better body and a bigger brain than people do now." She looked him up and down as he lounged back in the armchair. It was as if she were doing what he had been doing himself for the past twenty-four hours, taking an inventory of a new property that had been around for a while but had not been previously appreciated. It was impossible to relate the strong, handsome man in front of her with the old Bayle Richards. She could feel his interest in her. With Bayle, she had never been aware of any questions of sexual attitudes. The man sitting opposite her made such a thought unavoidable.

Lana forced herself to continue, to ignore the sudden sexual tension in the room. "Cro-Magnon man is probably what we all descended from, but we don't know much about him. When you feel like it, I'll show you some of the cave paintings that he did. After all"—she smiled, trying to change the mood—"you're a lot closer to him than most of us now."

"Yes. But you haven't told me why."

"I will. But there's one other thing I have to tell you first." She hesitated, knowing that she was going to do something that would enrage John Cramer if he found out about it. Usually she did anything she could to avoid his disapproval, but this was literally a life-and-death issue for Bayle Richards.

"You signed an agreement with John to let him transfer your memories to Pierre's cloned body. You agreed when you signed that he would not be held responsible for any failure, no matter what happened."

"But nothing did happen, did it?" Richards was looking slightly dizzy. Even the small amount of alcohol—less than half an ounce—was producing an effect on him. "I mean, I'm sitting here, in Pierre's body, and I feel fine."

"You look fine. I don't want you to ever tell John that I said this to you—promise me that—but something did happen. No one has ever done a successful transfer of memories to a stranger's cloned body before. John is the expert in it, and he had troubles. Everything went smoothly for the first few hours, and we were scanning memories out of your old body and into the one you have now. A couple of hours before we were finished, things went wrong."

"What do you mean, things went wrong? I'm here, and I'm in good shape."

"You seem to be. But before all the memories were transferred, the old body died. We don't know why. Bayle Richards just stopped breathing, and we couldn't start him again."

Lana leaned forward, her calm face full of unusual urgency. "Bayle, you may not think you care about this one way or the other, but your old body doesn't exist now. John won't admit it, but there are things about the consciousness transfer process that no one understands yet."

"So why should I care about that?" Richards was gradually moving to the acceptance of his new status. Cramer had completed the transfer, and the loss of the old body was perhaps a good thing. It was no pleasure to be reminded of that crippled, tormented past.

"So what?" he repeated. "I'm here, aren't I?"

"You're here, Bayle, but you don't understand." She leaned forward, took his hands in hers, then quickly released them. She dare not give the wrong signals to the new Bayle Richards. "You signed an agreement that if you occupied this new body, old Pierre's clone, you would help John in his experiments with it. Don't you know what he wants to do next? He didn't pick out this old body, and perform all that work on it, for nothing."

She was looking nervously around her, afraid suddenly that John Cramer would appear while she was speaking. "Bayle, John wants to try and do some memory transfer from old Pierre to you, to this body. He failed when he tried to do transfers to another subject, but he thinks that it would be possible with a cloned body form of Old Pierre when it wouldn't work with a stranger. Now do you see why I'm worried? John is going to insist on it, but there are still things about the process that we know we don't understand. If we did understand, why would the old Bayle Richards have died in the last transfer?"

The French countryside was flat and baked under the hot August sun. In the west the land fell slowly away towards the river. The focus moved in, shrinking the broad landscape view to a narrower scene of moss and isolated clumps of grey-green sedge. That dreary prospect seemed far removed in time and space from the Bordeaux land of vines and lush fruit.

John Cramer paused as he was about to move the scene to closer focus. He looked up in annoyance as the door was opened and light flooded into the darkened room.

"Keep that door shut!" He squinted up, eyes unable to handle the brighter light. "Lana, what the hell are you doing. You know I'm not to be interrupted when I'm working here."

"John." She closed the door and sat down next to him. "I have to talk to you."

"Not now. I'm micro-viewing some of the French material for tomorrow. We have to have it ready so I can navigate with Pierre."

"That's what I have to talk to you about, John. You have to give up the experiment. Last night I did as you asked with Bayle, and we went over a lot of things that he should remember from before the transfer."

John Cramer signed and switched off the micro-viewer with a gesture of irritation. "Lana, what's got into you? There's no way I'm going to stop the experiments now—we're almost halfway there."

She was sitting so close that he could sense her nervous hand movements. "We're not half way, John. That's why we have to stop. Look, you think that you transferred most of Bayle's memories, so you still think he's the old Bayle. He isn't. For one thing, he has less memories than we realized—when we looked in detail at what he recalls of his old life, it's mostly blanks and vague emotional recall."

"Of course it is." John Cramer felt a sudden impulse to violence. A week ago, she would never have dared to press him with this kind of intrusion. His working hours were sacred. "Look, Lana, I'll say one more thing, then I want you out of here so I can get my materials prepared. Bayle Richards is in a new body—one that I still own. The less he remembers of the old body, the better the chance that we can induce memories from Pierre into the new one. He doesn't recall much of the old Bayle because he doesn't want to. Can't you see it, the last thing he needs cluttering up his head is the knowledge of what a disaster he used to be? I don't think the experiment went wrong—I think he suppresses the old Bayle's memories, rejects them from his mind."

There was a silence next to him, but he sensed that it was not the silence of acceptance. She was refusing

to argue, waiting him out. He felt a rising fury at Richards, at the other man's attitudes. Just as Bayle Richards had been replaced by a new Bayle, the same process seemed to be turning the familiar and pliable Lana to a more obstinate and annoying form.

"Well?" he said after a few more seconds. "Do you agree with me, or don't you? I've got work to do."

She recoiled at the intensity in his voice.

"I'm sorry," she said at last. "Maybe you're right, he can't bear to think of what he used to be."

"Do you wonder?"

"No. I can't bear to think of it, either. John, I'll go now, but tell me one thing. What will you do if he refuses to work with you on the next set of transfer experiments?"

There was a creak from his chair as Cramer jerked forward on it. "Refuses? Now, when we're so committed, and he signed the papers to agree to it? You ought to know the answer to that, Lana. I don't let anybody cross me like that, ever. He won't keep that new body of his for a day. I'll trash him, that's what I'll do."

"But his old body died. Anyway, you couldn't condemn him to live in that again—you've seen how he is now."

"Wait and see what I'd do, Lana. I've seen you getting closer to Richards in the past couple of days. Do that all you like, help him get adjusted to that new body. But remember, I own that cloned body. Legally, it's no more than a piece of experimental tissue I assembled in the labs. I'll get cooperation from Richards, or I'll recycle the tissue."

She stood up abruptly. "That's murder, John."

He laughed, a snarl of bitter amusement in the darkness. "Go and learn the law, Lana. Until I sign off on it, that body has no independent status. It's what I make it, that's all. If I have to, I'll start again with another subject. Now, get the hell out of here. Go and tell all that to Richards. I have work to do. If you're so fond of him, you'd better explain what he has to do if he wants to keep that handsome new body."

She made a noise between a sigh and a groan, blundering in the darkness towards the door. Before she reached it he had turned the micro-viewer back on and was adjusting its focus to the French scene. His expression in the darkness was of grim satisfaction. He knew Lana. Now and again, it was necessary to show her who was in control.

"Do I need to run over it again, or do you have everything clear?"

John Cramer's voice was dispassionate but not unfriendly. Now that the experiment was beginning, he had no room for emotions.

"I know what to do." Bayle Richards was lying flat on the bed, a sheet draped over his naked body. A set of electrodes rose from his shaven skull to the computer monitor that hung suspended above him like a silver bee-hive. A second tangle of wires led to the sealed coffin on the table.

"Let's get on with it," he said. "I assume Old Pierre knows what he's doing?"

His voice, unlike Cramer's, was bitter. He and Lana had spent many hours discussing the situation, but always they came to the same conclusion. John Cramer was in control, and all that he cared about was

the continued experiments with Old Pierre.

"Do you think he's doing this because of—us?" Lana had asked.

"I don't think he cares what we do." Richards still felt uncomfortable, even though Cramer had made it clear during their discussions that he knew there was something between them. "He as good as told me that you would do whatever he told you to do. I don't think he worries about your body—he wants possession of your mind."

She had clung to him, but neither of them had faced the real question. Did John Cramer control her? Bayle Richards thought so, but Lana would have denied it.

There was one sustaining thought that lessened Bayle's concerns: no matter what John Cramer's views might be of Lana, or what he might know of the affair, nothing would be allowed to stand in the way of the experiments—and Bayle was central to those. Attempts to transfer memories from Old Pierre through random volunteers had all been dismal failures.

Cramer was peering at the array of dials on the outside of the coffin, then adjusting the settings of the controls that ran inside it.

"I think we've reached the best possible temperature in the casket. It's warm enough to stimulate the right brain areas, and it's cool enough to let us keep going without setting up interference reactions in the body. Bayle, just let your mind run where it wants to. If you begin to get visual or auditory images, just talk into the microphone. I've put that there as a stimulus—we'll pick you up anyway, if you begin to sub-vocalize."

He turned to Lana, who was again at her position as anesthetist and monitor of signal transfer.

"All right. Run a low level sedation rhythm. I think we'll get better response if Bayle's activity level is down from normal. He has to be conscious enough to comment, but not to do too much thinking. Can you find that setting?"

Lana nodded. Her wide mouth was firmed to a worried line. Bayle had not only refused to fight against John Cramer's intent—he had displayed a surprising interest in the project himself.

"You don't understand, Lana," he had said. "I want to know all I can about Pierre. It sounds stupid, but he's closer to me than any of the rest of you."

That remark had wounded her. She had done all she knew to draw him closer, to make him feel that the future would belong to the two of them. Bayle had taken what she offered, but little more than physical attention had been given in return. How much of that was simple physical need? John was unreachable, locked into his world of charts and plans. She sometimes suspected that he had planned her affair with Bayle, to give him more control over both of them.

Her attention was suddenly drawn back to the controls in front of her.

"Something's coming through," she said. "I'm getting primary brain rhythm from Pierre."

Cramer grunted. "Predicted. We got that far with the last subject, it's not an information-carrying signal. Watch for that mixture of alpha and beta waves that you saw when we were doing the Richards transfer to Pierre. That's when a real signal will be getting through."

"I'm getting that too."

"What!" Cramer was over by her side instantly, watching the monitors intently. "Damn it, you're right. We never had that with the others, not even when we tried for hours." He was as excited as a small child with a new toy. "Keep the signal to Bayle as constant as you can, let him start to soak up the flow. After he's had five minutes, we'll cut off the inputs from Pierre and see what we've got. I don't think we can expect—"

"Sun. Bright sun." The murmured words from the figure on the table cut Cramer off in mid-sentence. He swung around, moved quietly to Bayle Richards' side.

"Keep it going, Lana. Don't cut back on the transfer."

"Some of us." Richards paused, as though somehow looking around him, although the form on the table did not move. "Five of us, walking towards the sun. Feels like soft mud under our feet. Skin itches, itches a lot. Something bad there."

Cramer saw that Lana was looking at him, her expression worried. "Parasites. Pierre wouldn't notice them, he was used to fleas and lice. Bayle's too sensitive to feel comfortable in the Stone Age. Keep the signal going."

She looked unhappy, then nodded. "Data rate is up again. Want me to back it off?"

"No. Let's get all the sensory signals we can. I'm tuned in to pick up mainly visuals from Pierre, but I'm going to increase band width and see if we can get audio and tactile—looks as though Bayle has been picking up some of them anyway, he's aware of the skin sensations coming through from Pierre."

He went to the casket and began to reset the probe levels. After a few moments Bayle Richards began to grunt.

"Hungry. Following scent. Horns went this way, two days ago, must keep following until we can surround them at night. Don't like smell. Danger somewhere near us, not our people."

He was sniffing the air, turning his head from side to side. Somehow his features seemed to have become more primitive, full of a suggestion of animal awareness. After a few seconds his eyelids flicked open, then closed again.

"Won't find today," he said at last. "Dark coining, country here strange, can't keep going now. Look for safe place, see if can find water and bad food. Hungry. Hungry."

His voice was trailing off, the words losing clarity.

"All right." Cramer turned back from the casket. "We could keep going and pick up another signal, but there's enough there for me to analyse. I'm cutting off Pierre's inputs. Bring him round, I want to try him with a few visual comparisons."

Ten minutes later, and the electrodes had been removed. Bayle Richards had sunk into a deep natural sleep.

"Do you want me to give him a stimulant?" Lana Cramer seemed relieved, as much as her husband was exhilarated.

"No." He laughed. "Let him sleep a while, he has some information processing to do. Then we'll talk to him about what he saw—couldn't get that out while we were working there, but I'll bet he kept most of those visual images that came across from Old Pierre. Just think of it, Lana. He's been looking at the earth today as it was twenty-two thousand years ago—he could tell you the colors of the butterflies,

describe the actual weather." He took a deep breath. "God, it's enough to make me want to have myself cloned into Pierre's body form. Do you realize what this means? We have a new way to explore the whole of history, right back to the earliest fossils of man. We can find out when language developed, when writing was invented, when we mastered fire—everything."

He looked for a long moment at the body on the table, then turned to leave. "Stay with him, Lana. Stay with him, but let me know as soon as he wakes. I want to hear every word."

"John, what did he mean by 'bad food'?" Her face was puzzled, while she watched tenderly over the unconscious form of Bayle Richards. "Was that something to harm them?"

He shook his head. "I don't know, but I don't think so. I think that he was talking about grasses and berries—things that they could eat if they had to, just to keep going, but things that didn't really count. They were meat eaters, that's what they wanted. Deer, and cattle, and wild boar—risky business. That's why they had to hunt in groups. We'll know soon enough. Watch him, Lana."

His words were unnecessary. Lana Cramer was crouched over the body. Everything seemed to have gone well, but she wanted to see him awaken, to hear him talk to her again before she would be convinced.

"We were walking across some kind of—what's the word?—scree? Loose shale and gravel. Funny thing is, I have no idea at all what it looked like. Seems as though I've blanked it out." Bayle Richards looked up at the ceiling, squeezing his eyes hard shut with the effort of recollection. "Same with the trees and the grasses," he said at last. "I don't get much from them—just their smell, and a feeling about some of them."

"What sort of feeling?" Cramer was listening intently, the tape recorder by his side silently preserving every word. "Colors?"

"No. Definitely not colors. A feeling for uses. That's not right either. A feeling for some special function." He shook his head in annoyance. "What's wrong with me? It's as though there are big blank spots in my memory—but I can see a lot of the surroundings when I close my eyes, and I can hear the sound of the birds and the wind. Is it a bad transfer?"

"Bad?" Cramer laughed, excited and stimulated enough to drop his usual role of the impassive scientist. "It's not bad, it's more than I dared hope for. Bayle, you're doing fine. You have three things working against total recall, and I was afraid that any one of them might make the whole experiment a failure. First, Lana probably told you that Pierre is perfectly preserved, but that's not really possible. There was some decay, there had to be. We were lucky to find as much as we have of preserved chemical memories. Then we had to transfer to you, and that has been a big success. You've been getting more sensation than we ever hoped you'd experience."

"I've had sensation all right." Richards wriggled his shoulders. "Old Pierre had cuts and scratches all over him. He didn't even register them, but they came across to me down below the conscious level. When I woke up I felt as though I had been cut and bitten and stung by every plant and insect in creation. He didn't notice any of it. But what's the other thing working against us?"

"Outlook." Cramer began to flick through the slides in the big projector. "You are trying to see the world through his eyes, but his universe is totally different from the one we have in our heads. Ninety percent of the things that he thought were important are not in your data base at all. You will interpret what he saw, what he did—but the reasons he did them? That's something we'll never know. Here, do any of these look familiar to you?"

The slides that flashed onto the screen represented months of careful work in France. John and Lana

Cramer had travelled over the whole region, recording characteristic land forms and geological features—anything that might have survived for over twenty thousand years. As image after image passed across the screen, Bayle Richards shook his head.

"Not a glimmer. Dr. Cramer, I guess you're right. Pierre didn't even see things like this."

"Keep looking. They must have had some way of knowing where they were, and how to get back from the hunt."

"I'll look, but I think you may be on the wrong track. The one thing that Pierre always seemed to be conscious of is the position of the sun. Could he be navigating by that?"

"Maybe. But what about cloudy days?" Cramer shrugged. "Let's keep looking. What about fire? Did you carry any with you?"

"Fire." Richards hunched his head forward. "Yeah. That brings up all sorts of images. But not on the hunt. There was fire back where we came from—a long way back. Seems to me we had been farther on this hunt than ever before. They were worried about getting into enemy territory, some place where there were other animals or people that would hurt them. Pierre has a sort of built-in smell reaction, his test for aliens. No fire on the hunt, though, and a feeling that we were an awful long way from home. Many days. Maybe we were doing more than just hunting."

"Many days?" Cramer turned to Lana, who had been patiently taking notes of the conversation. "Maybe we spent too much time in the west when we were over there. Do you have anything fifty or a hundred miles to the east? I didn't bother."

"Skip to the end." She frowned, uneasy with the role of decision maker. "You remember, when you went up to Paris I stayed behind and did some sight-seeing. There may be a few shots in there."

Cramer began to flick rapidly through an assortment of images, pastoral villages, inns, river valleys, and mountain valleys.

"Hold it." Richards sat upright. "Back up a couple. There. What's that one? I recognize it, and I've never been to France in my life."

"This one?" Cramer froze on one slide.

"That's it. That's where we came from. We live in caves along the side of one of those big ridges. I'm sure of it—I can even remember which cave I lived in, one with a narrow part that broadens out again into a second chamber." Richards stood up. "Where is that?"

Lana Cramer was consulting her notes. "It's Auvergne, in the hills of the Massif Central, a hundred miles east of the Dordogne. We didn't cover that far over—I took that just as a good view."

"Damn good thing you did." Cramer slapped his notebook against his knee. "That's frustrating. We didn't expect that Pierre would have been so far away from his home base when he got into trouble. I'll have to call Paris and see if they can ship me a couple of hundred other slides of the eastern area. I want to pin down his travels as much as I can."

"You want to end it for today?" Richards was looking tired, but still stimulated by Pierre's memories. "I'd like to keep going for a while. When you showed that shot, I got a whole bunch of other thoughts. A woman, and a child. I think they may be Pierre's."

"You and Lana can keep going for a while. I want to get these other images ordered, but I don't see any

problem if you take notes of everything." Cramer stood up. "Tomorrow, we'll see if we can tap that same area, keep the hunt going and find out how it ends. Make sure you get enough sleep. I think we get better transfer if you are rested."

He left abruptly, his mind already moving on to the next session of the experiment. Lana moved in and turned off the tape recorder. Her calm face had changed, become that of a tormented woman who cannot see any answer to a difficult problem.

"Bayle, I can't go on pretending. It sounds trite, but it's a fact."

"You said you were going to talk to him. Did you change your mind about that?" Bayle Richards did not sound particularly interested in her answer. His eyes were far away, still back in the mesh of alien memories.

"Bayle, I can't face John." Lana sensed the separation but misunderstood the reason for it. "You know he can beat me down, he always could. Can you do it? If I try and talk to him now, he'll ignore me unless he thinks that you can affect his precious experiments by refusing to cooperate with him."

"He can force me to."

"No. He can force you to pretend to work with him, but he knows that he's at your mercy when it comes to the memories you say you have or don't have. That's your edge, Bayle."

He looked at her uneasily. "What are you suggesting, Lana? What should I tell him?"

"Make the bargain with him. You'll work with him to the end of the experiments with old Pierre. But set your price for that."

"And my price?" His voice was too cold, she did not think she was persuading him.

"Your price is your freedom." Her voice dropped. "And mine. I could never win it from him without you helping. He's too strong for me."

He shrugged. "What makes you sure there will be an end to the experiments? Suppose that he wants to go on with them forever?"

"No. Not this experiment. You heard what John said, he thinks he has a key that will unlock all human history. There are another twenty preserved bodies scattered in Institutes around the world. If he wants to explore the past with them, he'll need to have other clones developed, give them consciousness from other Bayle Richardses. When he does that, we'll be free. He won't care where you go when this experiment is over."

He was quiet for a long time, so long that she thought he was not going to give any reply at all. His face was unreadable in the dim light.

"All right," he said at last. "We need to know how long this is likely to go on, whatever happens after it. He has access to those other preserved bodies?"

"He already made the arrangements. I helped him do it. Bayle "——she moved close to him, touching his head gently as though she was afraid that he would suddenly disappear into the shadows of the room——"when will you do it, Bayle?"

"Tomorrow. Before the experiment. Don't worry, I'll do it. I don't want to stay in this place forever, when I could be out there in the world starting everything over with a decent body."

"Both of us."

He was silent again. Finally he shrugged. "I guess so. If John Cramer agrees. You're his wife. You ought to know him well, but if he says no, what do I do then?"

She put her arms round him. "He won't say no." The words were more like a prayer than a statement. "He won't say no to you."

The images that John Cramer had requested from Paris had been scanned and transmitted overnight. Lana Cramer, hurrying back with them from the communications office of the hospital, found the lab already a scene of great activity when she arrived there. John Cramer was supervising the installation of a ceiling projector directly above the table where Bayle Richards would again lie during the information transfer from Old Pierre.

"Over there, then get to the anesthetist station." Cramer's manner to her was cold and brusque. She placed the images on the side table, near the projector, and looked across to where Bayle was already connected to the multiple electrodes that would carry the signal for memory transfer. He was staring across at her.

"Did you talk?" she mouthed to him. Her husband was bending over the casket that contained Pierre's body, but she dare not go across to Bayle.

He nodded, and she gave him an exaggerated questioning look and a shrug of interrogation. He turned his thumb up, then down, and returned her shrug. John had listened, but he hadn't given any definite answer at all. She knew that reaction, the steady nodding of his head, then the sudden turn away or the switch of subject.

"Ask him again later?" She mouthed her question, not sure how well Bayle was getting her meaning.

He nodded, then lay back on the table. She would have to wait until this session was over for details—there was no chance that they would be coming from John, and his stony look made her fear the worst.

"Sedation patterns again, same as yesterday," he ordered, abruptly standing up from his position by the casket. "We're set up today so that we can throw scenes for Bayle's inspection while the experiments are still going on. We'll have to bring him in and out of contact with Pierre while that's being done, but I believe we have that degree of control now. Tell me when you are getting first signal transfer."

Lana forced her attention to the control console and watched the pattern of brain waves that was crawling across the oscilloscope. It was establishing itself even quicker than last time, the resonances building between Bayle's brain and Old Pierre's.

"It ought to get easier and easier," Cramer had told her when she expressed surprise at the ease of contact. "Don't forget their brains are structurally identical. It's not like trying to establish contact between two dissimilar objects. When these experiments are over, we ought to have sucked out most of Pierre's useful memories. It ought to be a bigger challenge when we leave the Cro-Magnons and try it with Neanderthalensis and Habilis. I've located well-preserved specimens of both of them."

Put that way, all the complex experiments that had led to Bayle's links with Old Pierre sounded easy and natural. Lana comforted herself with that thought as the transfer signal strength grew on the screen.

"Don't like smell." The words came suddenly from the figure on the table. "Bad smell. Like the others." Bayle Richards' hand moved convulsively, grasping at something by his side. "Will have to fight again,

beat the others to the horns."

"He's still on the trail," said Cramer softly. "I've edited the images that came in from Paris. Keep the transfer rate high until I tell you, then push it right down. I want him to look at one of the images."

Lana nodded. Cramer seemed to be the same as yesterday, but she knew from long experience that her own ability to read his emotions was negligible. At least the experiment was going well, that suggested he would be in a good mood later.

"Others ahead," said the figure on the table. Was it Bayle Richards at the moment, or was he no more than a vessel for Old Pierre's memories? "Must fight the others, can't go back without food. Cold, need food."

"Northern France still glaciated." Cramer sounded pleased. "I couldn't understand yesterday, when he said it was hot. Makes more sense for him to feel cold today."

"See many ahead of us. They are not the people, they are others. We get ready, move towards them. Bad place to fight ahead, not covered."

"Now." Cramer gestured across to Lana. "Cut the transfer for the moment, I want to try and get a fix on where he is."

As the signal switched from mildly sedating to stimulating, Cramer flashed a scene onto the ceiling above Richard's unconscious form.

"Bayle." The eyes flickered open, then closed again. "Bayle, look up there. Do you recognize that scene? Is it one that you've just looked at?"

The eyes flickered open again, stared up at the color image. Bayle Richards shuddered.

"That's it. That's where we are heading, where the others are. Danger, I think there's danger."

"Shall I cut the connection?" Lana sat with her hand poised over the switch that would inhibit all transfer from Pierre to Bayle.

"No." John Cramer's voice was full of some strange satisfaction. "I know what's happening, it's all right. Put him back to full transfer, let's keep this going."

"But what's the scene you showed him?" Lana, poised over the dials, had a poor view of the ceiling display.

"I'll tell you later." He looked at her impatiently. "Lana, get that signal back up now. We'll lose transfer, and that would ruin everything."

Automatically she responded to the command in his voice and turned on the full signal again. Bayle Richards jerked spasmodically, strained his head around him.

"See them now, they see us. Go forward now, must win and follow the horns. We all go forward together."

He had begun to pant, his deep chest filling to its maximum capacity beneath the covering sheet.

"John, what's happening?" She could hear the deep grunt of effort coming from the man on the table. "Shall I cut the signal?"

"No." John Cramer had moved to her side, leaning over the control panel. "Keep it like that, maximum transfer rate.

I'll tell you when to change it."

"But, John, what's he doing." She looked again at the groaning figure on the table. "He doesn't seem to be walking, and look at his arms moving. Do you know what's going on?"

Struck by a sudden thought, she pushed her chair away from the console and leaned far back, looking up at the scene on the ceiling projector. She screamed as soon as she saw the flat plain with its sparse cover of grass and sedges.

"John! That's the salt marsh where Old Pierre was found. If Bayle is there now, it means that he'll—"

She screamed again and threw herself at the control panel. John Cramer was there before her. As the figure on the table thrashed and gargled, the sounds coming from his throat suddenly agonized and blood-clogged, Cramer held the transfer rate switch open to full maximum. He was too strong for Lana to get near it, even though she struggled desperately. The sound from the table took on a new and more terrible urgency.

He came awake in one piece, his muscles flexing him upright at the same time as his eyes opened to the flat white light. Although he was lying up high, he instinctively rolled down to the floor, reaching up to his head to tear away the uncomfortable attachments to his bare scalp.

Naked, he crouched low and looked around him. He had been brought here without the comforting presence of stone axe and spear, without the cheering smells and sounds of the People. The smells that filled his nostrils now were alien and menacing. In front of him, two others struggled together, not seeming to see him at all or to detect his scent. Before they could attack, he had leapt forward to strike hard at the base of the neck, first the man, then the woman. To his surprise, they both crumpled unconscious to the level floor of the white cave.

He bent over and sniffed more closely at the man. Certainly alien, not of the People. With one efficient movement he snapped the neck, then bit the jugular vein to reach the blood. It had been many days since he remembered eating, but for some reason his hunger was satisfied almost at once. He dropped the man's body to the floor, surprised by the peculiar skins that seemed to cover it.

The woman's scent was different. She was not of the People, but it was good to mate outside the People. If he could find his way out of the strange cave, he would take the white-haired woman with her strange mixed smell back with him to the Home. But he wondered if he would find his way Home. If he had been ended in the marsh—his last memory was of the spear in his throat—then he must make a new life for himself here, in the After-Life. First he must possess the woman, to show that she belonged to him.

He knew how to be patient. Looking around the new cave, he squatted next to her on the floor and waited for her to wake. Already her eyelids were moving. It would not take long now.