

Volume 5

Number 6

SCIENCE FICTION

35¢ **STORIES**

May, 1955

NOVEL

LAST STAND Algis Budrys 4

NOVELETS

LIVE IN AMITY D. A. Jourdan 36

PROTECTIVE CAMOUFLAGE Charles V. De Vet 106

SHORT STORIES

IN WORKING ORDER Ward Moore 55

DESIGN IN STATISTICS Irving Cox, Jr. 63

TELESTASSIS M. C. Pease 78

UGLY DUCKLING Barbara Constant 93

Editor: ROBERT W. LOWNDES

Art Director: MILTON LUROS

COVER BY EMSH

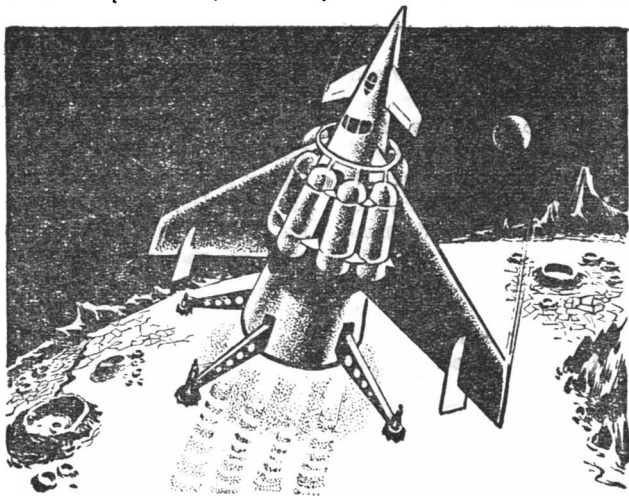
MARIE A. PARK, Asso. Ed.

DOROTHY B. SEADOR, Asso. Ed.

Illustrations by Emsch, Pease, Luton, and Orban

SCIENCE FICTION STORIES, May, 1955, published bi-monthly by COLUMBIA PUBLICATIONS, INC., 1 Appleton Street, Holyoke, Mass. Editorial and executive offices at 841 Church Street, New York 13, New York. Entered as second class matter at the Post Office at Holyoke, Mass., under the act of March 2, 1879. Entire contents copyright 1955 by Columbia Publications, Inc., 35¢ per copy; yearly subscriptions \$3.18. Printed in the U. S. A.

Was it a probable future they saw—or an immutable one?



DESIGN IN STATISTICS

by Irving Cox, Jr.

illustrated by Luton

“MY NAME is Paul Lark. I helped Dr. Roberts build the Historizer. On June 16th I was operating the machine when—”

“One moment.” Senator

McHagle interrupted my testimony in that somber tone of his. “Are you related in any way to Hiram Lark?”

“I never heard the name,” I

said. "Now, about the experiment—"

"Hiram Lark is your second-cousin." Senator McHagle waved a legal-looking paper in my face. "Do you still deny knowing him?"

"Senator, I was subpoenaed to testify concerning the operation of the Historizer. I don't understand what possible bearing—"

"Hiram Lark's wife's sister was at one time associated with a Red Front organization; I have sworn affidavits to that effect in my files."

"I've never met this Hiram Lark. The name means nothing—"

"Careful, Mr. Lark; remember, you're under oath." The Senator smiled with saintly pity and waved another paper at me. "On the fifteenth of August, 1948, you spent a night in St. Louis, at which time you visited Hiram Lark and—"

"That was twenty years ago, when I was a kid of eight!"

"I resent being interrupted," Senator McHagle interrupted me indignantly.

"Perhaps I did meet Lark then," I admitted. "I don't remember. At the time, we were driving west, and when we stopped overnight, dad sometimes looked up relatives who lived nearby."

I felt no real resentment, but instead a kind of clinical curiosity. I knew how the hearing would turn out; I had already seen the results—but it was interesting to watch how they pulled it off. Since it was

impossible for the Committee to question the Historizer data, they had to discredit our work without giving us an opportunity to explain it. Not that they knew what they were doing—far from it—but the future is as immutably unchangeable as yesterday. The Senate Committee was simply playing its blind role in the statistical design of time.

McHagle pursed his lips. "I'm trying to bring out the facts, Mr. Lark, to get at the truth for the benefit of the American people. Your testimony proves your willingness to perjure yourself in order to promote Dr. Roberts' vicious attack on our priceless American institutions."

"It is not perjury when I don't—"

"I said a *willingness* to commit perjury," McHagle reminded me smoothly.

"And Dr. Roberts hasn't made an attack on anything. He simply wrote a book describing the data which he—"

"Alleged data presented by a scientist, Mr. Lark, is something we take with reservation. Scientists seem to have a different definition of loyalty from the rest of us."

This generalization provoked a reaction from two other Senators on the Committee. They wrangled with McHagle for an hour or more as to whether or not the remark

should be stricken from the record. It was time to recess the hearing before they had that issue settled. The afternoon session went off just as inanely. All told, throughout my testimony, I didn't complete more than half a dozen statements. Senator McHagle dragged me from one absurd triviality to another; I never did get around to describing Dr. Roberts' machine, or my operation of it on June 16th.

I MET Chuck Roberts four years ago. We were both working for United Electronics. I was a technician; Roberts worked in the experimental lab, designing new applications of the basic computer patents held by the company. Roberts was responsible for the development of the gadget which United Electronics marketed as the Predictolizer.

The machine is a specialized computer, simplified so that an untrained clerk can use it; it is mass-produced at a price every business can afford. That description I've lifted word-for-word from our ads; it's literally true. Fed sales and market data on a given product, the Predictolizer will analyze future trends with an overall error of less than one percent.

I worked closely with Roberts in building the pilot model of the machine. He dreamed up the design; I built the machine from his plans. Roberts has the brain and the imagination; I'm just a

good mechanic who knows how to follow another man's directions.

When the Predictolizer was on the market, Chuck Roberts began tinkering with the idea of using the same principle to analyze social trends. The big problem there was how to reduce the unpredictable human factor to data which could be handled by the computer.

After two years of experiment, Roberts came up with the idea of combining the encephalograph with the computer; I built the machine from his plans. The encephalographic pattern of three different individuals, of three different generations, is tabbed into the computer. The computer combines the separate brain readings to produce a remarkably accurate analysis of the past. The results are thrown like a film on a scanning screen.

United Electronics marketed the new computer as the Historizer. It never sold as well as the Predictolizer, although it had a greater impact on the popular imagination. Individuals who could afford it bought the gadget because it was an amusing toy. Universities and research scholars used it to check the accuracy of the written record of history.

All that is background for the experiment Chuck Roberts conducted on the 16th of June, when we used the Historizer—with a slight variation in the relay setup—to make man's first statistical exploration of the future. For the

test run Roberts used encephalographs of himself, his son, and his father. I ran the machine for him, because the subjects supplying the analytical data are always on a comatose condition.

The three of them—two men and a boy—lay on couches with the probe wires taped to their skulls. I turned the dials and slowly the pictograph representation of the data came into focus on the reading screen.

I had no way of knowing how far into the future the machine had projected the analysis. It could have been twenty years or twenty thousand. In dealing with the past that factor had never presented a problem. Costume and event gave clues to the historical period, usually enough to identify the exact year; but we have no clue to the chronology of tomorrow.

As it did in reconstructing the past, the Historizer concentrated upon the point of view of a single individual. From time to time the calculator verbalized his emotional state; the words reeled across the bottom of the reading screen, like the interpretive titles in a foreign language film.

I FIRST SAW the subject as he walked down a suburban street, on both sides of which geometrically identical eight-family dwellings made a patterned wall of cement and steel. At intervals there were small, scrawny patches of

brownish grass. The flat buildings were characterless and ugly; young children were playing in fenced areas crowded between the apartments. Occasionally a sleek vehicle shot down the street, moving so fast I could not see it clearly.

The man was of an indeterminate age, somewhere in his forties. He was wearing an open-necked, bright colored jacket, knee-length shorts, and shoes which seemed to be made of plastic. Other men on the street were dressed in the same way. Across the screen came the first interpretation of the subject's mood. "He feels depressed and frightened. The emotion is related to a job change he has been ordered to make."

The man came to a street corner. He paused, looking carefully in both directions; then, suddenly, he sprinted across the intersection. He had nearly reached the opposite walk when a vehicle shot past, missing him narrowly. I heard an echo of mocking laughter from the driver, as the man jumped desperately for the curb.

I prodded the interpretive dial on the Historizer. The machine clattered out, "Present episode unrelated to emotive mind-set. This situation is entirely normal, a risk every pedestrian must take at an unbridged intersection."

In the next block the man turned down a walk and entered one of the eight-family dwelling units. As he opened his apartment door, I

felt a shock of surprise and horror, for he seemed to have plunged into a domestic crisis. A beautiful woman lay writhing on a couch, and a handsome, nearly naked man was ripping off her clothing and kissing her flaming lips. From the shadows a second man was watching. He had a gun in his hand, and he was aiming it carefully at the pair on the couch.

Ignoring the crisis, the subject of the analysis moved to an inner wall and snapped a switch. The scene faded, and I realized that it had been only a story played out on an enormous, three-dimensional television screen. A woman had been sitting in a foam-leather chair watching the drama. She sprang up angrily.

"You've no right to turn it off, John!" she screamed. "It was *Nellie's Secret Lover*, and you know I always—"

"I want to talk to you, Sandy."

THE WOMAN turned toward him. She was wearing a short, blue skirt and above the waist a tight, skimpy blouse which left her bosom almost completely exposed. Rhinestones were fixed decoratively to her skin.

"My story!" she wailed. "I'll never know how it came out!"

"I've been transferred to the school service," he told her as if he were repeating a death sentence.

"What's that to me?"

"I'll have to teach the culture

core; I don't rate high enough to do one of the sciences."

"Well, the pay's the same, isn't it?"

"I can't take any more of this, Sandy." He reached for her hand, but she jerked away. "Will you go away with me? We can sign up for Mars; they accept older people sometimes."

Sandy swept her hand toward the gigantic television screen. "And leave all this?"

"Things, Sandy; that's all they are—machines. If we started over again in the Mars bubble—"

"Don't be a fool, John."

Across the foot of the screen the Historizer spelled out John's emotional pattern, "He feels a strong affection for his wife, and he is unable to make the decision without her."

The woman went to a wall console and turned a series of dials. A vent snapped open and a tray of food shot out. She handed it to her husband. "There's your dinner," she told him. "Now do you mind if I watch *Uncle Jolly's Jesters*? Tonight they're giving away—"

John wrung his hands. "Sandy, don't you understand? They're putting me in the schools!"

She shrugged. "Social Service is the highest classification you ever qualified for; if you wanted something better, you should have arranged to be born with more brains." She snapped on the tele-

vision and dropped into her padded chair again.

In a kaleidoscopic flash of color the scene on the reading screen shifted. The Historizer was built to do that automatically, to sort out significant episodes and telescope the passage of time. When I saw the man named John again, it was apparently the following morning and he was on his way to work, walking down the same, drab street where the pictograph had first picked him up.

John walked for six blocks past the identical, eight-family apartment buildings and joined the line of men moving up the steps of a passenger station. As the camera-eye gained altitude, I could see the square, flat dwelling units stretching endlessly to the horizon, like a geometric pattern of blocks laid out on the earth. There were no trees anywhere, simply the postage-stamp patches of grass in front of each building and the symmetrical grid of streets. Far away, in a haze of smoke that grayed the morning sky, were the towers of a large city.

Although vehicles of some sort moved on the streets—rocketing along at a breakneck clip—the majority of people seemed to use another form of transportation. The passenger station opened upon a series of sliding walks which moved on an elevated track toward the city. The outer walk was very slow; the inner belt traveled at

better than sixty miles an hour. The intervening walks made an easy transition to the high speed lane.

JOHNS FOUND an empty seat on the fast slide-way. As he approached closer to the city, he came to the first of a series of rectangular boxes erected along the sides of the walk. They proved to be a spectacular evolution of the advertising media. Vivid, life-size images—usually lush, nude women—were projected from the boxes. They seemed to travel with each passenger while they cooed their sales spiel.

A blonde talked throatily about a liver compound "to make you feel that old zest for life again." A brunette whispered the virtues of a laxative—"peppy, zippy, snappy, and oh so safe." And a fleshy red-head did a series of bumps and grinds while she sang the sanitary wholesomeness of a cigarette from which everything had been removed. The number of advertisements increased until the projections were tumbling over each other and the clatter of their voices became a screaming Babel.

The slide-walk plunged into the city: canyons of gray stone and a choking fog of industrial smoke. John moved across the intervening belts to the slow-moving outer walk. Over the guard rail I could see into the buildings as they slid past. All were designed for com-

mercial use. I saw no apartments, no hotels, no slums. The city was only a work center; the people lived outside in the ugly, suburban subdivisions. Inside the factories giant machines were hammering out a variety of products—nearly half produced chemically synthetic foods—but the machines were largely automatic. I saw very few laborers; the handful of men at work in the factories seemed to be only repair crews, tinkering at machines which had broken down.

John left the slide-walk at a central terminal. On the thronged city street he walked past display windows which exhibited an infinite assortment of clothing, games, patent medicines, tonics and labor-saving gadgets. Advertising slogans and price scales were flashed at him from all sides. Apparently his was a culture where technology had found a machine to do even the smallest individual chore—and where competitive advertising had run riot.

Here and there, sandwiched on display boards between the big, exhibit windows, were posters recruiting colonists for Mars. The central point was a picture of a stern, gray-haired man—vaguely reminiscent of the cartoonist's Uncle Sam—pointing out accusingly at the mob. Beneath the face red letters proclaimed, "*We need YOU on Mars. OPPORTUNITY UNLIMITED. For details apply to your local tax bureau.*"

At intervals along the walk were racks of popular literature. Neon letters over the stands read, "Current Library Selections." I saw nothing remotely resembling a genuine book. There were one or two serious picture magazines, but the majority were brightly colored comics. The covers were the most lurid illustrations of sex and violence I had ever seen; literally nothing left to the viewer's imagination. A steady stream of men from the crowd put coins in the purchase boxes and selected literature from the racks, reading avidly as they walked along the murky street.

AT A SECOND terminal John took another slide-walk to the outskirts of the city. He got off in front of a high, granite building where the words "City School" were chiseled in stone above the door. Mobs of teen-agers thronged a fenced courtyard. Beyond the building I saw a vast parking lot filled with sleek, low-slung, two-seated vehicles which resembled daringly designed sport cars of my own day. Other cars shot into the lot from the grid of suburban roads. These, then, were the high-speed vehicles I had noticed before—the sort of car which had nearly run John down the previous afternoon. Evidently the sports cars were driven only by teen-agers.

John worked his way through the courtyard crowd and entered the school. In the reception hall

I saw another display rack of current literary selections. These comics, if possible, were even more lurid than the material offered to the adults. The school day had not yet started, and only a few young people were in the corridor. It was impossible for me not to notice the young boy—perhaps sixteen—leaning against a central pillar. He wore brief shorts and a tiny jacket, which left his well-muscled chest exposed. He held a girl in his arms, in a long, passionate kiss; slowly his hands kneaded her back as he crushed her closer.

John went past the couple, ignoring the exhibition as if it were a common occurrence. He pushed a bell-button beside a metal door. A peephole slid open; John gave his name; he was admitted to the administrative office of the city school. A chubby, pink-faced man sat behind a large desk.

"So you're our replacement for the culture core," he said, with disappointment. "This time I hoped they would send a younger man."

"I've had no school service," John volunteered hopefully. "Perhaps if you contact the assignment bureau, you can persuade them to send another—"

"We make do with what we have. The culture core isn't important enough to warrant an official protest."

"I'm not a teacher, sir. Since I took the qualification exams, I've worked in the national archives.

I don't know exactly what I'm supposed to do here."

"That's no problem." The administrator spread his pudgy hands in an expansive gesture. "The culture core is divided into thirty minute periods. You teach history, literature, philosophy, government, the spiritual and moral values of—"

"In only thirty minutes?"

"My dear sir, that is the maximum time we can spare from the important scientific and technical subjects. The modern school is integrated with society; we prepare the child for his life experience." The administrator took a number of paperbound books from a drawer and piled them on his desk—a stack nearly three feet high. "This is the outline of your course," he explained negligently.

"I cover all that," John gasped, "in half an hour a day?"

ACROSS THE screen the Historizer sent the explanation, "John feels an unspecified hatred for his whole civilization. There is a strong image in his mind of the recruiting posters for the Martian colony. He is thinking about his wife's refusal and what he might do to persuade her to change her mind."

The administrator said unctuously, "The culture core in an overview of our social evolution. Don't bog down in details. Hit the high points—the signposts, you might

say, on the long road of human progress. Let the pupil understand how we have achieved our present wholesome perfection by correcting the errors of the past."

"Every day in every way we get better and better."

"Precisely," the administrator beamed. "That's the idea." -

"I was quoting a phrase I once read in a book I found in the archives," John answered stiffly. His irony was self-evident, without the explanation of the Historizer, but it was quite lost on the administrator.

"In teaching the culture core," the administrator continued, "the key to success is pupil interest. Make it exciting; make it entertaining. You have a certain degree of opposition to overcome. The boys and girls hate the culture core because it's the one course they're required to take. And most of them have a natural feeling that if they take the subject matter too seriously they may qualify only for the social services when they take their final classification exams." He shook his head depreciatingly. "But you'll work out good teaching techniques, I'm sure. Just remember, sir, we are completely democratic here; the children run the schools. Find a method to satisfy the majority, and you'll have no trouble."

The pink-faced administrator arose and shook John's hand.

"Your assigned classroom is the

bungalow south of the campus. We have no space for the non-technical courses in the school building proper. You understand the reason for that: the noise and confusion of the culture core would disturb the more important lectures." He glanced at his watch. "You have nearly ten minutes before your first class. That gives you plenty of time to look through your outline and work out some material for today."

John took his three foot bundle of printed brochures and retreated through the metal door into the hall. There were more teen-agers crowding the corridor by that time. Most of them stood in knots talking shrilly in the jargon of youth. A few were reading comics from the library rack. Some younger boys were wrestling with each other or playing tag. Here and there couples were embracing with frank, sensuous pleasure.

Because of the outlines he carried, the teen-agers recognized John as their new culture core teacher. They hooted derisive remarks at him or jostled against him maliciously. John seemed to expect the general attitude of disrespect; he ignored it, or muttered a vague apology. As he walked toward the campus, he passed the open doors of the science lecture halls, where the gleaming array of experimental equipment stood on the lab tables —motors in one room, chemicals in another, partly dismantled TV

transmitters in a third: all the host of mechanical things so vital to his world.

THE CALCULATOR tabbed out a continuous patter of words.

"He feels resentment at the mechanistic preoccupation of his society, where technology has relegated social values to a status of utter insignificance. He thinks of it as a permanently adolescent culture, with the amoral philosophy of a twelve-year-old. The only solution he can see for himself is escape to the Martian colony. He knows there is no legal reason why he cannot go alone, but faithfulness to his wife is a significant part of the value pattern he has made for himself. He must persuade her to go with him."

John crossed the courtyard and entered a dismal, ramshackle bungalow. Rows of rickety, old-fashioned schooldesks lined the splintered floor. At the front of the room was a small, cracked blackboard; a half-dozen dusty, faded pictures of ancient buildings were thumb-tacked to the bulletin board.

John dropped his outlines on the teacher's desk. Dust swirled up, dancing thickly in the slanting shaft of anaemic sunlight that came through the narrow windows. Slowly clenching his fists, John turned toward an apparatus standing in a corner of the room. It was a derivative of the telephone, integrated with a viewing screen.

He dialed a number. I saw his wife's pretty face focused on the glowing view panel. "What do you want?" she demanded.

"Sandy, look at this room. It's where they expect me to teach culture. I can't go through with it. Don't you see—"

"John, do you mean to say you dragged me away from watching *Dr. Kimmer's Problem* just to tell me that?"

"I want to sign up for the Martian colony."

"That nonsense again?" She laughed. "I've more important things to do, John, than argue with you about anything so absurd. Go to Mars, if that's what you want, but leave me out of your plans."

"I didn't mind the social service as long as they kept me in the archives. I was able to pretend that ideas important to me mattered to other people, too. But now I have to rub my nose in the truth. I have to see young people who don't care, and don't have even an idiot's inkling of moral values—"

"That's nothing to me, John."

She broke the connection. He stood looking dumbly at the blank screen. Far away a bell sounded. A mob of scantily dressed teenagers poured into the bungalow, talking and laughing among themselves. Four or five dropped into the creaking desk chairs and opened their notebooks; they were completing written assignments for a class in motor mechanics.

John stood behind his desk. The class ignored him. He asked for their attention and the din of conversation increased. John rapped his knuckles on the wood. A girl of fifteen looked at him brightly. "What's on your mind, Egghead?" she asked.

THE OTHERS gradually fell silent, waiting for his response so they would have something concrete to jeer at. John twisted his hands together; abruptly the muscles of his face hardened.

"No, I won't run away to Mars," he said, more to himself than to his shiny-faced audience of adolescents. "I have a responsibility here; I never thought of it that way before. Perhaps I can't teach any of you a system of values, but I can make you distrust what you have now."

Somewhere in the room a boy laughed; the others took it up in chorus. John waited for the laughter to subside. "You expect to hear a thirty minute lecture from me," he said. "That's what a culture core teacher is supposed to do—dish up some entertaining tidbits that you can forget five minutes after you hear them. By all means, I must be amusing; it's a cardinal sin if I don't hold your interest. Everything I believe in has to be sacrificed to that."

He took his ponderous course outline and symbolically crammed it in the wastebasket. "But I'm

going to do it differently. I won't tell you about the past. If you feel any curiosity, dig the information out of the archives for yourselves. Starting today there's going to be a new subject covered by the culture core. And that will be you—yourselves."

"I don't get it, Egghead," one of the teen-agers said uncertainly.

"What could be more entertaining?" John demanded savagely. "A generation totally without frustrations—for only rules can frustrate, and you have no rules. Only a standard of values can instill a sense of guilt, and you live without standards. The well-adjusted people. We've cleansed your minds of neuroticism and madness, but we've washed away the soul in the bargain. Now I'm going to dissect your minds and—"

At that point the projection screen on the Historizer went blank. I saw the words, "Hypothesis derived from the data is—"

Frantically I twisted the dial to demand more information, but in a figurative sense the calculator shook its head by stating, "Additional specifics unnecessary."

The Historizer is, after all, only a machine designed to present a scientific generalization relative to social trends. When the machine has all the data necessary for a valid conclusion, it makes no superfluous exploration. The human drama, in which an observer might have taken an emotional interest,

had no meaning to the machine. I could not return to John's situation in order to discover what solution he attempted to his own problem. Since the Historizer had not seen fit to explore it at greater length, I could only assume that whatever John tried had not appreciably altered the statistical pattern I had seen.

Helpless, I watched the orderly formation of the generalization on the reading screen. "The culture is technologically very complex, predominantly materialistic. Artistic creativeness as well as moral philosophy are subordinated, and will finally disappear. The individual misfit is rare; the majority are attracted to the frontier colony on Mars. Although material invention is multiplying, social invention is at a standstill. The prognosis for such a society is conformity at its present level of adjustment, followed by a steady degeneration. Without a value system a human culture has no goal; without a goal, that culture moves inevitably into aimless chaos and dissolution."

BY THAT TIME Dr. Roberts, and his father and son, had recovered from the encephalographic coma. I removed the electrodes from their skulls. The Historizer works in such a way that they were aware of the data I had observed on the screen; the calculator transmits the details directly into their conscious minds.

"What a miserable way for civilization to end," Chuck Roberts said grimly.

"Can't we do something?" his father inquired.

"To change the culture?" I asked. "The Historizer has been accurate in every analysis of the past, down to the smallest detail. This data about tomorrow must be right, too."

"It's only a statistical accuracy," Roberts answered firmly, "the evolution of civilization as it exists now. We weren't observing a real future, but only a probability."

"I wonder," I said. "When we apply the Historizer to the past, the reconstruction has concentrated on real people."

"Because the past already exists. Tomorrow is different. It could be what we observed, but man by the exercise of his will can always re-make his own destiny. We know while elements in our present culture were overemphasized to create the situation we saw. All we need do, then, is make the public aware of the danger, and we can change the pattern."

On that basis, Dr. Roberts wrote his book. The rest is current history: the spectacular newspaper controversy, the storm of critical articles in the big, national magazines, and finally the Senate hearing. Unlike many scientists, Dr. Roberts had a knack for making himself entirely clear. Perhaps people reacted because they understood

him; or perhaps because he attacked our most popular shibboleths.

On the surface it would seem that a defense of morals was one thing that even Senator McHagle could never consider subversive. He analyzed the false sentiment and the suggestive sexual immorality underlying the comic books, the TV soap operas, the happy-ending fairy tales in the slick-paper magazines; he demonstrated how the mild opiate of today could become tomorrow's social paralysis. He condemned the educator's philosophy of education, which had substituted technological skill for the moral values derived from academic scholarship. By all odds Roberts' most vitriolic criticism was aimed at the advertising profession, where sex had become the touchstone for selling everything from toothpaste to vacuum cleaners.

Various groups agreed wholeheartedly with parts of his book; no one accepted it all. Goodhearted church folk quoted Roberts on comic books and the sins of the silver screen. But they screamed "Un-Americanism" because of his attack upon the advertisers—which the hucksters' fraternity managed to interpret as an underhand attack upon the fundamentals of free enterprise. It was inevitable that Roberts would sooner or later tangle with the McHagle Committee.

NAIVELY, Dr. Roberts welcomed the investigation. He knew it would be televised. He thought it would give him an opportunity to make his point to millions of viewers.

I was more realistic; I knew the McHagle technique.

From the beginning I had never been entirely able to accept Roberts' conclusion that the Historizer had shown us only a statistical probability; John had been an entirely real individual to me. I was certain that I had seen the future, and that nothing we did could change it. Yet it puzzled me when Roberts' book sold so rapidly—half a million copies in two months' time. If he aroused so much popular interest, his point of view was bound to have some effect.

And that created a paradox. If we had seen the future, then it existed just as surely as the past did. Tomorrow is "tomorrow," standing always on the shoulders of "yesterday". If Dr. Roberts actually succeeded in erasing the degenerate trends from our present culture, what happened to John and his world? How could we condemn a reality to non-existence?

The McHagle investigation cancelled out the paradox. In theory, McHagle subpoenaed us to testify to the accuracy of the Historizer data Roberts had published; in actual fact, we were put on the stand to be ridiculed with irrelevant side issues. I knew the meth-

od; I knew how it had to end. Roberts fought hard for his point, and he fought with the cold, precise logic of the scientist; but it was no match for McHagle's emotional paranoia.

At the end of the hearing, the Committee made no indictment, but Roberts had been thoroughly discredited and his research was condemned as Un-American; both Roberts and I were dismissed by United Electronics as security risks. Our job prospects were nil. Roberts might have been a broken man—McHagle's victims usually were—but he had an amazing resilience.

HE WALKED out of the hearing room jauntily, with an air of undefeated pride. As soon as we escaped the mob of photographers, he took my arm and we went to a nearby park. We found an empty bench. For some minutes neither of us spoke. Roberts breathed deeply of the fresh, clean air, as if it would drive the stench of the hearing from his mind.

"When the Historizer broke off the data projection," he said suddenly, "John was faced with a problem very much like ours. I had the impression that he thought he had found a solution."

"I did too," I answered, "but we don't know what it was, and I can't see how it would apply to our situation, in any case."

"Not his specific course of action, Paul. But the method—that's what counts."

"He told the kids in the classroom he wasn't going to teach; he threw his course outline away; then he said—"

"Exactly, Paul. He junked tradition because he knew it had failed before. I've tried the scientist's traditional method of presenting a conclusion, and the McHagle investigation has destroyed the results; therefore, I have to use another technique."

"You still believe you can change what's going to happen?"

"Paul, the only reason we make the statistical analysis of trends is to avoid the predictable pitfalls. The future is always in our hands."

But if people reject the truth, what else can you do?"

"Make a lie, then, that people *are* willing to believe in." Roberts smiled slyly. "I have money, Paul, and I have friends. That combination works miracles. Let's admit that the future we saw was something we manufactured—something ghastly and subversive. We'll do it dramatically, with a lot of public contrition; that automatically transforms us into McHagle heroes. It's a quirk of our time that the confessed subversive somehow becomes a more loyal American than the rest of us. Then, I'll persuade a friend to publish a sham

version of tomorrow—a goal so alluring and so attractive that we'll all jump at the chance to work it out." He looked into my face and I saw the gleam of hope in his eyes. "All we have to do is disturb the present configuration of data slightly, and the whole probability trend becomes invalid."

Dr. Roberts may have had the answer. But I never knew exactly what he had in mind, for, as we left the park, he was struck by an automobile. He died thirty minutes later, without recovering consciousness.

In a general way, I knew what he wanted to do, but not how he planned to do it. As I explained earlier, Roberts had the imagination; I'm just a mechanic who can follow directions. I've had the complete co-operation of Roberts' friends, but we haven't come up with a sham future attractive enough to take the mass mind by storm. When we finally published

our fabricated data, the book sold less than a thousand copies.

The public has lost interest in the analysis of the future because of the popular excitement over our first successful rocket ship landing on Mars. The newspapers are already talking about building a Martian colony. The planet is unbelievably rich in uranium ores.

Only last month a new gadget was introduced: a machine by which advertisers project realistic, three-dimensional images directly in a prospective buyer's vision. Already signboards along the highways are being replaced by the rectangular, projection boxes.

I wonder: could Roberts really have made it any different, if he had lived? Or is the evolution of tomorrow as inevitable and as unalterable as the data of yesterday? Was all history predetermined at the moment when the first living cell emerged from primordial slime?

