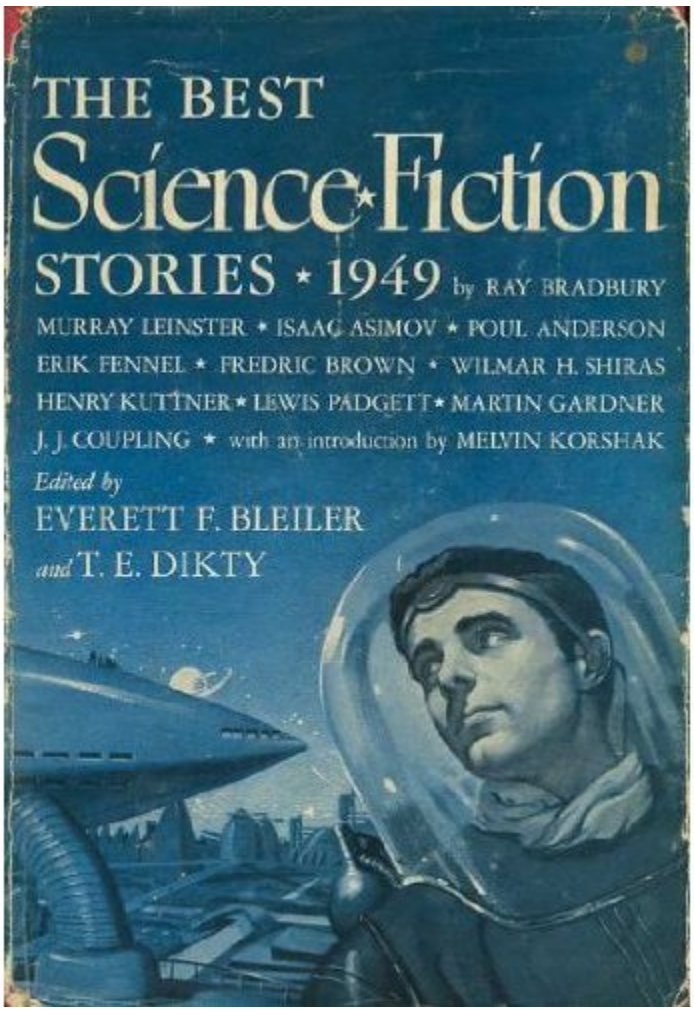

The Best Science Fiction Stories: 1949

Edited by Everett F. Bleiler and T. E. Dikty

Introduction by Melvin Korshak

RAY BRADBURY • ISAAC ASIMOV•MURRAY LEINSTER • ERIK FENNEL•FREDRIC BROWN • HENRY KUTTNER•J. J. COUPLING • LEWIS PADGETT•POUL ANDERSON • MARTIN GARDNER•WILMAR H. SHIRAS

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TO
the many people who have asked us what science-fiction is and to
ALDOUS HUXLEY
who has given the answer.

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Introduction

TRENDS IN MODERN SCIENCE-FICTION

Melvin Korshak

IN THE past there were several types of stories that were based on imaginative science, although they were not unified into any single body of literature. Of these, perhaps the most important were the utopias, which date back to Plato and Euhemerus. From the utopias science-fiction obtained several of its most important elements: settings in other times and places, superior science, and social change. And not too dissimilar from the utopia was the lost-race story, which is essentially an adventure story concerning a hidden land out of communication with the rest of the world, in which some well-known race of antiquity, usually Greeks or Egyptians or Mayas or Aztecs still survive. The great classical scholar Gilbert Murray wrote one such story, while H. Rider Haggard has probably been the greatest influence in its development. Also present were future-war stories, usually symbolizing a nation's dread of being conquered, of which perhaps the most influential was George Chesney's Battle of Dorking published in 1871, the Orson Welles program of its day, which set England in an uproar when it appeared at the time of the Franco-Prussian War. Nor can the interplanetary story be overlooked. In its earliest forms it is a religious expression of cosmic experience as old as Plutarch's myth of Arideus, who undertook a cosmic voyage before visiting the land of the dead. Then there was the mad scientist, an iconoclastic offshoot of the Romantic period, with man in rebellion against society. There were other types of stories based on imaginative science too—stories of world destruction by cataclysmic forces; of incredible invasions by nature; of suspended animation—and other imaginative themes too numerous to mention here—all of these contributing to the general background of literature. The importance of these earlier usages of imaginative science in literature was not only that they pointed out new themes for the use of the writer of fiction, but also they proved that the reading public, for the

sake of the story, would accept a fantastic premise in fiction. The famous critic Coleridge called this reader cooperation "a willing suspension of disbelief."

At the close of the 19th Century and during the early years of the 20th, the first two modern science-fiction authors and the first modern science-fiction publisher appeared upon the scene: Jules Verne, a Frenchman, H. G. Wells, an Englishman, and Hugo Gernsback, an American. To understand the roles of these men, and to appreciate their contribution to the science-fiction of today, the reader must bear in mind that science, by the time they lived, had to be pragmatic. With the advent of the 20th Century the science of the laboratories had become an acknowledged influence on the lives of many people. The Industrial Revolution and its far-reaching consequences, to say nothing of the tremendous currents of 19th Century thought, of socialism and sociology, of evolution and economic determinism, had left their positive mark.

When Jules Verne began writing stories of imaginative science, he consolidated several of the older, specialized stories of the 19th Century. With modern, popularized science for his backgrounds he produced simple adventure yarns hinging mostly on man's sense of wonder at the strange things that science could reveal—as in trips to the center of the earth, voyages to the moon, and journeys around the solar system. Thus, to understand Verne's influence on the modern development it should be noted that Verne who wrote adventure stories with only side flashes of science would fall far left of center of an imaginary line, representing one of the possible poles of the modem science-fiction story.

In complete contrast to Verne, and at the opposite pole, was Hugo Gernsback. Gernsback, although born in Luxembourg and educated in Germany, was an American publisher of popular science magazines—of "do it yourself" and "science made easy in the home" publications. His entire purpose was to sugar-coat science, and to make it palatable to the largest possible reader-base. In his early publication The Electrical Experimenter, and later in his Science and Invention, Gernsback served a diet of popularized science with occasional science-fiction to vary the fare. Such stories as Clement Fezandie's Dr. Hackensaw series, and Gernsback's own novel Ralph 124C41±, which was about as close to a science text as anything ever disguised as fiction, appeared in these publications, and are excellent examples of the science-fiction story for science's sake.

Between these two poles, and approaching the well-balanced center, was H. G. Wells. The importance of Wells can he found not only in his personal background and orientation, different from Verne's, and later from Gernsback's, but also in his application of these factors to his stories. In his better, purely imaginative romances, Wells wrote less adventure stories with scientific backgrounds or science stories with adventure backgrounds, than stories built up around some scientific idea, often with a stress on social significance. For the strength of Wells' stories, in the final analysis, is that they are written about sympathetic and understandable human beings and human values in his effort to determine the 'status of man and the human spirit in the shifting currents of modern thought.

Even with our short perspective in time H. G. Wells emerges as the greatest name in modern science-fiction. Wells not only brought together the isolated lumber of the earlier authors and constructed a framework, but also provided a house in which his successors lived. He anticipated most of the themes for the thirty or forty years following The Time Machine in 1896, and as a literary craftsman far exceeded his successors. A completely new generation of writers, with thirty or forty years advance in the sciences, was needed to develop new themes of any importance. He was thus both a great and a terrible moment in the history of science-fiction.

When Wells stopped writing science-fiction as such, the scene of its modern development shifted from Europe to America where notably in the Munsey chain Bob Davis, the very capable editor, offered "different" stories—basically adventure yarns with either science or fantasy backgrounds to add to their appeal. Interestingly enough, some of the finest stories in imaginative literature appeared in this medium; much of it eventually gained the permanence of book publication.

Outstanding during this period were such authors as Ray Cummings, a former assistant of Edison's, who developed several of the most important modem themes such as the adventure into size and the pursuit through time; Edgar Rice Burroughs, the creator of Tarzan, who was a great influence in carrying on the chain of lost-race and Kipling-like adventure stories; A. Merritt, later the editor of Hearst's American Weekly, who gave the lost-race story a depth, flavor, and literary quality it never before or since attained; George Allen England, a fervent socialist, whose Darkness and Dawn trilogy in the old Cavalier Magazine showed whatcan happen when our artificial civilization is dead and man has a chance to rebuild; Homer Eon Flint, with his first-rate adventure stories developing out of science; Austin Hall, who brought German transcendental philosophy into pulp adventure; and, represented in this volume, Murray Leinster, who has consistently led the field with new ideas and effective writing.

Not until 1923 did the first all-fantasy magazine, Weird Tales, appear, specializing primarily in stories with weird and supernatural themes, but also carrying a small percentage of pure science-fiction. Weird Tales was important in the development of science-fiction for it showed that an all-fantasy magazine was commercially possible, and it provided a developing ground for many modem authors.

In April 1926 the first all-science-fiction magazine was established in America, when Hugo Gemsback's Amazing Stories came into being. Gernsback, as we have already seen, had pioneered with science-fiction in his earlier publications

The Electrical Experimenter and Science and Invention. His policy was still one of emphasizing science in "scientifiction," but during the first two years of publication he was forced to lean heavily on reprinting older material, until such time as he was able to develop new talent and authors able to write to his specifications. For this reason he was forced, during the first two years, to rely heavily on such established "name" authors as Edgar Allan Poe, Garrett P. Serviss, and Jules Verne. That Gernsback recognized Wells' gigantic stature as an author is shown by the fact that he published one of Wells' science-fiction stories in each of the first twenty-nine issues of Amazing, and sporadically after that.

By 1928 Gernsback was able to get a greater proportion of stories from newer American writers, and with the use of considerable material translated from German writers, Gernsback continued his policy of science over fiction (excepting in such notable cases as the stories of Dr. David H.

Keller) when he left Amazing to found Air Wonder Stories and Science Wonder Stories in 1929.

In 1930 Clayton Publishers released Astounding Stories of Super Science, and this magazine, in contrast to Gemsback, went back to the Verne extreme—restressing the adventure and fiction element in science-fiction. Then in 1933, under Street and Smith, F. Orlin Tremaine assumed the editorship of Astounding Stories and began to stress stories combining both science and adventure elements, a fusion which laid the basis for a new development of science-fiction under John W. Campbell, Jr. a few years later.

Within the past few years the two extremes have, in optimal instances, been united with a certain amount of success within Astounding Science-Fiction, and somewhat later in Thrilling Wonder Stories and in Startling Stories, so that science-fiction has become a serious form of literature. The importance of these magazines is that they proved that there was a large reading public for stories of this nature, and in addition, provided a market for new and different stories.

Among newer authors who have made contributions to modern science-fiction are Dr. Edward Elmer Smith, an outstanding research chemist, whose cosmic imagination created entire new universes for Promethean man to triumph in; Stanley G. Weinbaum, who before his untimely death instilled life and warmth from his own personality into his characters; H. P. Lovecraft, America's foremost modem master of weird honor, who added a new depth to science-fiction by stressing man's insignificance when faced with cosmic horror beyond his reason; L. Sprague de Camp, who brought sharply ironic humor to the otherwise forbidding world of test tubes and machines; Robert A. Heinlein, atomic mathematician, whose fresh interpretations of the problem of the individual during technological and social changes in his Future-History series have received wide acclaim; A. E. van Vogt, who in fictionalizing the non-Aristotelian logic of

Korczybski's semantics has added new thought-concepts together with breath-taking action; John W. Campbell, Jr., who as an author emphasized not merely scientific gadgets but characterization and mood, and who as an editor has been a pronounced influence in science-fiction for the past twelve years; and Henry Kuttner and Ray Bradbury, whose superior literary techniques and balanced humanistic views of life point the way toward newer and better developments within the genre.

While science-fiction was developing in the specialist-magazines, a parallel movement was taking place in the world of books. In both America and England, to say nothing of many other countries, outstanding books using imaginative science were written and published when authors realized that fantasy of any sort gave them a freedom lacking in other types of stories. Indeed, a roll-call of these modern authors of science-fiction within hard covers sounds like a who's who in modem literature. Some noteworthy examples are Herbert Read, famous British critic, whose Green Child is considered a masterpiece of English style; Professor Olaf Stapledon, who in Star Maker and Last and First Men has projected man into the vast panorama of the future to find God and himself; the irrepressible Philip Wylie, whose Gladiator and contributions to When and After Worlds Collide are milestones in modern science-fiction enjoyment; S. Fowler Wright, who is primarily concerned in such serious fiction as The New Gods Lead and The World Below with the problem of man struggling between the gods of formalized religion and the gods of science and civilization; John Collier, master of the fantasy short story, whose Tom's A-Cold is a brilliant successor to Richard Jefferies' After London; and Gerald (H. F.)

Heard, whose vast erudition and mystical insight have combined to produce such thought-provoking works as Doppelgangers and The Great Fog. Most important of all, perhaps, is the brilliant Aldous Huxley, who in Brave New World and Ape and Essence has utilized the arguments of modern science to show its own fallacies, and has indicated a new and better path for man.

Such books as these have the advantage of not only following the best trends of modern thought with their inquiry into metaphysical problems of modern man and the place of the human spirit in our complex and confused world, but also, by the use of science-fiction as a vehicle the writer has gained for his researches and inquiries freedom not so readily available in other literary forms. This same trend has appeared to advantage among the best modern writers for the magazines.

It will be seen that the best modern science-fiction is a combination of two earlier extremes: a heavy science story and a pure adventure story; the first written to instruct, the second to entertain. Each of these two extremes produced little of value. It was only when both streams united, as in the optimal case of the most modem trends, that something of general interest occurred. Thus, today, we have occasional stories which rise above either extreme, and are valuable entertainment. Such are the stories that the editors have selected for this volume; such are the stories which this series is aimed to encourage.

Chicago, Illinois

Anril 7, 1949

Preface

TO TELL what modern science-fiction is would almost take a book in itself. We might answer best, however, by advising the reader to read the stories in this book, and then decide for himself. The old Chinese saying that one image is worth a thousand words would most certainly apply here. But, to give the reader a hint, a foretaste of what is to come, let us say that science-fiction is fiction based on imaginative science, or with imaginative science for a background.

The use of such imaginative science in literature has had a long history. Many of the greatest figures in world literature have written what might be called science-fiction, and much scholarship has been expended to show their indebtedness to the science of their day. A short list would include Daniel DeFoe, W. H. Hudson, Aldous Huxley, Edgar Allan Poe, Jean Jacques Rousseau, Jonathan Swift, and H. G. Wells. And there are many others who have contributed in some measure to the shaping of the present genre. But for a more detailed history, we shall refer the reader to Melvin Korshak's excellent introduction.

We shall be more concerned with showing that science-fiction can be a respectable form of literature, and that it can have some value for our culture. We might point, first of all, to the fact that much literature is science-fiction, as the names which we have already mentioned will show, but will instead offer more cogent reasons to demonstrate that science-fiction has value: its scientific truth, its educational value, and its artistic truth.

If we remember that H. G. Wells in The World Set Free told of a workable atomic bomb in 1914, that Jane Webb discussed television in 1827 in The Mummy!, and that in 1892 Robert Braine in Messages from Mars mentioned the horrors of bacteriological and chemical warfare in very practical fashion, we can see that science-fiction is not really so fantastic that it has no merit beyond refuge from reality. A glimpse at the history of science-fiction, on the contrary, will show that authors on the whole have not overstated human progress, but often instead have been surpassed by it. And there has been a large middle ground where science-fiction and history have conveniently met, and many apt predictions have resulted.

Nor has science-fiction been without repercussions on the life of the individual. The British Academy of Sciences was founded as an outgrowth of Sir Francis Bacon's utopia, The New Atlantis, while many an attempted utopia was founded in the 19th century under the impact of the striking systems of Edward Bellamy, Theodor Hertzka, and others. The influence of the various utopias, most of which called for social reforms, should not be underestimated.

Thus, even though we freely admit that science-fiction is not an unfailing prophet of the future, we claim that it is not always too fantastic to happen. Unfortunately, the situation is just the reverse.

The educational value of science-fiction might be considered as a second point. In the early days of the American development of science-fiction, much emphasis was placed upon its pragmatic value as a sugar-coated way of acquiring knowledge. These were the days, of course, when text-book science was

quoted in whole pages to give body to a story. Science-fiction, it is true, can offer a palatable mass of facts for easy consumption, but we should not overestimate its potentialities as education. Much depends upon whether the individual knows where to draw the line between the scientific fact and the fancy of the author's extrapolation. The modern development of science-fiction, on the other hand, has stressed less the scientific aspects and more the story and human elements, hence we should not overrate its possible educational value.

But, by far the most important of science-fiction's claims to be respectable literature is to be found within its very essence. This consists of an insight and investigation into a specific aspect of life which no other means can offer: the relation of man to science. In no other time in history has the happiness and fate of the entire world been linked so intimately with the thoughts and manufactures of a few thousand men, the scientists, or so dependent upon that abstraction—science. Modern science-fiction at its best is essentially a fictional attempt to investigate man's relationships with science, and in investigating an aspect of human experience is fully as valid as a similar fictional investigation of sex or society. The reader will notice how many of the stories in this volume are intimately and seriously connected with man's problems of adjustment. Such a quest can hardly be called escapism, but, in the historian Toynbee's sense. might better be called "withdrawal."

Science-fiction offers at least two important solutions to man's problem of adjustment, both of which present consistent views of the universe and man's place in it: that of the rationalist, and that of the nonrationalist.

The first of these is essentially the philosophy of those scientists who write science-fiction. It regards science as the potential savior of man. It sees man, with the aid of science, triumphant over the universe. At its worst we might say that this philosophy conceives of the universe as a gigantic "white man's burden." Science for these men is a logically coherent system of mechanical principles which can be discovered, by the human reason, and the human reason is mans greatest glory. The authors and readers who have accepted this logical positivist solution to the world are very largely those who have been attracted to Korczybski's semantics.

The other solution, held not so much by the scientists themselves, regards modern science not as man's greatest glory, but as a misgrowth, and demands the return of human values to the universe. It sees a complete man, with art, emotion, and culture, as the center of the cosmos, and recognizes that there are many factors in life which are not amenable to reason, but are frankly nonrational. It is this mode of thought which some of the more important authors who have used science-fiction have expressed, as Aldous Huxley, H. F. Heard, S. Fowler Wright, and Olaf Stapledon among contemporary authors, and William Morris, and W. H. Hudson in an earlier generation. It is essentially the philosophy of such men as Goethe and Carus as opposed to Darwin and Haeckel.

Both of these two trends or attitudes are represented in the stories contained in this volume.

Let us summarize by suggesting that science-fiction often may be a respectable form of literature and of value for four reasons: historical precedent, prediction value, educational value, and insight into one of man's most pressing problems.

In selecting these stories we have been guided first of all by literary craftsmanship and artistic insight, secondly by the desire to make a representative selection of trends and ideas within the modern range of development. We have not restricted ourselves to the specialist magazines, but have read all the media in which science-fiction occasionally appears, including the "slicks" and the "little magazines."

Ray Bradbury's Mars Is Heaven! is one of the most effective surprise stories that we've ever read. The simple homely atmosphere of the first part, the restrained action, and the emotional reactions of the

crew at finding their beloved dead on Mars all form a wonderful contrast to the surprising denouement, when the Martians are revealed. It is also historically most interesting in combining two of the oldest motives in fantastic literature, Mars as Heaven, and the shape-changer. The concept of the planets of the solar system as stations in the progress of the soul dates back at least as far as Plutarch, and has persistently accompanied the interplanetary motive through the centuries. In the 19th century it was given a new burst of life, in spite of the prevailing rationalism, in the work of Louis Figuier and Camille Flammarion. The shape-changer, a monster who can assume any form for his own evil purposes, is old in folklore. One used to haunt the caravan trails along which Sir John de Mandeville travelled. In modem times, John W. Campbell, Jr. has very effectively made use of the idea in his classic Who Goes There?.

. . . . And the Moon Be Still As Bright emphasizes another mode of Bradbury's thought. His sense of humility before the universe, his deviation from the customary human egocentricity of much science-fiction are both refreshing changes. The naturalism with which he drives home his message of man's insignificance is most effective. The emphasis on the complete man, with the reintroduction of feeling and aesthetic norms, makes Bradbury stand somewhat apart from the typical writer and reader of most science-fiction. He almost forms a focus for a reaction against the physical sciences within the literature of the physical sciences itself.

Kuttner's Happy Ending is perhaps the best example of the modem Gothic story which has come to our attention. We call it Gothic with. no disparagement. One of the strongest trends in science-fiction in recent times has been a return to a complex plot and denouements by revealment with all the tricks and devices of the older Gothic school. Kuttner often presents such a plot, as opposed to the simple linear plot of most science-fiction, but most certainly not with the naivete of most of the others who have used the same techniques. Happy Ending stands out within its field. The complete involvement of motives and absence of loose ends and illogical propositions might serve as lessons to many who have tried the same technique. The subject-matter of the malicious robot, incidentally, is as old as Frankenstein and the Golem.

Ex Machina by Padgett illustrates the possibilities of a tale of mystification based on fantasy. The destruction of the ordinary barriers of reality within fantasy permits almost endless possibility for mystery far more puzzling than that of the ordinary whodunit, where space and time combine to limit the author. Yet few writers within the science-fiction field have taken advantage of this liberty. Ex Machina also shows Padgett as a science-fiction humorist, in which capacity he has been almost a pioneer within a notoriously humorless field of writing. The trial scene, as good as any from Thorne Smith, will bear out this assertion.

Poul Anderson's Genius presents a viewpoint directly opposed to that of Bradbury's stories. Reason is evaluated as man's sole protection against the evil forces both within and without him. Particularly interesting is Mr. Anderson's solution to the same problem that Aldous Huxley considered very briefly in Brave New World: the problem of adjustment in a world of geniuses. Mr. Anderson is more optimistic than Mr. Huxley, whose geniuses kill each other off.

Fredric Brown's clever little story Knock is based on the horror anecdote attributed to Thomas Bailey Aldrich—the last woman on earth hears a knock on her door. Brown's sarcasm and irony fit well with the restraint with which he handles a vast subject, nothing less than the almost complete destruction of the human race. Well-known authors have dealt with the same theme before, as Mrs. Shelley in The Last Man, M. P. Shiel in The Purple Cloud, and S. Fowler Wright in The Adventure of Wyndham Smith, but we wonder whether they would have had the courage to tell Brown's story of a middle-aged unromantic professor and an unwilling female.

J. J. Coupling's Period Piece develops the theme of the feeling robot. It also recapitulates, although

probably unconsciously, the heresy of Valentinus the Gnostic, that a created being suffers because of imperfections put into it by an imperfect creator. Mr. Coupling's story is by implication the story of man himself, who is but a puppet in the hands of the gods, and so great is the feeling of sympathy which Mr. Coupling arouses that we almost feel ourselves to be the Period Piece.

Martin -Gardner's amusing Thong will probably be very much a surprise to the readers. Mr. Gardner has very ably and whimsically revived an ancient mythological concept—a world-eating monster who is cousin to the Mexican and Chinese monsters that eat the moon to cause eclipses.

Doughnut Jockey by Erik Fennel exemplifies a trend toward the adventure pole inherent in science-fiction, presenting a human problem that might arise in science as well as elsewhere. We do not say this with any feeling of disparagement, but merely to point out that one stream of influence is still strong, and still has much to offer science-fiction. This story also shows that excellent science-fiction appears in other magazines than those specializing in the field. The reader will notice Mr. Fennel's remarkable background detail, as convincing and as satisfying as in any science-fiction story we have ever read.

Murray Leinster's Strange Case of John Kingman, if we were driven by an urge to classify, might be termed an outgrowth of the mad scientist theme, plus modern psychiatry. We can also trace the influence of the late Charles Fort in the early stop over of a space-ship from another world, and in the unfathomable stranger with the odd sense of humor, who, unfortunately, is mad. Murray Leinster has long been outstanding in the science-fiction field for excellent tales.

Isaac Asimov’s No Connection is a typical good Astounding story, if there is any such thing as a typical story. It will be immediately obvious that it belongs to the same tradition as Genius. Written by a scientist, the whole story is based on a scientific idea, rather than upon a common human situation, yet with more topical allusion, with much special reference to uncontrolled political misuse of science. Mr. Asimov's bear society is convincing, and his logic is beyond question when he shows that unless a miracle happens the bear society is doomed before the human-like erratic science of the chimpanzees, and we are left with a feeling of futility at the thought that the bears will perish.

In Hiding by Wilmar Shins represents the psychological trend within modern science-fiction. Here problems of psychology, especially the adjustment of the highly gifted individual to society, replace the earlier stress on the physical sciences. In Hiding was the most popular story of the year in Astounding Science-Fiction, and we can recommend it for its mellowness, keenness of insight, analysis, and restraint. It will be long before the reader forgets In Hiding.

At this time we should like to thank the following persons for their aid in the preparation of this volume: Harry Altshuler, Jay Bachrach, Bernard Brodsky, 0. James Butler of the Vagabond Book Shop, John W. Campbell, Jr., editor of Astounding Science-Fiction, Oscar J. Friend, Donald Kennicott, editor of Blue Book Magazine, Abe Klein, Mrs. Jane

S. Melnick, Sam Merwin, editor of Thrilling Wonder Stories, Henry W. Ralston of Street & Smith Publications, Inc., Malcolm Reiss of Fiction House, Inc., and Mark Reinsberg.

Everett F. Bleiler
T. E. Dikty
Chicago, Illinois
21 March 1949

The expression "all is illusion" may have originated on Earth, but it was really practical on Mars.

MARS IS HEAVEN!

Ray Bradbury

The ship came down from space. It came from the stars and the black velocities, and the shining movements, and the silent gulfs of space. It was a new ship; it had fire in its body and men in its metal cells, and it moved with a clean silence, fiery and warm. In it were seventeen men, including a captain. The crowd at the Ohio field had shouted and waved their hands up into the sunlight, and the rocket bad bloomed out great flowers of beat and cobs and run away into space on the third voyage to Mars!

Now it was decelerating with metal efficiency in the upper Martian atmospheres. It was still a thing of beauty and strength. It had moved in the midnight waters of space like a pale sea leviathan; it had passed the ancient moon and thrown itself onward into one nothingness following another. The men within it had been battered, thrown about, sickened, made well again, each in his turn. One man had died, but now the remaining sixteen, with their eyes clear in their heads and their faces pressed to the thick glass ports, watched Mars swing up under them.

"Mars! Mars! Good old Mars, here we are!" cried Navigator Lustig.

"Good old Mars!" said Samuel Hinkston, archaeologist.

"Well," said Captain John Black.

The ship landed softly on a lawn of green grass. Outside, upon the lawn, stood an iron deer. Further up the lawn, a tall brown Victorian house sat in the quiet sunlight, all covered with scrolls and rococo, its windows made of blue and pink and yellow and green colored glass. Upon the porch were hairy geraniums and an old swing which was hooked into the porch ceiling and which now swung back and forth, back and forth, in a little breeze. At the top of the house was a cupola with diamond, leaded-glass windows, and a dunce-cap roof! Through the front window you could see an ancient piano with yellow keys and a piece of music titled *Beautiful Ohio* sitting on the music rest.

Around the rocket in four directions spread the little town, green and motionless in the Martian spring, There were white houses and red brick ones, and tall elm trees blowing in the wind, and tall maples and horse chestnuts. And church steeples with golden bells silent in them.

The men in the rocket looked out and saw this. Then they looked at one another and then they looked out again. They held on to each other's elbows, suddenly unable to breathe, it seemed. Their faces grew pale and they blinked constantly, running from glass port to glass port of the ship.

"I'll be damned," whispered Lustig, rubbing his face with his numb fingers, his eyes wet. "I'll be damned, damned, damned."

"It can't be, it just can't be," said Samuel Hinkston.

"Lord," said Captain John Black.

There was a call from the chemist. "Sir, the atmosphere is fine for breathing, sir."

Black turned slowly. "Are you sure?'

"No doubt of it, sir."

"Then we'll go. out," said Lustig.

"Lord, yes," said Samuel Hinkston.

"Hold on," said Captain John Black. "Just a moment, Nobody gave any orders."

"But, sir--"

"Sir, nothing. How do we know what this is?"

"We know what it is, sir," said the chemist. "It's a small town with good air in it, sir."

"And it's a small town the like of Earth towns," said Samuel Hinkston, the archaeologist. "Incredible. It can't be, but it is."

Captain John Black looked at him, idly. "Do you think that the civilizations of two planets can progress at the same rate and evolve in the same way, Hinkston?"

"I wouldn't have thought so, sir."

Captain Black stood by the port. "Look out there. The geraniums. A specialized plant. That specific variety has only been known on Earth for fifty years. Think of the thousands of years of time it takes to evolve plants. Then tell me if it is logical that the Martians should have: one, leaded glass windows; two, cupolas; three, porch swings; four, an instrument that looks like, a piano and probably is a piano; and, five, if you look closely, if a Martian composer would have published a piece of music titled, strangely enough, *Beautiful Ohio.* All of which means that we have an Ohio River here on Mars!"

"It is quite strange, sir."

"Strange, hell, it's absolutely impossible, and I suspect the whole bloody shooting setup. Something's wrong here, and I'm not leaving the ship until I know what it is."

"Oh, sir," said Lustig.

"Dammit," said Samuel Hinkston. "Sir, I want to investigate this at first hand. It may be that there are similar patterns of thought, movement, civilization on *every* planet in our system. We may be on the threshold of the great psychological and metaphysical discovery In our time, sir, don't you think?"

"I'm willing to wait a moment," said Captain John Black.

"It may be, sir, that we are looking upon a phenomenon that, for the first time, would absolutely prove the existence of a God, sir."

"There are many people who are of good faith without such proof, Mr. Hinkston."

"I'm one myself, sir. But certainly a thing like this, out there," said Hinkston, "could not occur without divine intervention, sir. It fills me with such terror and elation. I don't know whether to laugh or cry, sir."

"Do neither,. then, until we know what we're up against."

"Up against, sir?" inquired Lustig. "I see that we're up against nothing. It's a good quiet, green town, much like the one I was born in, and I like the looks of It."

"When were you born, Lustig?"

"In 1910, sir."

"That makes you fifty years old, now, doesn't it?"

"This being 1960, yes, sir."

"And you, Hinkston?"

"1920, sir. In Illinois. And this looks swell to me, sir."

"This couldn't be Heaven," said the captain, ironically. "Though, I must admit, it looks peaceful and cool, and pretty much like Green Bluff, where I was born, in *1915."*

He looked at the chemist. "The air's all right, is it?"

"Yes, sir."

'Well, then, tell you what we'll do. Lustig, you and Hinkston and I will fetch ourselves out to look this town over. The other 14 men will stay aboard ship. If anything untoward happens, lift the Ship and get the hell out, do you hear what I say, Craner?"

"Yes, sir. The hell out we'll go, sir. Leaving *you?",*

"A loss of three men's better than a whole ship. If something bad happens get back to Earth and warn the next Rocket, that's Lingle's Rocket, I think, which will be completed and ready to take off some time around next Christmas, what he has to meet up with. If there's something hostile about Mars we certainly want the next expedition to be well armed."

"So are we, sir. We've got a regular arsenal with us."

"Tell the men to stand by the guns, then, as Lustig and Hinkston and I go out."

"Right, sir."

"Come along, Lustig, Hinkston."

The three men walked together, down through the levels of the ship.

It was a beautiful spring day. A robin sat on a blossoming apple tree and sang continuously. Showers of petal snow sifted down when the wind touched the apple tree, and the blossom smell drifted upon the air. Somewhere in the town, somebody was playing the piano and the music came and went, came and went, softly, drowsily. The song was *Beautiful Dreamer.* Somewhere else, a phonograph, scratchy and faded, was hissing out a record of *Roamin' In The Gloamin,'* sung by Harry Lapder.

The three men stood outside the ship. The port closed behind them. At every window, a face pressed, looking out. The large metal guns pointed this way and that, ready.

Now the phonograph record being played was:

"Oh give me a June night

The moonlight and you—"

Lustig began to tremble. Samuel Hinkston did likewise.

Hinkston's voice was so feeble and uneven that the captain had to ask him to repeat what he had said. "I said, sir, that I think I have solved this, all of this, sir!"

"And what is the solution, Hinkston?"

The soft wind blew. The sky was serene and quiet and somewhere a stream of water ran through the

cool caverns and tree-shadings of a ravine. Somewhere a horse and wagon trotted and rolled by, bumping.

"Sir, it must be, it has to be, this is the *only* solution! Rocket travel began to Mars in the years before the first World War, sir!" S

The captain stared at his archaeologist. "No!"

"But, yes, sir! You must admit, look at all of this! How else explain it, the houses, the lawns, the iron deer, the flowers, the pianos, the music!"

"Hinkston, Hinkston, oh," and the captain put his hand to his face, shaking his head, his hand shaking now, his lips blue.

"Sir, listen to me." Hinkston took his elbow persuasively and looked up into the captain's face, pleading. "Say that there were some people in the year *1905,* perhaps, who hated wars and wanted to get away from Earth and they got together, some scientists, in secret, and built a rocket and came out here to Mars."

"No, no, Hinkston."

"Why not? The world was a different place in 1905, they could have kept it a secret much more easily."

"But the work, Hinkston, the work of building a complex thing like a rocket, oh, no, no." The captain looked at his shoes, looked at his hands, looked at the houses, and then at Hinkston.

"And they came up here, and naturally the houses they built were similar to Earth houses because they brought the cultural architecture with them, and here it is!"

"And they've lived here all these years?" said the captain.

"In peace and quiet, sir, yes. Maybe they made a few trips, to bring enough people here for one small town, and then stopped, for fear of being discovered. That's why the town seems so old-fashioned. I don't see a thing, myself, that is older than the year 1927, do you?"

"No, frankly, I don't, Hinkston."

"These are *our* people, sir. This is an American city; it's definitely not European!"

"That—that's right, too, Hinkston."

"Or maybe, just maybe, sir, rocket travel is older than we think. Perhaps it started in some part of the world hundreds of years ago, was discovered and kept secret by a small number of men, and they came to Mars, with only occasional visits to Earth over the centuries."

"You make it sound almost reasonable."

"It is, sir. It has to be. We have the proof here before us, all we have to do now, is find some people and verify it!"

"You're right there, of course. We can't just stand here and talk. Did you bring your gun?"

"Yes, but we won't need it."

"We'll see about it. Come along, we'll ring that doorbell and see if anyone is home."

Their boots were deadened of all sound in the thick green grass. it smelled from a fresh mowing. In spite of himself, Captain John Black felt a great peace come over him. It had been thirty years since he had been in a small' town, and the buzzing of spring bees on the air lulled and quieted him, and the fresh look of things was a balm to the soul.

Hollow echoes sounded from under the boards as they walked across the porch and stood before the screen door. Inside, they could see a bead curtain hung across the hall entry, and a crystal chandelier and a Maxfield Parrish painting framed on one wall over a comfortable Morris, Chair. The house smelled old, and of the attic, and infinitely comfortable. You could hear the tinkle of ice rattling in a lemonade pitcher. In a distant kitchen, because of the day, someone was preparing a soft lemon pie.

Captain John Black rang the bell.

Footsteps, dainty and thin, came along the hail and a kind-faced lady of some forty years, dressed in the sort of dress you might expect in the year 1909, peered out at them.

"Can I help you?" she asked.

"Beg your pardon," said Captain Black, uncertainly.

"But we're looking for, that is, could you help us, I mean." He stopped. She looked out at him with dark wondering eyes.

"If you're selling something," she said, "I'm much too busy and I haven't time." She turned to go.

"No, *wait!,"* he cried bewilderedly. "What town is this?"

She looked him up and down as if he were crazy.

"What do you mean, what town is it? How could you be in a town and not know what town it was?"

The captain looked as if he wanted to go sit under a shady apple tree. "I beg your pardon," he said, "But we're strangers here. We're from Earth, and we want to know how this town got here and you got here."

"Are you census takers?" she asked.

"No," be said.

"What do you want then?" she demanded.

"Well," said the captain.

"Well?" she asked.

"How long has this town been here?" he wondered.

"It was built in 1868," she snapped at them. "Is this a game?"

"No, not a game," cried the captain. "Oh, God," he said. "Look here. We're from Earth!"

"From *where?"* she said.

"From Earth!" he said.

"Where's that?" she said.

"From Earth," he cried.

"Out of the ground, do you mean?"

"No, from the planet Earth!" he almost shouted.

"Here," he insisted, "come out on the porch and I'll show you."

"No," she said, "I won't come out there, you are all evidently quite mad from the sun."

Lustig and Hinkston stood behind the captain. Hinkston now spoke up. "Mrs.," he said. ‘We came

in a flying ship across space, among the stars. We came from the third planet from the sun, Earth, to this planet, which is Mars. *Now* do you understand, Mrs.?"

"Mad from the sun," she said, taking hold of the door. "Go away now, before I call my husband who's upstairs taking a nap, and he'll beat you all with his fists."

"But—" said Hinkston. "This is Mars, is it not?"

"This," explained the woman, as if she were addressing a child, "is Green Lake, Wisconsin, on the continent of America, surrounded by the Pacific and Atlantic Oceans, on a place called the world, or sometimes, the Earth. Go away now. Good-bye!"

She slammed the door.

The three men stood before the door with their hands up in the air toward it, as if pleading with her to open it once more.

They looked at one another.

"Let's knock the door down," said Lustig.

"We can't," sighed the captain.

"Why not?"

"She didn't do anything bad, did she? We're the strangers here. This is private property. Good God, Hinkston!" He went and sat down on the porchstep.

"What, sir?"

Did it ever strike you, that maybe we got ourselves, somehow, some way, fouled up. And, by accident, came back and landed on Earth!"

"Oh, sir, oh, sir, oh oh, sir." And Hinkston sat down numbly and thought about it.

Lustig stood up in the sunlight. "How could we have done that?"

"I don't know, just let me think."

Hinkston said, "But we checked every mile of the way, and we saw Mars and our chronometers said so many miles gone, and we went past the moon and out into space and here we are, on Mars. I'm sure we're on Mars, sir."

Lustig said, "But, suppose that, by accident, in space, in time, or something, we landed on a planet in space, in another time. Suppose this is Earth, thirty or fifty years ago? Maybe we got lost in the dimensions, do you think?"

"Oh, go away, Lustig."

"Are the men in the ship keeping an eye on us, Hinkston?"

"At their guns, sir."

Lustig went to the door, rang the bell. When the door opened again, he asked, "What year is this?"

"1926, of, course!" cried the woman, furiously, and slammed the door again.

"Did you bear that?" Lustig ran back to them, wildly, "She said 1926! We - *have* gone back in time. This *is* Earth!"

Lustig sat down and the three men let the wonder and terror of the thought afflict them. Their hands stirred fitfully on their knees. The wind blew, nodding the locks of hair on their heads.

The captain stood up, brushing off his pants. "I never thought it would be like this. It scares the hell out of me. How can a thing like this happen?"

"Will anybody in the whole town believe us?" wondered Hinkston. "Are we playing around with something dangerous? Time, I mean. Shouldn't we just take off and go home?"

"No. We'll try another house."

They walked three houses down to a little white cottage under an oak tree. "I like to be as logical as I can get," said the captain, He nodded at the town. "How does this sound to you, Hinkston? Suppose, as you said originally, that rocket travel occurred years ago. And when the Earth people had lived here a number of years they began to get homesick for Earth. First a mild neurosis about it, then a full-fledged psychosis. Then, threatened insanity. What would you do, as a psychiatrist, if faced with such a problem?"

Hinkston thought. "Well, I think I'd re-arrange the civilization on Mars so it resembled Earth more and more each day. If there was any way of reproducing every plant, every road and every lake, and even an ocean, I would do so. Then I would, by some vast crowd hypnosis, theoretically anyway, convince everyone in a town this size that this really *was* Earth, not Mars at all."

"Good enough, Hinkston. I think we're on the right track now. That woman in that house back there, just *thinks* she's living on Earth. It protects her sanity. She and all the others in this town are the patients of the greatest experiment in migration and hypnosis you will ever lay your eyes on in your life."

"That's it, sir!" cried Lustig.

"Well," the captain sighed. "Now we're getting somewhere. I feel better. It all sounds a bit more logical now. This talk about time and going back and forth and traveling in time turns my stomach upside down. But, *this* way—" He actually smiled for the first time in a month. "Well. It looks as if we'll be fairly welcome here."

"Or, will we, sir?" said Lustig. "After all, like the Pilgrims, these people came here to escape Earth. Maybe they won't be too happy to see us, sir Maybe they'll try to drive us out or kill us?"

"We have superior weapons if that should happen. Anyway, all we can do is try. This next house now. Up we go."

But they had hardly crossed the lawn when Lustig stopped and looked off across the town, down the quiet, dreaming afternoon street. "Sir," he said.

"What is it, Lustig?" asked the captain.

"Oh, sir, *sir,* what I see, what I do see now before me, oh, oh—" said Lustig, and he began to cry. His fingers came up, twisting and trembling, and his face was all wonder and joy and incredulity. He sounded as if any moment he might go quite insane with happiness. He looked down the street and he began to run, stumbling awkwardly, falling, picking himself up, and running on. "Oh, God, God, thank you, God! Thank you!"

"Don't let him get away!" The captain broke into a run.

Now Lustig was running at full speed, shouting. He turned into a yard half way down the little shady side street and leaped up upon the porch of a large green house with an iron rooster on the roof.

He was beating upon the door, shouting and hollering and crying when Hinkston and the captain ran up and stood in the yard.

The door opened. Lustig yanked the screen wide and in a high wail of discovery and happiness, cried out, "Grandma! Grandpa!"

Two old people stood in the doorway, their faces lighting up.

"Albert!" Their voices piped and they rushed out to embrace and pat him on the back and move around him, "Albert, oh, Albert, it's been so many years! How you've grown, boy, how big you ate, boy, oh, Albert boy, how are you!"

"Grandma, Grandpa!" sobbed Albert Lustig. "Good to see you! You look fine, fine! Oh, fine." He held them, turned them, kissed them, hugged them, cried on them, held them out again, blinked at the little old people. The, sun was in the sky, the wind blew, the grass was green, the screen door stood open.

"Come in, lad, come in, there's lemonade for you, fresh, lots of it!"

"Grandma, Grandpa, good to see you! I've got friends down here! Here!" Lustig turned and waved wildly at the captain and Hinkston, who, all during the adventure on the porch, had stood in the shade of a tree, holding onto each other. "Captain, captain, come up, come up, I want you to meet my grandfolks!"

"Howdy," said the folks. "Any friend of Albert's is ours, too! Don't stand there with your mouths open! Come on!"

In the living room of the old house it was cool and a grandfather clock ticked high and long and bronzed in one corner. There were soft pillows on large couches and walls filled with books and a rug cut in a thick rose pattern and antimacassars pinned to furniture, and lemonade in the hand, sweating, and cool on the thirsty tongue. "Here's to our health." Grandma tipped her glass to her porcelain teeth.

"How long you *been* here, Grandma?" said Lustig.

"A good many years," she said, tartly. "Ever since we died."

"Ever since you what?" asked Captain John Black, putting his drink down.

"Oh, yes," Lustig looked at his captain. "They've been dead thirty years."

"And you *sit* there, calmly!" cried the captain.

"Tush," said the old woman, and winked glitteringly at John Black. "Who are we to question what happens? Here we are. What's life, anyways? Who does what for why and where? All we know is here we are, alive again, and no questions asked. A second chance." She toddled over and held out her thin wrist to Captain John Black.

"Feel." He felt. "Solid, ain't I?" she asked. He nodded.

"You hear my voice, don't you?" she inquired. Yes, he did. "Well, then," she said in triumph, "why go around questioning?"

"Well," said the captain, "it's simply that we never thought we'd find a thing like this on Mars."

"And now you've found it. I dare say there's lots on every planet that'll show you God's infinite ways."

"Is this Heaven?" asked Hinkston.

"Nonsense, no. It's a world and we get a second chance. Nobody told us why. But then nobody told us why we were on Earth, either. That *other* Earth, I mean. The one you came from. How do we know there wasn't *another* before *that* one?"

"A good question," said the captain.

The captain stood up and slapped his hand on his leg in an off-hand fashion. "We've got to be going. It's been nice. Thank you for the drinks."

He stopped. He turned and looked toward the door, startled.

Far away, in the sunlight, there was a sound of voices, a crowd, a shouting and a great hello.

"What's that?" asked Hinkston.

"We'll soon find out!" And Captain John Black was out the front door abruptly, jolting across the green lawn and into the street of the Martian town.

He stood looking at the ship. The ports were open and his crew were streaming out, waving their hands. A crowd of people had gathered and in and through and among these people the members of the crew were running, talking, laughing, shaking hands. People did little dances. People swarmed. The rocket lay empty and abandoned.

A brass band exploded in the sunlight, flinging off a gay tune from upraised tubas and trumpets. There was a bang of drums and a shrill of fifes. Little girls with golden hair jumped up and down. Little boys shouted, "Hooray!" And fat men passed around ten-cent cigars. The mayor of the town made a speech. Then, each member of the crew with a mother on one -arm, a father or sister on the other, was spirited off down the street, into little cottages or big mansions and doors slammed shut.

The wind rose in the clear spring sky and all was silent. The brass band had banged off around a corner leaving the rocket to shine and dazzle alone in the sunlight.

"Abandoned!" cried the captain. "Abandoned the ship, they did! I'll have their skins; by God! They had orders!"

"Sir," said Lustig. "Don't be too hard on them. Those were all old relatives and friends."

"That's no excuse!"

"Think how they felt, captain, seeing familiar faces outside the ship!"

"I would have obeyed orders! I would have!" The captain's mouth remained open.

Striding along the sidewalk under the Martian sun, tall, smiling, eyes blue, face tan, came a young man of some twenty-six years.

"John!" the man cried, and broke into a run.

"What?" said Captain John Black. He swayed.

"John, you old beggar, you!"

The man ran up and gripped his hand and slapped him on the back.

"It's you," said John Black.

"Of course, who'd you *think* it was!"

"Edward!" The captain appealed now to Lustig and Hinkston, holding the stranger's hand. "This is my brother Edward. Ed, meet my men, Lustig, Hinkston, my brother!"

They tugged at each other's hands and arms and then finally embraced.

"Ed!"

"John, you old bum, you!"

"You're looking fine, Ed, but, Ed, what is this? You haven't changed over the years. You died, I

remember, when you were twenty-six, and I was nineteen, oh God, so many years ago, and here you are, and, Lord, what goes on, what goes on?"

Edward Black gave him a brotherly knock on the chin.

"Mom's waiting," he said.

"Mom?"

"And Dad, too."

"And Dad?" The captain almost fell to earth as if hit upon the chest with a mighty weapon. He walked stiffly and awkwardly, out of coordination. He stuttered and whispered and talked only one or two words at a time.

"Mom alive? Dad? Where?"

"At the old house on Oak Knoll Avenue."

"The old house." The captain stared in delighted amazement. "Did you *hear* that, Lustig, Hinkston?"

"I know it's hard for you to believe."

"But alive. Real."

"Don't I *feel* real?" The strong arm, the firm grip, the white smile. The light, curling hair.

Hinkston was gone. He had seen his own house down the street and was running for it. Lustig was grinning.

"Now you understand, sir, what happened to everybody on the ship. They couldn't help themselves."

"Yes. Yes," said the captain, eyes shut. "Yes." He put out his hand. "When I open my eyes, you'll be gone." He opened his eyes. "You're still here. God, Edward, you look fine!"

"Come along, lunch is waiting for you. I told Mom." Lustig said, "Sir, I'll be with my grandfolks if you want me."

"What? Oh, fine, Lustig. Later, then."

Edward grabbed his arm and marched him. "You need support."

"I do. My knees, all funny. My stomach, loose. God."

"There's the house. Remember it?"

"Remember it? Hell! I bet I can beat you to the front porch!"

They ran. The wind roared over Captain John Black's ears. The earth roared under his feet. He saw the golden figure of Edward Black pull ahead of him in the amazing dream of reality. He saw the house rush forward, the door open, the screen swing back. "Beat you!" cried Edward, bounding up the steps.

"I'm an old man," panted the captain "and you're still young. But, then, you *always* beat me, I remember!"

In the doorway, Mom, pink, and plump and bright. And behind her, pepper grey, Dad, with his pipe in his hand.

"Mom, Dad!"

He ran up the steps like a child, to meet them.

It was a fine long afternoon. They finished lunch and they sat in the living room and he told them all about his rocket and his being captain and they nodded and smiled upon him and Mother was just the same, and Dad bit the end off a cigar and lighted it in his old fashion. Mom brought in some iced tea in the middle of the afternoon. Then, there was a big turkey dinner at night and time flowing oil. When the drumsticks were sucked clean and lay brittle upon the plates, the captain leaned back in his chair and exhaled his deep contentment. Dad poured him a small glass of dry sherry. It was seven-thirty in the evening. Night was in all the trees and coloring the sky, and the lamps were halos of dim light in the gentle house. From all the other houses down the streets came sounds of music; pianos playing, laughter.

Mom put a record on the victrola and she and Captain John Black had a dance. She was wearing the same perfume he remembered from the summer when she and Dad had been killed in the train accident. She was very real in his arms as they danced lightly to the music.

"I'll wake in the morning," said the captain. "And I'll be in my rocket in space, and this will be gone."

"No, no, don't think that," she cried, softly, pleadingly, "We're here. Don't question. God is good to us. Let's be happy."

The record ended with a hissing.

"You're tired, son," said Dad. He waved his pipe. "You and Ed go on upstairs. Your old bedroom is waiting for you."

"The old one?"

"The brass bed and all," laughed Edward.

"But I should report my men in."

"Why?" Mother was logical.

"Why? Well, I don't know. No reason, I guess. No, none at all. What's the difference?" He shook his head. "I'm not being very logical these days."

"Good night, son." She kissed his cheek. "'Night, Mom."

"Sleep tight, son." Dad shook his hand.

"Same to you, Pop."

"It's good to have you home."

"It's good to *be* home."

He left the land of cigar smoke and perfume and books and gentle light and ascended the stairs, talking, talking with Edward. Edward pushed a door open and there was the yellow brass bed and the old semaphore banners from college days and a very musty raccoon coat which he petted with strange, muted affection. "It's too much," he said faintly. "Like being in a thunder shower without an umbrella. I'm soaked to the skin with emotion. I'm numb. I'm tired."

"A night's sleep between cool clean sheets for you, my bucko." Edward slapped wide the snowy linens and flounced the pillows. Then he put up a window and let the night blooming jasmine float in. There was moonlight and the sound of distant dancing and whispering.

"So this is Mars," said the captain undressing.

"So this is Mars." Edward undressed in idle, leisurely moves, drawing his shirt off over his head,

revealing golden shoulders and the good muscular neck.

The lights were out, they were into bed, side by side, as in the days, how many decades ago? The captain lolled and was nourished by the night wind pushing the lace curtains out upon the dark room air. Among the trees, upon a lawn, someone had cranked up a portable phonograph and now it was playing softly, "I'll be loving you, always, with a love that's true, always."

The thought of Anna came to his mind. "Is Anna here?"

His brother, lying straight out in the moonlight from the window, waited and then said, "Yes. She's out of town. But she'll be here in the morning."

The captain shut his eyes. "I want to see Anna very much?"

The room was square and quiet except for their breathing. "Good night, Ed."

A pause. "Good night, John."

He lay peacefully, letting his thoughts float. For the first time the stress of the day was moved aside, all of the excitement was calmed. He could think logically now. It had all been emotion. The bands playing, the sight of familiar faces, the sick pounding of your heart. But now...

How? He thought. How was all this made? And why? For what purpose? Out of the goodness of some kind God? Was God, then, really that fine and thoughtful of his children? How and why and what for?

He thought of the various theories advanced in the first heat of the afternoon by Hinkston and Lustig. He let all kinds of new theories drop in lazy pebbles down through his mind, as through a dark water, now, turning, throwing out dull flashes of white light. Mars. Earth. Mom.

Dad Edward. Mars. Martians.

Who had lived here a thousand years ago on Mars? Martians? Or had this always been like this? Martians. He repeated the word quietly, inwardly.

He laughed out loud, almost. He had the ridiculous theory, all of a sudden. It gave him a kind of chilled feeling. It was really nothing to think of, of course. Highly. improbable. Silly. Forget it. Ridiculous.

But, he thought, Just suppose. Just *suppose* now, that there were Martians living on Mars and they saw our ship coming and saw us inside our ship and hated us. Suppose, now, just for the hell of it, that they wanted to destroy us, as invaders, as unwanted ones, and they wanted to do it in a very clever way, so that we would be taken off guard. Well, what would the best weapon be that a Martian could use against Earthmen with atom weapons?

The answer was interesting. Telepathy, hypnosis, memory and imagination.

Suppose all these houses weren't real at all, this bed not real, but only figments of my own imagination, given substance by telepathy and hypnosis by the Martians.

Suppose these houses are really some other shape, a Martian shape, but, by playing on my desires and wants, these Martians have made this seem like my old home town, my old house, to lull me out of my suspicions?

What better way to fool a man, by his own emotions.

And suppose those two people in the next room, asleep, are not my mother and father at all. But two Martians, incredibly brilliant, with the ability to keep me under this dreaming hypnosis all of the time?

And that brass band, today? What a clever plan it would be. First, fool Lustig, then fool Hinkston, then gather a crowd around the rocket ship and wave. And all the men in the ship, seeing mothers, aunts, uncles, sweethearts dead ten, twenty years ago, naturally, disregarding orders, would rush out and abandon the ship. What more natural? What more unsuspecting? What more simple? A *man* doesn't ask too many questions when his mother is suddenly brought back to life; he's much too happy. And the brass band played and everybody was taken off to private homes. And here we all are, tonight, in various houses, in various beds, with no weapons to protect us, and the rocket lies in the moonlight, empty. And wouldn't it be horrible and terrifying to discover that all of this was part of some great clever plan by the Martians to divide and conquer us, and kill us. Some time during the night, perhaps, my brother here on this bed, will change form, melt, shift, and become a one-eyed, green and yellow-toothed Martian. It would be very simple for him just to turn over in bed and put a knife into my heart. And in all those other houses down the street a dozen other brothers or fathers suddenly melting away and taking out knives and doing things to the unsuspecting, sleeping men of Earth.

His hands were shaking under the covers. His body was cold. Suddenly it was not a theory. Suddenly he was very afraid. He lifted himself in bed and listened. The night was very quiet. The music had stopped. The wind had died. His brother (?) lay sleeping beside him.

Very carefully he lifted the sheets, rolled them back. He slipped from bed and was walking softly across the room when his brother's voice said, "Where are you going?"

"What?"

His brother's voice was quite cold. "I said, where do you think you're going?"

"For a drink of water."

"But you're not thirsty."

"Yes, yes, I am."

"No, you're not."

Captain John Black broke and ran across the room.

He screamed. He screamed twice. He never reached the door.

In the morning, the brass band played a mournful dirge. From every house in the street came little solemn processions bearing long boxes and along the sun-filled street, weeping and changing, came the grandmas and grandfathers and mothers and sisters and brothers, walking to the churchyard, where there were open holes dug freshly and new tombstones installed. Seventeen holes in all, and seventeen tombstones. Three of the tombstones said, CAPTAIN JOHN BLACK, ALBERT LUSTIG, and SAMUEL HINKSTON.

The mayor made a little sad speech, his face sometimes looking like the mayor, sometimes looking like something else.

Mother and Father Black were there, with Brother Edward, and they cried, their faces melting now from a familiar face into something else.

Grandpa and Grandma Lustig were there, weeping their faces also shifting like wax, shivering as a thing does in waves of heat on a summer day.

The coffins were lowered. Somebody murmured about

"the unexpected and sudden deaths of seventeen fine men during the night—"

Earth was shoveled in on the coffin tops.

After the funeral the brass band slammed and banged into town and the crowd stood around and waved and shouted as the rocket was torn to pieces and strewn about and blown up.

Ex Machina

Lewis Padgett

I got the idea out of a bottle labeled 'DRINK ME,'" Gallegher said wanly. "I'm no technician, except when I'm drunk. I don't know the difference between an electron and an electrode, except that one's invisible. At least I do know, sometimes, but they get mixed up. My trouble is semantics."

"Your trouble is you're a lush," said the transparent robot, crossing its legs with a faint crash. Gallegher winced.

"Not at all. I get along fine when I'm drinking. It's only during my periods of sobriety that I get confused. I have a technological hangover. The aqueous humor in my eyeballs is coming out by osmosis. Does that make sense?"

"No," said the robot, whose name was Joe. "You're crying, that's all. Did you turn me on just to have an audience? I'm busy at the moment."

"Busy with what?"

"I'm analyzing philosophy, *per se.* Hideous as you humans are, you sometimes get bright ideas. The clear, intellectual logic of pure philosophy is a revelation to me."

Gallegher said something about a hard, gemlike flame. He still wept sporadically, which reminded him of the bottle labeled "DRINK ME," which reminded him of the liquor-organ beside the couch. Gallegher stiffly moved his long body across the laboratory, detouring around three bulky objects which might have been the dynamos, Monstro and Bubbles, except for the fact that there were three of them. This realization flickered only dimly through Gallegher's mind. Since one of the dynamos was looking at him, he hurriedly averted his gaze, sank down on the couch, and manipulated several buttons. When no liquor flowed through the tube into his parched mouth, he removed the mouthpiece, blinked at it hopelessly, and ordered Joe to bring beer.

The glass was brimming as he raised it to his lips. But it was empty before he drank.

"That's very strange," Gallegher said. "I feel like Tantalus."

"Somebody's drinking your beer," Joe explained. "Now do leave me alone. I've an idea I'll be able to appreciate my baroque beauty even more after I've mastered the essentials of philosophy."

"No doubt," Gallegher said. "Come away from that mirror. Who's drinking my beer? A little green man?"

"A little brown animal," Joe explained cryptically, and turned to the mirror again, leaving Gallegher to glare at him hatefully. There were times when Mr. Galloway Gallegher yearned to bind Joe securely under a steady drip of hydrochloric. Instead, he tried another beer, with equal ill luck.

In a sudden fury, Gallegher rose and procured soda water. The little brown animal had even less taste for such fluids than Gallegher himself; at any rate, the water didn't mysteriously vanish. Less

thirsty but more confused than ever, Gallegher circled the third dynamo with the bright blue eyes and morosely examined the equipment littering his workbench. There were bottles filled with ambiguous liquids, obviously nonalcoholic, but the labels meant little or nothing. Gallegher's subconscious self, liberated by liquor last night, had marked them for easy reference. Since Gallegher Plus, though a top-flight technician, saw the world through thoroughly distorted lenses, the labels were not helpful. One said "RABBITS ONLY." Another inquired "WHY NOT?" A third said "CHRISTMAS NIGHT."

There was also a complicated affair of wheels, gears, tubes, sprockets and light tubes plugged into an electric outlet.

"Cogito, ergo sum," Joe murmured softly. "When there's no one around on the quad. No. Hm-m-m."

"What about this little brown animal?" Gallegher wanted to know. "Is it real or merely a figment?"

"What is reality?" Joe inquired, thus confusing the issue still further. "I haven't resolved that yet to my own satisfaction."

"Your satisfaction!" Gallegher said. "I wake up with a tenth-power hangover and you can't get a drink. You tell me fairy stories about little brown animals stealing my liquor. Then you quote moldy philosophical concepts at me. If I pick up that crowbar over there, you'll neither be *nor* think, in very short order."

Joe gave ground gracefully. "It's a small creature that moves remarkably fast. So fast it can't be seen."

"How come you see it?"

"I don't. I varish it," said Joe, who had more than the five senses normal to humans.

"Where is it now?"

"It went out a while ago."

"Well—" Gallegher sought inconclusively for words. "Something must have happened last night."

"Naturally," Joe agreed. "But you turned me off after the ugly man with the ears came in."

"I remember that. You were beating your plastic gums .. .*what* man?"

"The ugly one. You told your grandfather to take a walk, too, but you couldn't pry him loose from his bottle."

"Grandpa. Uh. Oh. Where's he?"

"Maybe he went back to Maine," Joe suggested. "He kept threatening to do that."

"He never leaves till he's drunk out the cellar," Gallegher said. He tuned in the audio system and called every room in the house. There was no response. Presently Gallegher got up and made a search. There was no trace of Grandpa.

He came back to the laboratory, trying to ignore the third dynamo with the big blue eyes, and hopelessly studied the workbench again. Joe, posturing before the mirror, said he thought he believed in the basic philosophy of intellectualism. Still, he added, since obviously Gallegher's intellect was in abeyance, it might pay to hook up the projector and find out what had happened last night.

'This made sense. Some time before, realizing that Gallegher sober never remembered the adventures of Gallegher tight, he had installed a visio-audio gadget in the laboratory, cleverly adjusted to turn itself on whenever circumstances warranted it. How the thing worked Gallegher wasn't quite sure anymore, except that it could run off miraculous blood-alcohol tests on its creator and start

recording when the percentage was sufficiently high. At the moment the machine was shrouded in a blanket. Gallegher whipped this off, wheeled over a screen, and watched and listened to what had happened last night.

Joe stood in a corner, turned off, probably cogitating.

Grandpa, a wizened little man with a brown face like a bad-tempered nutcracker, sat on a stool cuddling a bottle. Gallegher was removing the liquor-organ mouthpiece from between his lips, having just taken on enough of a load to start the recorder working.

A slim, middle-aged man with large ears and an eager expression jittered on the edge of his relaxer, watching Gallegher.

"Claptrap," Grandpa said in a squeaky voice. "When I was a kid we went out and killed grizzlies with our hands. None of these new-fangled ideas—"

"Grandpa," Gallegher said, "shut up. You're not that old. And you're a liar anyway."

"Reminds me of the time I was out in the woods and a grizzly came at me. I didn't have a gun. Well, I'll tell you. I just reached down his mouth—"

"Your bottle's empty," Gallegher said cleverly, and there was a pause while Grandpa, startled, investigated. It wasn't.

"You were highly recommended," said the eager man. "I do hope you can help me. My partner and I are about at the end of our rope."

Gallegher looked at him dazedly. "You have a partner? Who's he? For that matter, who are you?"

Dead silence fell while the eager man fought with his bafflement. Grandpa lowered his bottle and said: "It wasn't empty, but it is now, Where's another?"

The eager man blinked. "Mr. Gallegher," he said faintly. "I don't understand. We've been discussing —"

Gallegher said, "I know. I'm sorry. It's just that I'm no good on technical problems unless I'm...ah...stimulated. Then I'm a genius. But I'm awfully absent-minded. I'm sure I can solve your problem, but the fact is I've forgotten what it is. I suggest you start from the beginning. Who are you and have you given me any money yet?"

"I'm Jonas Harding," the eager man said. "I've got fifty thousand credits in my pocket, but we haven't come to any terms yet."

"Then give me the dough and we'll come to terms," Gallegher said with ill-concealed greed. "I need money."

"You certainly do," Grandpa put in, searching for a bottle. "You're so overdrawn at the bank that they lock the doors when they see you coming. I want a drink."

"Try the organ," Gallegher suggested. "Now, Mr. Harding—"

"I want a bottle. I don't trust that dohinkus of yours."

Harding, for all his eagerness, could not quite conceal a growing skepticism. "As for the credits," he said, "I think perhaps we'd better talk a little first. You were very highly recommended, but perhaps this is one of your off days."

"Not at all. Still—"

"Why should I give you the money before we come to terms?" Harding pointed out. "Especially

since you've forgotten who I am and what I wanted."

Gallegher sighed and gave up. "All right. Tell me what you are and who you want. I mean—"

"I'll go back home," Grandpa threatened. "Where's a bottle?"

Harding said desperately, "Look, Mr. Gallegher, there's a limit. I come in here and that robot of yours insults me. Your grandfather insists I have a drink with him. I'm nearly poisoned—"

"I was weaned on corn likker," Grandpa muttered. "Young whippersnappers can't take it."

"Then let's get down to business," Gallegher said brightly. "I'm beginning to feel good. I'll just relax here on the couch and you can tell me everything." He relaxed and sucked idly at the organ's mouthpiece, which trickled a gin buck. Grandpa cursed.

"Now," Gallegher said, "the whole thing, from the beginning."

Harding gave a little sigh. "Well—I'm half partner in Adrenals, Incorporated. We run a service. A luxury service, keyed to this day and age. As I told you—"

"I've forgotten it all," Gallegher murmured. "You should have made a carbon copy. What is it you do? I've got a mad picture of you building tiny prefabricated houses on top of kidneys, but I know I must be wrong."

"You are," Harding said shortly. "Here's your carbon copy. We're in the adrenal-rousing business. Today man lives a quiet, safe life—"

"Ha.!" Gallegher interjected bitterly.

"—what with safety controls and devices, medical advances, and the general structure of social living. Now the adrenal glands serve a vital functional purpose, necessary to the health of the normal man." Harding had apparently launched into a familiar sales talk. "Ages ago we lived in caves, and when a sabertooth burst out of the jungle, our adrenals, or suprarenals, went into instant action, flooding our systems with adrenalin. There was an immediate explosion of action, either toward fight or flight, and such periodic flooding of the blood stream gave tone to the whole system. Not to mention the psychological advantages. Man is a competitive animal. He's losing that instinct, but it can be roused by artificial stimulation of the adrenals."

"A drink?" Grandpa said hopefully, though he understood practically nothing of Harding's explanation.

Harding's face became shrewder. He leaned forward confidentially.

"Glamour," he said. "That's the answer. We offer adventure. Safe, thrilling, dramatic, exciting, glamorous adventure to the jaded modern man or woman. Not the vicarious, unsatisfactory excitement of television; the real article. Adrenals, Incorporated, will give you adventure plus, and at the same time improve your health physically and mentally. You must have seen our ads: 'Are you in a rut? Are you jaded? Take a Hunt—and return refreshed, happy, and healthy, ready to lick the world!'"

"A Hunt?"

"That's our mest popular service," Harding said, relapsing into more businesslike tones. "It's not new, really. A long time ago travel bureaus were advertising thrilling tiger hunts in Mexico—"

"Ain't no tigers in Mexico," Grandpa said. "I been there. I warn you, if you don't find me a bottle, I'm going right back to Maine."

But Gallegher was concentrating on the problem. "I don't see why you need me, then. I can't supply tigers for you."

"The Mexican tiger was really a member of me cat family. Puma, I think. We've got special reservations all over the world—expensive to set up and maintain—and there we have our Hunts, with every detail carefully planned in advance. The danger must be minimized—in fact, eliminated. But there must be an illusion of danger or there's no thrill for the customer. We've tried conditioning animals so they'll stop short of hurting anyone, but... ah... that isn't too successful. We lost several customers, I'm sorry to say. This is an enormous investment, and we've got to recoup. But we've found we can't use tigers, or, in fact, any of the large carnivora. It simply isn't safe. But there must be that illusion of danger! The trouble is, we're degenerating into a trapshooting club. And there's no personal danger involved in trapshooting."

Grandpa said: "Want some fun, eh? Come on up to Maine with me and I'll show you some real hunting. We still got bear back in the mountains."

Gallegher said: "I'm beginning to see. But that personal angle—I wonder! What is the definition of danger, anyhow?"

"Danger's when something's trying to git you," Grandpa pointed out.

"The unknown—the strange—is dangerous too, simply because we don't understand it. That's why ghost stories have always been popular. A roar in the dark is more frightening than a tiger in the daylight."

Harding nodded. "I see your point. But there's another factor. The game mustn't be made too easy. It's a cinch to outwit a rabbit. And, naturally, we have to supply our customers with the most modern weapons."

"Why?"

"Safety precautions. The trouble is, with those weapons and scanners and scent-analyzers, any fool can track down and kill an animal. There's no thrill involved unless the animal's a man-eating tiger, and that's a little too thrilling for our underwriters!"

"So what do you want?"

"I'm not sure," Harding said slowly. "A new animal, perhaps. One that fulfills the requirements of Adrenals, Incorporated. But I'm not sure what the answer is, or I wouldn't be asking you."

Gallegher said: "You don't make new animals out of thin air."

"Where do you get them?"

"I wonder. Other planets? Other time-sectors? Other probability-worlds? I got hold of some funny animals once—Lybblas—by tuning in on a future time-era on Mars, but they wouldn't have filled the bill."

"Other planets, then?"

Gallegher got up and strolled to his workbench. He began to piece together stray cogs and tubes. "I'm getting a thought. The latent factors inherent in the human brain— My latent factors are rousing to life. Let me see. Perhaps—"

Under his hands a gadget grew. Gallagher remained preoccupied. Presently he cursed, tossed the device aside, and settled back to the liquor-organ. Grandpa had already tried it, but choked on his first sip of a gin buck. He threatened to go back home and take Harding with him and show him some real hunting.

Gallegher pushed the old gentleman off the couch. "Now look, Mr. Harding," he said. "I'll have this for you tomorrow. I've got some thinking to do—"

"Drinking, you mean," Harding said, taking out a bundle of credits. "I've heard a lot about you, Mr. Gallegher. You never work except under pressure. You've got to have a deadline, or you won't do a thing. Well—do you see this? Fifty thousand credits." He glanced at his wrist watch. "I'm giving you one hour. If you don't solve my problem by then, the deal's off."

Gallegher started up from the couch as though he had been bitten. "That's ridiculous. An hour isn't time enough—"

Harding said obdurately: "I'm a methodical man. I know enough about you to realize that you're not. I can find other specialists and technicians, you know. One hour! Or I go out that door and take these fifty thousand credits with me!"

Gallegher eyed the money greedily. He took a quick drink, cursed quietly, and went back to his gadget. This time he kept working on it.

After a while a light shot up from the worktable and hit Gallegher in the eye. He staggered back, yelping.

"Are you all right?" Harding asked, jumping up.

"Sure," Gallegher growled, cutting a switch. "I think I'm getting it. That light...ouch. I've sunburned my eyeballs." He blinked back tears. Then he went over to the liquor-organ.

After a hearty swig, he nodded at Harding. "I'm getting on the trail of what you want. I don't know how long it will take, though." He winced. "Grandpa. Did you change the setting on this thing?"

"I dunno. I pushed some buttons."

"I thought so. This isn't a gin buck. Wheeooo!"

"Got a wallop, has it?" Grandpa said, getting interested and coming over to try the liquor-organ again.

"Not at all," Gallegher said, walking on his knees toward the audio-sonic recorder. "What's this? A spy, huh? We know how to deal with spies in this house, you dirty traitor." So saying, he rose to his feet, seized a blanket, and threw it over the projector.

At that point the screen, naturally enough, was blank.

"I cleverly outwit myself every time," Gallegher remarked, rising to switch off the projector. "I go to the trouble of building that recorder and then blindfold it just when matters get interesting. I know less than I did before, because there are more unknown factors now."

"Men can know the nature of things," Joe murmured.

"An important concept," Gallegher admitted. "The Greeks found it out quite a while ago, though. Pretty soon, if you keep on thinking hard, you'll come up with the bright discovery that two and two are four."

"Be quiet, you ugly man," Joe said. "I'm getting into abstractions now. Answer the door and leave me alone."

"The door? Why? The bell isn't singing."

"It will," Joe pointed out. "There it goes."

"Visitors at this time of the morning," Gallegher sighed."Maybe it's Grandpa, though." He pushed a button, studied the doorplate screen, and failed to recognize the lantern-jawed, bushy-browed face. "All right," he said. "Come in. Follow the guide-line." Then he turned to the liquor-organ thirstily before

remembering his current Tantalus proclivities.

The lantern-jawed man came into the room. Gallegher said: "Hurry up. I'm being followed by a little brown animal that drinks all my liquor. I've several other troubles, too, but the little brown animal's the worst. If I don't get a drink, I'll die. So tell me what you want and leave me alone to work out my problems. I don't owe you money, do I?"

"That depends," said the newcomer, with a strong Scots accent. "My name is Murdoch Mackenzie, and I assume you're Mr. Gallegher. You look untrustworthy. Where is my partner and the fifty thousand credits he had with him?"

Gallegher pondered. "Your partner, eh? I wonder if you mean Jonas Harding?"

"That's the lad. My partner in Adrenals, Incorporated."

"I haven't seen him—"

With his usual felicity, Joe remarked, "The ugly man with the big ears. How hideous he was."

"Vurra true," Mackenzie nodded. "I note you're using the past tense, or rather that great clanking machine of yours is. Have you perhaps murdered my partner and disposed of his body with one of your scientific gadgets?"

"Now look—" Gallegher said. "What's the idea? Have I got the mark of Cain on my forehead or something? Why should you jump to a conclusion like that? You're crazy."

Mackenzie rubbed his long jaw and studied Gallegher from under his bushy gray brows. "It would be no great loss, I know," he admitted. "Jonas is little help in the business. Too methodical. But he had fifty thousand credits on his person when he came here last night. There is also the question of the body. The insurance is perfectly enormous. Between ourselves, Mr. Gallegher, I would not hold it against you if you had murdered my unfortunate partner and pocketed the fifty thousand. In fact, I would be willing to consider letting you escape with... say... ten thousand, provided you gave me the rest. But not unless you provided me with legal evidence of Jonas's death, so my underwriters would be satisfied."

"Logic," Joe said admiringly. "Beautiful logic. It's amazing that such logic should come from such an opaque horror."

"I would look far more horrible, my friend, if I had a transparent skin like you," Mackenzie" said, "if the anatomy charts are accurate. But we were discussing the matter of my partner's body."

Gallegher said wildly: "This is fantastic. You're probably laying yourself open to compounding a felony or something."

"Then you admit the charge."

"Of course not! You're entirely too sure of yourself, Mr. Mackenzie. I'll bet you killed Harding yourself and you're trying to frame me for it. How do you know he's dead?"

"Now that calls for some explanation, I admit," Mackenzie said. "Jonas was a methodical man. Vurra. I have never known him to miss an appointment for any reason whatsoever. He had appointments last night, and more this morning. One with me. Moreover, he had fifty thousand credits on him when he came here to see you last night."

"How do you know he got here?"

"I brought him, in my aircab. I let him out at your door. I saw him go in."

"Well, you didn't see him go out, but he did," Gallegher said.

Mackenzie, quite unruffled, went on checking points on his bony fingers.

"This morning I checked your record, Mr. Gallegher, and it is not a good one. Unstable, to say the least. You have been mixed up in some shady deals, and you have been accused of crimes in the past. Nothing was ever proved, but you're a sly one, I suspect. The police would agree."

"They can't prove a thing. Harding's probably home in bed."

"He is not. Fifty thousand credits is a lot of money. My partner's insurance amounts to much more than that. The business will be tied up sadly if Jonas remains vanished, and there will be litigation. Litigation costs money."

"I didn't kill your partner!" Gallegher cried.

"Ah," Mackenzie mused. "Still, if I can prove that you did, it will come to the same thing, and be reasonably profitable for me. You see your position, Mr. Gallegher. Why not admit it, tell me what you did with the body, and escape with five thousand credits."

"You said ten thousand a while ago."

"You're daft," Mackenzie said firmly. "I said nothing of the sort. At least, you canna prove that I did."

Gallegher said: "Well, suppose we have a drink and talk it over." A new idea had struck him.

"An excellent suggestion."

Gallegher found two glasses and manipulated the liquor-organ. He offered one drink to Mackenzie, but the man shook his head and reached for the other glass. "Poison, perhaps," he said cryptically. "You have an untrustworthy face."

Gallegher ignored that. He was hoping that with two drinks available, the mysterious little brown animal would show its limitations. He tried to gulp the whisky fast, but only a tantalizing drop burned on his tongue. The glass was empty. He lowered it and stared at Mackenzie.

"A cheap trick," Mackenzie said, putting his own glass down on the workbench. "I did not ask for your whisky, you know. How did you make it disappear like that?"

Furious with disappointment, Gallegher snarled: "I'm a wizard. I've sold my soul to the devil. For two cents I'd make you disappear, too."

Mackenzie shrugged. "I am not worried. If you could, you'd have done it before this. As for wizardry, I am far from skeptical, after seeing that monster squatting over there." He indicated the third dynamo that wasn't a dynamo.

"What? You mean you see it, too?"

"I see more than you think, Mr. Gallegher," Mackenzie said darkly. "In fact, I am going to the police now."

"Wait a minute. You can't gain anything by that—"

"I can gain nothing by talking to you. Since you remain obdurate, I will try the police. If they can prove that Jonas is dead, I will at least collect his insurance."

Gallegher said: "Now wait a minute. Your partner did come here. He wanted me to solve a problem for him."

"Ah. And you solved it?"

"N-no. At least—"

"Then I can get no profit from you," Mackenzie said firmly, and turned to the door. "You will hear from me vurra soon."

He departed. Gallegher sank down miserably on the couch and brooded. Presently he lifted his eyes to stare at the third dynamo.

It was not, then, a hallucination, as he had first suspected. Nor was it a dynamo. It was a squat, shapeless object like a truncated pyramid that had begun to melt down, and two large blue eyes were watching him. Eyes, or agates, or painted metal. He couldn't be sure. It was about three feet high and three feet in diameter at the base.

"Joe," Gallegher said, "why didn't you tell me about that thing?"

"I thought you saw it," Joe explained.

"I did, but—what is it?"

"I haven't the slightest idea."

"Where could it have come from?"

"Your subconscious alone knows what you were up to last night," Joe said. "Perhaps Grandpa and Jonas Harding know, but they're not around, apparently."

Gallegher went to the teleview and put in a call to Maine. "Grandpa may have gone back home. It isn't likely he'd have taken Harding with him, but we can't miss any bets. I'll check on that. One thing, my eyes have stopped watering. What *was* that gadget I made last night?" He passed to the workbench and studied the cryptic assemblage. "I wonder why I put a shoehorn in that circuit?"

"If you'd keep a supply of materials available here, Gallegher Plus wouldn't have to depend on makeshifts," Joe said severely.

"Uh. I could get drunk and let my subconscious take over again.. .no, I can't. Joe, I can't drink anymore! I'm bound hand and foot to the water wagon!"

"I wonder if Dalton had the right idea after all?"

Gallegher snarled: "Do you have to extrude your eyes that way? I need help!"

"You won't get it from me," Joe said. "The problem's extremely simple, if you'd put your mind to it."

"Simple, is it? Then suppose you tell me the answer!"

"I want to be sure of a certain philosophical concept first."

"Take all the time you want. When I'm rotting in jail, you can spend your leisure hours pondering abstracts. *Get me a beer!* No, never mind. I couldn't drink it anyway. What does this little brown animal look like?"

"Oh, use your head," Joe said.

Gallegher growled; "I could use it for an anchor, the way it feels. You know all the answers. Why not tell me instead of babbling?"

"Men can know the nature of things," Joe said. "Today is the logical development of yesterday. Obviously you've solved the problem Adrenals, Incorporated, gave you."

"What? Oh. I see. Harding wanted a new animal or something."

"Well?"

"I've got two of 'em," Gallegher said. "That little brown invisible dipsomaniac and that blue-eyed critter sitting on the floor. *Oh-ho!* Where did I pick them up? Another dimension?"

"How should I know? You've got 'em."

"I'll say I have," Gallegher agreed. "Maybe I made a machine that scooped them off another world —and maybe Grandpa and Harding are on that world now! A sort of exchange of prisoners. I don't know. Harding wanted non-dangerous beasts elusive enough to give hunters a thrill—but where's the element of danger?" He gulped. "Conceivably the pure alienage of the critters provides that illusion. Anyway, I'm shivering."

"Flooding of the blood stream with adrenalin gives tone to the whole system," Joe said smugly.

"So I captured or got hold of those beasts somehow, apparently, to solve Harding's problem.. .mm-m." Gallegher went to stand in front of the shapeless blue-eyed creature. "Hey, you," he said.

There was no response. The mild blue eyes continued to regard nothing. Gallegher poked a finger tentatively at one of them.

Nothing at all happened. The eye was immovable and hard as glass. Gallegher tried the thing's bluish, sleek skin. It felt like metal. Repressing his mild panic, he tried to lift the beast from the floor, but failed completely. It was either enormously heavy or it had sucking-disks on its bottom.

"Eyes," Gallegher said. "No other sensory organs, apparently. That isn't what Harding wanted."

"I think it clever of the turtle," Joe suggested.

"Turtle? Oh. Like the armadillo. That's right. It's a problem, isn't it? How can you kill or capture a...a beast like this? Its exoderm feels plenty hard, it's immovable— that's it, Joe. Quarry doesn't have to depend on flight or fight. The turtle doesn't. And a barracudo could go nuts trying to eat a turtle. This would be perfect quarry for the lazy intellectual who wants a thrill. But what about adrenalin?"

Joe said nothing. Gallegher pondered, and presently seized upon some reagents and apparatus. He tried a diamond drill. He tried acids. He tried every way he could think of to rouse the blue-eyed beast. After an hour his furious curses were interrupted by a remark from the robot.

"Well, what about adrenalin?" Joe inquired ironically.

"Shut up!" Gallegher yelped. "That thing just sits there looking at me! Adren...what?"

"Anger as well as fear stimulates the suprarenals, you know. I suppose any human would become infuriated by continued passive resistance."

"That's right," said the sweating Gallegher, giving the creature a final kick. He turned to the couch. "Increase the nuisance quotient enough and you can substitute anger for fear. But what about that little brown animal? I'm not mad at it."

"Have a drink," Joe suggested.

"All right, I am mad at the kleptomaniacal so-and-so!

You said it moved so fast I can't see it. How can I catch it?"

"There are undoubtedly methods."

"It's as elusive as the other critter is invulnerable. Could I immobilize it by gelling it drunk?"

"Metabolism."

"Burns up its fuel too fast to get drunk? Probably. But it must need a lot of food."

"Have you looked in the kitchen lately?" Joe asked.

Visions of a depleted larder filling his mind, Gallegher rose. He paused beside the blue-eyed object.

"This one hasn't got any metabolism to speak of. But it has to eat, I suppose. Still, eat what? Air? It's possible."

The doorbell sang. Gallegher moaned, "What now?" and admitted the guest. A man with a ruddy face and a belligerent expression came in, told Gallegher he was under tentative arrest, and called in the rest of his crew, who immediately began searching the house.

"Mackenzie sent you, I suppose?" Gallegher said.

"That's right. My name's Johnson. Department of Violence, Unproved. Do you want to call counsel?"

"Yes," said Gallegher, jumping at the opportunity. He used the visor to get an attorney he knew, and began outlining his troubles. But the lawyer interrupted him.

"Sorry. I'm not taking any jobs on spec. You know my rates."

"Who said anything about spec?"

"Your last check bounced yesterday. It's cash on the line this time, or no deal."

"I... Now wait! I've just finished a commissioned job that's paying off big. I can have the money for you—"

"When I see the color of your credits, I'll be your lawyer," the unsympathetic voice said, and the screen blanked. The detective, Johnson, tapped Gallegher on the shoulder.

"So you're overdrawn at the bank, eh? Needed money?"

"That's no secret. Besides, I'm not broke now, exactly. I finished a—"

"A job. Yeah, I heard that, too. So you're suddenly rich. How much did this job pay you? It wouldn't be fifty thousand credits, would it?"

Gallegher drew a deep breath. "I'm not saying a word," he said, and retreated to the couch, trying to ignore the Department men who were searching the lab. He needed a lawyer. He needed one bad. But he couldn't get one without money. Suppose he saw Mackenzie—

The visor put him in touch with the man. Mackenzie seemed cheerful.

"Hello," he said, "see, the police have arrived."

Gallegher said, "Listen, that job your partner gave me—I've solved your problem. I've got what you want."

" Jonas's body, you mean?" Mackenzie seemed pleased.

"No! The animals you wanted! The perfect quarry!"

"Oh. Well. Why didn't you say so sooner?"

"Get over here and call off the police!" Gallegher insisted. "I tell you, I've got your ideal Hunt animals for you!"

"I dinna ken if I can call off the bloodhounds," Mackenzie said, "but I'll be over directly. I will not pay vurra much, you understand?"

"Bah!" Gallegher snarled, and broke the connection. The visor buzzed at him. He touched the

receiver, and a woman's face came in.

She said: "Mr. Gallegher, with reference to your call of inquiry regarding your grandfather, we report that investigation shows that he has not returned to our Maine sector. That is all."

She vanished. Johnson said: "What's this? Your grandfather? Where's he at?"

"I ate him," Gallegher said, twitching. "Why don't you leave me alone?"

Johnson made a note. "Your grandfather. I'll just check up a bit. Incidentally, what's that thing over there?" He pointed to the blue-eyed beast.

"I've been studying a curious case of degenerative osteomyelitis affecting a baroque cephalopod!"

"Oh, I see. Thanks. Fred, see about this guy's grandfather. What are you gaping at?"

Fred said: "That screen. It's set up for projection."

Johnson moved to the audio-sonic recorder. "Better impound it. Probably not important, but—" He touched a switch. The screen turned blank, but Gallegher's voice said: *"We know how to deal with spies in this house, you dirty traitor."*

Johnson moved the switch again. He glanced at Gallegher, his ruddy face impassive, and in silence began to rewind the wire tape. Gallegher said: "Joe, get me a dull knife. I want to cut my throat, and I don't want to make it too easy for myself. I'm getting used to doing things the hard way."

But Joe, pondering philosophy, refused to answer.

Johnson began to run off the recording. He took out a picture and compared it with what showed on the screen.

"That's Harding, all right," he said. "Thanks for keeping this for us, Mr. Gallegher."

"Don't mention it," Gallegher said. "I'll even show the hangman how to tie the knot around my neck."

"Ha-ha. Taking notes, Fred? Right."

The reel unrolled relentlessly. But, Gallegher tried to make himself believe, there was nothing really incriminating recorded.

He was disillusioned after the screen went blank, at the point when he had thrown a blanket over the recorder last night. Johnson held up his hand for silence. The screen still showed nothing, but after a moment or two voices were clearly audible.

"You have thirty-seven minutes to go, Mr. Gallegher."

"Just stay where you are. I'll have this in a minute. Besides, I want to get my hands on your fifty thousand credits."

"But-"

"Relax. I'm getting it. In a very short time your worries will be over."

"Did I say that?" Gallegher thought wildly. "What a fool I am! Why didn't I turn off the radio when I covered up the lens?"

Grandpa's voice said: *"Trying to kill me by inches, eh, you young whippersnapper!"*

"All the old so-and-so wanted was another bottle," Gallegher moaned to himself. "But try to make those flatfeet believe that! Still—" He brightened. "Maybe I can find out what really happened to Grandpa and Harding. If I shot them off to another world, there might be some clue—"

"Watch closely now," Gallegher's voice said from last night. "*I'll explain as I proceed. Oh-oh. Wait a minute. I'm going to patent this later, so I don't want any spies. I can trust you two not to talk, but that recorder's still turned on to audio. Tomorrow, if I played it back, I'd be saying to myself, 'Gallegher, you talk too much. There's only one way to keep a secret safe.' Off it goes!"*

Someone screamed. The shriek was cut off midway. The projector stopped humming. There was utter silence.

The door opened to admit Murdoch Mackenzie. He was rubbing his hands.

"I came right down," he said briskly. "So you've solved our problem, eh, Mr. Gallagher? Perhaps we can do business then. After all, there's no real evidence that you killed Jonas—and I'll be willing to drop the charges, *if* you've got what Adrenals, Incorporated, wants."

"Pass me those handcuffs, Fred." Johnson requested.

Gallegher protested, "You can't do this to me!"

"A fallacious theorem," Joe said, "which, I note, is now being disproved by the empirical method. How illogical all you ugly people are."

The social trend always lags behind the technological one. And while technology tended, in these days, toward simplification, the social pattern was immensely complicated, since it was partly an outgrowth of historical precedent and partly a result of the scientific advance of the era. Take jurisprudence. Cockburn and Blackwood and a score of others had established certain general and specific rules— say, regarding patents—but those rules could be made thoroughly impractical by a single gadget. The Integrators could solve problems no human brain could manage, so, as a governor, it was necessary to build various controls into those semimechanical colloids. Moreover, an electronic duplicator could infringe not only on patents but on property rights, and attorneys prepared voluminous briefs on such questions as whether "rarity rights" are real property, whether a gadget made on a duplicator is a "representation" or a copy, and whether mass-duplication of chinchillas is unfair competition to a chinchilla breeder who depended on old-fashioned biological principles. All of which added up to the fact that the world, slightly punch-drunk with technology, was trying desperately to walk a straight line. Eventually the confusion would settle down.

It hadn't settled down yet.

So legal machinery was a construction far more complicated than an Integrator. Precedent warred with abstract theory as lawyer warred with lawyer. It was all perfectly clear to the technicians, but they were much too impractical to be consulted; they were apt to remark wickedly, "So my gadget unstabilizes property rights? Well—why have property rights, then?"

And you can't do that!

Not to a world that had found security, of a sort, for thousands of years in rigid precedents of social intercourse. The ancient dyke of formal culture was beginning to leak in innumerable spots, and, had you noticed, you might have seen hundreds of thousands of frantic, small figures rushing from danger-spot to danger-spot, valorously plugging the leaks with their fingers, arms, or heads. Some day it would be discovered that there was no encroaching ocean beyond that dyke, but that day hadn't yet come.

In a way, that was lucky for Gallegher. Public officials were chary about sticking their necks out. A simple suit for false arrest might lead to fantastic ramifications and big trouble. The hard-headed Murdoch Mackenzie took advantage of this situation to vise his own personal attorney and toss a monkey wrench in the legal wheels. The attorney spoke to Johnson.

There was no corpse. The audiosonic recording was not sufficient. Moreover, there were vital

questions involving *habeus corpus* and search warrants. Johnson called Headquarters Jurisprudence and the argument raged over the heads of Gallegher and the imperturbable Mackenzie. It ended with Johnson leaving, with his crew—and the increasing recording—and threatening to return as soon as a judge could issue the appropriate writs and papers. Meanwhile, he said, there would be officers on guard outside the house. With a malignant glare for Mackenzie, he stamped out.

"And now to business," said Mackenzie, rubbing his hands. "Between ourselves"—he leaned forward confidentially—"I'm just as glad to get rid of that partner of mine. Whether or not you killed him, I hope he stays vanished. Now I can run the business my way, for a change."

"It's all right about that," Gallegher said, "but what about me? I'll be in custody again as soon as Johnson can wangle it."

"But not convicted," Mackenzie pointed out. "A clever lawyer can fix you up. There was a similar case in which the defendant got off with a defense of *non esse*—his attorney went into metaphysics and proved that the murdered man had never existed. Quite specious, but so far the murderer's gone free."

Gallegher said: "I've searched the house, and Johnson's men did, too. There's simply no trace of Jonas Harding or my grandfather. And I'll tell you frankly, Mr. Mackenzie, I haven't the slightest idea what happened to them."

Mackenzie gestured airily. "We must be methodical. You mentioned you had solved a certain problem for Adrenals, Incorporated. Now, I'll admit, that interested me."

Silently Gallegher pointed to the blue-eyed dynamo. Mackenzie studied the object thoughtfully.

"Well?" he said.

"That's it. The perfect quarry."

Mackenzie walked over to the thing, rapped its hide, and looked deeply into the mild azure eyes.

"How fast can it run?" he asked shrewdly.

Gallegher said: "It doesn't have to run. You see, it's invulnerable."

"Ha. Hum. Perhaps if you'd explain a wee bit more—"

But Mackenzie did not seem pleased with the explanation. "No," he said, "I don't see it. There would be no thrill to hunting a critter like that. You forget our customers demand excitement—adrenal stimulation."

"They'll get it. Anger has the same effect as rage—" Gallegher went into detail.

But Mackenzie shook his head. "Both fear and anger give you excess energy you've got to use up. You can't, against a passive quarry. You'll just cause neuroses. We try to get rid of neuroses, not create them."

Gallegher, growing desperate, suddenly remembered the little brown beast and began to discuss that. Once, Mackenzie interrupted with a demand to see the creature. Gallegher slid around that one fast.

"Ha," Mackenzie said finally. "It isna canny. How can you hunt something that's invisible?"

"Oh—ultraviolet. Scent-analyzers. It's a test for ingenuity—"

"Our customers are not ingenious. They don't want to be. They want a change and a vacation from routine, hard work—or easy work, as the case may be—they want a rest. They don't want to beat their brains working out methods to catch a thing that moves faster than a pixy, nor do they want to chase a

critter that's out of sight before it even gets there. You are a vurra clever man, Mr. Gallegher, but it begins to look as though Jonas's insurance is my best bet after all."

"Now wait—"

Mackenzie pursed his lips. "I'll admit the beasties *may*—I say may—have some possibilities. But what good is quarry that can't be caught? Perhaps if you'd work out a way to capture these other—worldly animals of yours, we might do business. At present, I willna buy a pig in a poke."

"I'll find a way," Gallegher promised wildly. "But I can't do it in jail."

"Ah. I am a little irritated with you, Mr. Gallegher. You tricked me into believing you had solved our problem. Which you havena done—yet. Consider the thought of jail. Your adrenalin may stimulate your brain into working out a way to trap these animals of yours. Though, even so, I can make no rash promises—"

Murdoch Mackenzie grinned at Gallegher and went out, closing the door softly behind him. Gallegher began to dine off his finger nails.

"Men can know the nature of things," Joe said, with an air of solid conviction.

At that point matters were complicated even further by the appearance, on the televisor screen, of a gray-haired man who announced that one of Gallegher's checks had just bounced. Three hundred and fifty credits, the man said, and how about it?

Gallegher looked dazedly at the identification card on the screen. "You're with United Cultures? What's that?"

The gray-haired man said silkily, "Biological and medical supplies and laboratories, Mr. Gallegher."

"What did I order from you?"

"We have a receipt for six hundred pounds of Vita-plasm, first grade. We made delivery within an hour."

"And when—"

The gray-haired man went into more detail. Finally Gallegher made a few lying promises and turned from the blanking screen. He looked wildly around the lab.

"Six hundred pounds of artificial protoplasm," he murmured. "Ordered by Gallegher Plus. He's got delusions of economic grandeur."

"It was delivered," Joe said. "You signed the receipt, the night Grandpa and Jonas Harding disappeared."

"But what could I do with the stuff? It's used for plastic surgery and for humano-prosthesis. Artificial limbs and stuff. It's cultured cellular tissue, this Vitaplasm. Did I use it to *make* some animals? That's biologically impossible. I think. How could I have molded Vitaplasm into a little brown animal that's invisible? What about the brain and the neural structure? Joe, six hundred pounds of Vitaplasm has simply disappeared. Where has it gone?" But Joe was silent.

Hours later Gallegher was furiously busy. "The trick is," he explained to Joe, "to find out all I can about those critters. Then maybe I can tell where they came from and how I got 'em. Then perhaps I can discover where Grandpa and Harding went. Then—"

"Why not sit down and think about it?"

"That's the difference between us. You've got no instinct of self-preservation. You could sit down

and think while a chain reaction took place in your toes and worked up, but not me. I'm too young to die. I keep thinking of Reading Gaol. I need a drink. If I could only get high, my demon subconscious could work out the whole problem for me. Is that little brown animal around?"

"No, "Joe said.

"Then maybe I can steal a drink." Gallegher exploded, after an abortive attempt that ended in utter failure: "Nobody can move *that* fast."

"Accelerated metabolism. It must have smelled alcohol. Or perhaps it has additional senses. Even I can scarcely varish it."

"If I mixed kerosene with the whisky, maybe the dipsomaniacal little monster wouldn't like it. Still, neither would I. Ah, well. Back to the mill," Gallegher said, as he tried reagent after reagent on the blue-eyed dynamo, without any effect at all.

"Men can know the nature of things." Joe said irritatingly.

"Shut up. I wonder if I could electroplate this creature? That would immobilize it, all right. But it's immobilized already. How does it eat?"

"Logically, I'd say osmosis."

"Very likely. Osmosis of what?"

Joe clicked irritatedly. "There are dozens of ways you could solve your problem. Instrumentalism. Determinism. Vitalism. Work *from a posteriori to a priori.* It's perfectly obvious to me that you've solved the problem Adrenals, Incorporated, set you."

"I have?"

"Certainly."

"How?"

"Very simple. Men can know the nature of things."

"Will you stop repeating that outmoded basic and try to be useful? You're wrong, anyway. Men can know the nature of things by experiment and reason combined!"

Joe said: "Ridiculous. Philosophical incompetence. If you can't prove your point by logic, you've failed. Anybody who has to depend on experiment is beneath contempt."

"Why should I sit here arguing philosophical concepts with a robot?" Gallegher demanded of no one in particular. "How would you like me to demonstrate the fact that ideation is dependent on your having a radioatomic brain that isn't scattered all over the floor?"

"Kill me, then," Joe said. "It's your loss and the world's. Earth will be a poorer place when I die. But coercion means nothing to me. I have no instinct of self-preservation."

"Now look," Gallegher said, trying a new tack, "if you know the answer, why not tell me? Demonstrate that wonderful logic of yours. Convince me without having to depend on experiment. Use pure reason."

"Why should I want to convince you? *I'm* convinced. And I'm so beautiful and perfect that I can achieve no higher glory than to admire me."

"Narcissus," Gallegher snarled. "You're a combination of Narcissus and Nietzsche's Superman."

"Men can know the nature of things," Joe said.

The next development was a subpoena for the transparent robot. The legal machinery was beginning to move, an immensely complicated gadget that worked on a logic as apparently twisted as Joe's own. Gallegher himself, it seemed, was temporarily inviolate, through some odd interpretation of jurisprudence. But the State's principle was that the sum of the parts was equal to the whole. Joe was classified as one of the parts, the total of which equaled Gallegher. Thus the robot found itself in court, listening to a polemic with impassive scorn.

Gallegher, flanked by Murdoch Mackenzie and a corps of attorneys, was with Joe. This was an informal hearing. Gallegher didn't pay much attention; he was concentrating on finding a way to put the bite on the recalcitrant robot, who knew all the answers but wouldn't talk. He had been studying the philosophers, with an eye toward meeting Joe on his own ground, but so far had succeeded only in acquiring a headache and an almost unendurable longing for a drink. Even out of his laboratory, though, he remained Tantalus. The invisible little brown animal followed him around and stole his liquor.

One of Mackenzie's lawyers jumped up. "I object," he said. There was a brief wrangle as to whether Joe should be classified as a witness or as Exhibit A. If the latter, the subpoena had been falsely served. The Justice pondered.

"As I see it," he declared, "the question is one of determinism versus voluntarism. If this... ah... robot has free will—"

"Ha!" Gallegher said, and was shushed by an attorney. He subsided rebelliously.

"—then it, or he, is a witness. But, on the other hand, there is the possibility that the robot, in acts of apparent choice, is the mechanical expression of heredity and past environment. For heredity read... ah... initial mechanical basics."

"Whether or not the robot is a rational being, Mr. Justice, is beside the point," the prosecutor put in.

"I do not agree. Law is based on *res*—"

Joe said: "Mr. Justice, may I speak?"

"Your ability to do so rather automatically gives you permission," the Justice said, studying the robot in a baffled way. "Go ahead."

Joe had seemingly found the connection between law, logic, and philosophy. He said happily: "I've figured it all out. A thinking robot is a rational being. I am a thinking robot—therefore I am a rational being."

"What a fool," Gallegher groaned, longing for the sane logics or electronics and chemistry. "The old Socratic syllogism. Even I could point out the flaw in that?"

"Quiet," Mackenzie whispered. "All the lawyers really depend on is tying up the case in such knots nobody can figure it out. Your robot is perhaps not such a fool as you think."

An argument started as to whether thinking robots really were rational beings. Gallegher brooded. He couldn't see the point, really. Nor did it become clear until, from the maze of contradictions, there emerged the tentative decision that Joe was a rational being. This seemed to please the prosecutor immensely.

"Then," the prosecutor said triumphantly, "I wish to bring a charge of assault and battery against Mr. Gallegher. Since this robot has been tentatively classed as a rational being, any activity causing him, or it, to lose consciousness or the power of mobility is *contra bonos mores,* and may be classed as mayhem."

Mackenzie's attorneys were ruffled. Gallegher said: "What does that mean?"

A lawyer whispered: "They can hold you, and hold that robot as a witness." He stood up. "Mr. Justice. Our statements were in reply to purely theoretical questions."

The prosecutor said: "But the robot's statement answered a non-theoretical question."

"The robot was not on oath."

"Easily remedied," said the prosecutor, while Gallegher saw his last hopes slipping rapidly away. He thought hard, while matters proceeded.

"Do you solemnly swear to tell the truth the whole truth and nothing but the truth so help you God?"

Gallegher leaped to his feet. "Mr. Justice, I object."

"Indeed. To what?"

"To the validity of that oath."

Mackenzie said: "Ah- *ha!"*

The Justice was thoughtful. "Will you please elucidate, Mr. Gallegher? Why should the oath not be administered to this robot?"

"Such an oath is applicable to man only."

"And?"

"It presupposes the existence of the soul. At least it implies theism, a personal religion. Can a robot take an oath?"

The Justice eyed Joe. "It's a point, certainly. Ah... Joe. Do you believe in a personal deity?"

"I do."

"Mr. Justice," he announced, "we have learned that Mr. Galloway Gallegher two nights ago inactivated the robot before us now. Is this not true, Mr. Gallegher?"

But Mackenzie's hand kept Gallegher in his seat. One of the defending attorneys rose to meet the question.

"We admit nothing," he said. "However, if you wish to pose a theoretical question, we will answer it."

The query was posed theoretically.

"Then the theoretical answer is 'yes,' Mr. Prosecutor. A robot of this type can be turned on and off at will."

"Can the robot turn itself off?"

"Yes."

"But this did not occur? Mr. Gallegher inactivated the robot at the time Mr. Jonas Harding was with him in his laboratory two nights ago?"

"Theoretically, that is true. There was a temporary inactivation."

"Then," said the prosecutor, "we wish to question the robot, who has been classed as a rational being."

"The decision was tentative," the defense objected.

"Accepted. Mr. Justice—"

"All right," said the Justice, who was still staring at Joe, "you may ask your questions."

"Ah... ah—" The prosecutor, facing the robot, hesitated.

"Call me Joe," Joe said.

"Thank you. Ah... is this true? Did Mr. Gallegher inactivate you at the time and place stated?"

"Yes."

The prosecutor beamed. "Then we can proceed."

"Wait a minute," Murdoch Mackenzie said, rising. "May I ask a question, Mr. Justice?"

"Go ahead."

Mackenzie stared at the robot. "Well, now. Will you tell me, please, what this personal deity of yours is like?"

"Certainly," Joe said. "Just like me."

After a while it degenerated into a theological argument. Gallegher left the attorneys debating the apparently vital point of how many angels could dance on the head of a pin, and went home temporarily scot-free, with Joe. Until such points as the robot's religious basics were settled, nothing could be done. All the way, in the aircab, Mackenzie insisted on pointing out the merits of Calvinism to Joe.

At the door Mackenzie made a mild threat. "I did not intend to give you so much rope, you understand. But you will work all the harder with the threat of prison hanging over your head. I don't know how long I can keep you a free man. If you can work out an answer quickly—"

"What sort of answer?"

"I am easily satisfied. Jonas's body, now—"

"Bah!" Gallegher said, and went into his laboratory and sat down morosely. He siphoned himself a drink before he remembered the little brown animal. Then he lay back, staring from the blue-eyed dynamo to Joe and back again.

Finally he said: "There's an old Chinese idea that the man who first stops arguing and starts swinging with his fists admits his intellectual defeat."

Joe said: "Naturally. Reason is sufficient; if you need experiment to prove your point, you're a lousy philosopher and logician."

Gallegher fell back on casuistry. "First step, animal. Fist-swinging. Second step, human. Pure logic. But what about the third step?"

"What third step?"

"Men can know the nature of things —but you're not a man. Your personal deity isn't an anthropomorphic one. Three steps: animal, man, and what we'll call for convenience, superman—though *man* doesn't necessarily enter into it. We've always attributed godlike traits to the theoretical superbeing. Suppose, just for the sake of having a label, we call this third-stage entity Joe."

"Why not?" Joe said.

"Then the two basic concepts of logic don't apply. Men can know the nature of things by pure

reason, and also by experiment *and* reason. But such second-stage concepts are as elementary to Joe as Plato's ideas were to Aristotle." Gallegher crossed his fingers behind his back. "The question is, then, what's the third-stage operation for Joe?"

"Godlike?" the robot said.

"You've got special senses, you know. You can varish, whatever that is. Do you need ordinary logical methods? Suppose— "

"Yes," Joe said, "I can varish, all right. I can skren, too. Hm-m-m."

Gallegher abruptly rose from the couch. "What a fool I am. 'DRINK ME'. That's the answer. Joe, shut up. Go off in a corner and varish."

"I'm skrenning," Joe said.

"Then skren. I've finally got an idea. When I woke up yesterday, I was thinking about a bottle labeled 'DRINK ME'. When Alice took a drink, she changed size, didn't she? Where's that reference book? I wish I knew more about technology. Vasoconstrictor...hemostatic. ..here it is— demonstrates the metabolic regulation mechanisms of the vegetative nervous system. Metabolism. I wonder now—"

Gallegher rushed to the workbench and examined the bottles. "Vitalism. Life is the basic reality, of which everything else is a form or manifestation. Now, I had a problem to solve for Adrenals, Incorporated. Jonas Harding and Grandpa were here. Harding gave me an hour to fill the bill. The problem...a dangerous and harmless animal. Paradox. That isn't it. Harding's clients wanted thrills and safety at the same time. I've got no lab animals on tap at the moment... *Joe!"*

"Well?"

"Watch," Gallegher said. He poured a drink and watched the liquid vanish before he tasted it. "Now. What happened?"

"The little brown animal drank it."

"Is that little brown animal, by any chance— Grandpa?"

"That's right," Joe said.

Gallegher blistered the robot's transparent hide with sulphurous oaths. "Why didn't you tell me? You—"

"I answered your question," the robot said smugly. "Grandpa's brown, isn't he? And he's an animal."

"But—little! I thought it was a critter about as big as a rabbit."

"The only standard of comparison is the majority of the species. That's the yardstick. Compared to the average height of humans, Grandpa *is* little. A little brown animal."

"So it's Grandpa, is it?" Gallegher said, returning to the workbench. "And he's simply speeded up. Accelerated metabolism. Adrenalin. Hm-m-m. Now I know what to look for, maybe—"

He fell to. But it was sundown before Gallegher emptied a small vial into a glass, siphoned whisky into it, and watched the mixture disappear.

A flickering began. Something flashed from corner to corner of the room. Gradually it became visible as a streaking brownness that resolved itself, finally, into Grandpa. He stood before Gallegher, jittering like mad as the last traces of the accelerative formula wore off.

"Hello, Grandpa," Gallegher said placatingly.

Grandpa's nutcracker face wore an expression of malevolent fury. For the first time in his life, the

old gentleman was drunk. Gallegher stared in utter amazement.

"I'm going back to Maine," Grandpa cried, and fell over backwards.

"Never seen such a lot of slow pokes in my life," Grandpa said, devouring a steak. "My, I'm hungry. Next time I let you stick a needle in me I'll know better. How many months have I been like this?"

"Two days," Gallegher said, carefully mixing up a formula. "It was a metabolic accelerator, Grandpa. You just lived faster, that's all."

"All! Bah. Couldn't eat nothing. Food was solid as a rock. Only thing I could get down my gullet was liquor."

"Oh?"

"Hard chewing. Even with my store teeth. Even whisky tasted hotter. As for a steak like this, I couldn't've managed it."

"You were living faster." Gallegher glanced at the robot, who was still quietly skrenning in a comer. "Let me see. The antithesis of an accelerator is a decelerator— Grandpa, where's Jonas Harding?"

"In there," Grandpa said, pointing to the blue-eyed dynamo and thus confirming Gallegher's suspicion.

"Vitaplasm. So that was it. That's why I had a lot of Vitaplasm sent over a couple of nights ago. Hm-m-m." Gallegher examined the sleek, impermeable surface of the apparent dynamo. After a while he tried a hypodermic syringe. He couldn't penetrate the hard shell.

Instead, using a new mixture he had concocted from the bottles on his workbench, he dripped a drop of the liquid on the substance. Presently it softened. At that spot Gallegher made an injection, and was delighted to see a color-change spread out from the locus till the entire mass was pallid and plastic.

"Vitaplasm," he exulted. "Ordinary artificial protoplasm cells, that's all. No wonder it looked hard. I'd given it a decelerative treatment. An approach to molecular stasis. Anything metabolizing that slowly would seem hard as iron." He wadded up great bunches of the surrogate and dumped it into a convenient vat. Something began to form around the blue eyes—the shape of a cranium, broad shoulders, a torso—

Freed from the disguising mass of Vitaplasm, Jonas Harding was revealed crouching on the floor, silent as a statue.

His heart wasn't beating. He didn't breathe. The decelerator held him in an unbreakable grip of passivity.

Not quite unbreakable. Gallegher, about to apply the hypodermic, paused and looked from Joe to Grandpa. "Now why did I do that?" he demanded.

Then he answered his own question.

"The time limit. Harding gave me an hour to solve his problem. Time's relative—especially when your metabolism is slowed down. I must have given Harding a shot of the decelerator so he wouldn't realize how much time had passed. Let's see." Gallegher applied a drop to Harding's impermeable skin and watched the spot soften and change hue. "Uh-huh. With Harding frozen like that, I could take weeks to work on the problem, and when he woke up, he'd figure only a short time had passed. But why did I use the Vitaplasm on him?"

Grandpa downed a beer. "When you're drunk, you're apt to do anything," he contended, reaching for another steak.

"True, true. But Gallegher Plus is logical. A strange, eerie kind of logic, but logic nevertheless. Let me see. I shot the decelerator into Harding, and then—there he was. Rigid and stiff. I couldn't leave him kicking around the lab, could I?

If anybody came in they'd think I had a corpse on my hands!"

"You mean he ain't dead?" Grandpa demanded.

"Of course not. Merely decelerated. I know! I camouflaged Harding's body. I sent out for Vitaplasm, molded the stuff around his body, and then applied the decelerator to the Vitaplasm. It works on living cellular substance—slows it down. And slowed down to that extent, it's impermeable and immovable!"

"You're crazy," Grandpa said.

"I'm short-sighted," Gallegher admitted. "At least, Gallegher Plus is. Imagine leaving Harding's eyes visible, so I'd be reminded the guy was under that pile when I woke up from my binge! What did I construct that recorder for, anyhow? The logic Gallegher Plus uses is far more fantastic than Joe's."

"Don't bother me," Joe said. "I'm still skrenning."

Gallegher put the hypodermic needle into the soft spot on Harding's arm. He injected the accelerator, and within a moment or two Jonas Harding stirred, blinked his blue eyes, and got up from the floor. "Ouch!" he said, rubbing his arm. "Did you stick me with something?"

"An accident," Gallegher said, watching the man warily. "Uh...this problem of yours—"

Harding found a chair and sat down, yawning. "Solved it?"

"You gave me an hour."

"Oh. Yes, of course." Harding looked at his watch. "It's stopped. Well, what about it?"

"Just how long a time do you think has lapsed since you came into this laboratory?"

"Half an hour?" Harding hazarded.

"Two months," Grandpa snapped.

"You're both right," Gallegher said. "I'd have another answer, but I'd be right, too."

Harding obviously thought that Gallegher was still drunk. He stayed doggedly on the subject.

"What about that specialized animal we need? You still have half an hour— "

"I don't need it," Gallegher said, a great white light dawning in his mind. "I've got your answer for you. But it isn't quite what you think it is." He relaxed on the couch and considered the liquor-organ. Now that he could drink again, he found he preferred to prolong the anticipation.

"I came upon no wine so wonderful as thirst," he remarked.

"Claptrap," Grandpa said.

Gallegher said: "The clients of Adrenals, Incorporated, want to hunt animals. They want a thrill, so they need dangerous animals. They have to be safe, so they can't have dangerous animals. It seems paradoxical, but it isn't. The answer doesn't lie in the animal. It's in the hunter."

Harding blinked. "Come again?"

"Tigers. Ferocious man-eating tigers. Lions. Jaguars. Water buffalo. The most vicious, carnivorous animals you can get. That's part of the answer."

"Listen—" Harding said. "Maybe you've got the wrong idea. The tigers aren't our customers. We don't supply clients to the animals, it's the other way round."

"I must make a few more tests," Gallegher said, "but the basic priciple's right here in my hand. An accelerator. A latent metabolic accelerator with a strong concentration of adrenalin as the catalyst. Like this— " He sketched a vivid verbal picture.

Armed with a rifle the client wandered through the artificial jungle, seeking quarry. He had already paid his fee to Adrenals, Incorporated, and got his intravenous shot of the latent accelerator. That substance permeated his blood stream, doing nothing as yet, waiting for the catalyst.

The tiger launched itself from the underbrush. It shot toward the client like catapulted murder, fangs bared. As the claws neared the man's back, the suprarenals shot adrenalin into the blood stream in strong concentration.

That was the catalyst. The latent accelerative factor became active.

The client speeded up —tremendously.

He stepped away from the body of the tiger, apparently frozen in midair, and did what seemed best to him before the effect of the accelerator wore off. When it did, he returned to normal—and by that time he could be in the supply station of Adrenals, Incorporated, getting another intravenous shot—unless he'd decided to bag his tiger the easy way.

It was as simple as that.

"Ten thousand credits," Gallegher said, happily counting them. "The balance due as soon as I work out the catalytic angle. Which is a cinch. Any fourth-rate chemist could do it. What intrigues me is the forthcoming interview between Harding and Murdoch Mackenzie. When they compare the time element, it's going to be funny."

"I want a drink," Grandpa said. "Where's a bottle?"

"Even in court, I think I could prove I only took an hour or less to solve the problem. It was Harding's hour, of course, but time *is* relative. Entropy—metabolism—what a legal battle *that* would be! Still, it won't happen. I know the formula for the accelerator and Harding doesn't. He'll pay the other forty thousand—and Mackenzie won't have any kicks. After all, I'm giving Adrenals, Incorporated, the success factor they needed."

"Well, I'm still going back to Maine," Grandpa contended. "Least you can do is give me a bottle."

"Go out and buy one," Gallegher said, tossing the old gentleman several credits. "Buy several. I often wonder what the vintners buy—"

"Eh?"

"—one-half so precious as the stuff they sell. No, I'm not tight. But I'm going to be." Gallegher clutched the liquor-organ's mouth-piece in a loving grip and began to play alcoholic arpeggios on the keyboard. Grandpa, with a parting sneer at such new-fangled contraptions, took his departure.

Silence fell over the laboratory. Bubbles and Monstro, the two dynamos, sat quiescent. Neither of them had bright blue eyes. Gallegher experimented with cocktails and felt a warm, pleasant glow seep through his soul.

Joe came out of his corner and stood before the mirror, admiring his gears.

"Finished skrenning?" Gallegher asked sardonically.

"Yes."

"Rational being, forsooth. You and your philosophy. Well, my fine robot, it turned out I didn't need your help after all. Pose away."

"How ungrateful you are," Joe said, "after I've given you the benefit of my superlogic."

"Your... what? You've slipped a gear. What super-logic?"

"The third-stage, of course. What we were talking about a while back. That's why I was skrenning. I hope you didn't think all your problems were solved by your feeble brain, in that opaque cranium of yours."

Gallegher sat up. "What are your talking about? Third-stage logic? You didn't— "

"I don't think I can describe it to you. It's more abstruse than the noumenon of Kant, which can't be perceived except by thought. You've got to be able to skren to understand it, but—well, it's the third stage. It's...let's see...demonstrating the nature of things by making things happen by themselves."

"Experiment?"

"No. By skrenning, I reduce all things from the material plane to the realm of pure thought, and figure out the logical concepts and solutions."

"But... wait. Things have been *happening!* I figured out about Grandpa and Harding and worked out the accelerator—"

"You think you did," Joe said. "I simply skrenned. Which is a purely super-intellectual process. After I'd done that, things couldn't help happening. But I hope you don't think they happened by themselves!"

Gallegher said: "What's skrenning?"

"You'll never know."

"But…you're contending you're the First Cause... no, it's voluntarism... third-stage logic? No—" Gallegher fell back on the couch, staring. "Who do you think you are? *Deus ex machina?"*

Joe glanced down at the conglomeration of gears in his torso.

"What else?" he asked smugly.

It seems only reasonable that the mental hospital should have done something for "John Kingman". After all, he was there for 162 years…

The Strange Case of John Kingman

Murray Leinster

IT STARTED WHEN Dr. Braden took the trouble to look up John Kingman's case-history card. Meadeville Mental Hospital had a beautifully elaborate system of card indexes, because psychiatric research is stressed there. It is the oldest mental institution in the country, having been known as "New Bedlam" when it was founded some years before the Republic of the United States of America. The card index system was unbelievably perfect. But young Dr. Braden found John Kingman's card remarkably lacking in the usual data.

"Kingman, John," said the card. "White, male, 5'8", brown-black hair. Note: physical anomaly. Patient has six fingers on each hand, extra digits contaming apparently normal bones and being wholly functional. Age . . ." This was blank. "Race . . ." This, too, was blank. "Birthplace " Considering the other blanks, it was natural for this to be vacant, also. "Diagnosis: advanced typical paranoia with pronounced delusions of grandeur apparently unassociated with usual conviction of persecution." There was a comment here, too. "Patient apparently understands English very slightly if at all. Does not speak." Then three more spaces. "Nearest relative . . ." It was blank. "Case history . . ." It was blank. Then, "Date of admission . . ." and it was blank.

The card was notably defective, for the index card of a patient at Meadeville Mental. A patient's age and race could be unknown if he'd simply been picked up in the street somewhere and never adequately identified. In such an event it was reasonable that his nearest relative and birthplace should be unknown, too. But there should have been some sort of case history, at least of the events leading to his committal to the institution. And certainly, positively, absolutely, the date of his admission should be on the card!

Young Dr. Braden was annoyed. This was at the time when the Jantzen euphoric-shock treatment was first introduced, and young Dr. Braden believed in it. It made sense. He was anxious to attempt it at Meadeville, of course on a patient with no other possible hope of improvement. He handed the card to the clerk in the records department and asked for further data on the case.

Two hours later he smoked comfortably on a very foul pipe, stretched out on grassy sward by the Administration Building. There was a beautifully blue sky overhead, and the shadows of the live oaks reached out in an odd long pattern on the lawn. Young Dr. Braden read meditatively in the American Journal of Psychiatry. The article was "Reaction of Ten Paranoid Cases to Euphoric Shock." John Kingman sat in regal dignity on the steps nearby. He wore the nondescript garments of an indigent patient, not supplied with clothing by relatives. He gazed into the distance, to all appearances thinking consciously godlike thoughts and being infinitely superior to mere ordinary humans. He was of an indeterminate age which might be forty or might be sixty or might be anywhere in between. His six-fingered hands lay in studied gracefulness in his lap. He deiberately ignored all of mankind and mankind's doings.

Dr. Braden finished the article. He sucked thoughtfully on the burned-out pipe. Without seeming to do so, he regarded John Kingman again. Mental cases have unpredictable reactions, but as with children and will animals, much can be done if care is taken not to startle them. Presently young Dr. Braden said meditatively:

"John, I think something can be done for you"

The regal figure turned its eyes. They looked at the younger man. They were aloofly amused at the imperitinence of a mere human being addressing John Kingman, who was so much greater than a mere human being that he was not even annoyed at human impertinence. Then John Kingman looked away again.

"I imagine," said Braden, as meditatively as before, "that you're pretty bored. I'm going to see if something can't be done about it. In fact-"

Someone came across the grass toward him. It was the clerk of the records department. He looked very unhappy. He had the card Dr. Braden had turned in with a request for more complete information. Braden waited.

"Er . . .doctor," said the clerk miserably, "there's something wrong! Something terribly wrong! About the records, I mean."

The aloofness of John Kingman had multiplied with the coming of a second, low, human being into his ken. He gazed into the distance in divine indifference to such creatures.

"Well?" said Braden.

"There's no record of his admission!" said the clerk. "Every year there's a complete roster of the patients, you know. I thought I'd just glance back, find out what year his name first appeared, and look in the committal papers for that year. But I went back twenty years, and John Kingman is mentioned every year!"

"Look back thirty, then," said Braden.

"I . . . I did!" said the clerk painfully. "He was a patient here thirty years ago!"

"Forty?" asked Braden.

The clerk gulped.

"Dr. Braden," he said desperately, "I even went to the dead files, where records going back to 1850 are kept. And . . . doctor, he was a patient then!"

Braden got up from the grass and brushed himself off automatically.

"Nonsense!" he said. "That's ninety-eight years ago!"

The clerk looked crushed. "I know, doctor. There's something terribly wrong! I've never had my records questioned before. I've been here twenty years."

"I'll come with you and look for myself," said Dr. Braden. "Send an attendant to come here and take him back to his ward."

"Y-yes, doctor," said the clerk, gulping again. "At... at once."

He went away at a fast pace between a shuffle and a run. Dr. Braden scowled impatiently.

Then he saw John Kingman looking at him again, and John Kingmàn was amused. Tolerantly, loftily amused. Amused with a patronizing condescension that would have been infuriating to anyone but a physician trained to regard behavior as symptomatic rather than personal.

"It's absurd," grunted Braden, matter of factly treating the patient, as a good psychiatrist does, like a perfectly normal human being. "You haven't been here for ninety-eight years!"

One of the six-fingered hands stirred. While John Kingman regarded Braden with infinitely superior scorn, six fingers made a gesture as of writing. Then the hand reached out.

Braden put a pencil in it. The other hand reached. Braden fumbled in his pockets and found a scrap of paper. He offered that.

John Kingman looked aloofly into the far distance, not even glancing at what his hands did. But the fingers sketched swiftly, with practiced ease. It took only seconds. Then, negligently, he reached out and returned pencil and paper to Braden. He returned to his godlike indifference to mere mortals. But there was now the faintest possible smile on his face. It was an expression of contemptuous triumph.

Braden glanced at the sketch. There was design there. There was an unbelievable intricacy of relationship between this curved line and that, and between them and the formalized irregular pattern in the center. It was not the drawing of a lunatic. It was cryptic, but it was utterly rational. There is something essentially childish in the background of most forms of insanity. There was nothing childish about this. And it was obscurely, annoyingly familiar. Braden had seen something like it, somewhere, before. It was not in the line of psychiatry, but in some of the physical sciences diagrams like this were

used in explanations.

An attendant came to return John Kingman to his ward. Braden folded the paper and put it in his pocket.

"It's not in my line, John," he told John Kingman. "I'll have a check-up made. I think I'm going to be able to do something for you."

John Kingman suffered himself to be led away. Rather, he grandly preceded the attendant, negligently preventing the man from touching him, as if such a touch Would be a sacrilege the man was too ignorant to realize.

Braden went to the record office. With the agitated clerk beside him, he traced John Kingman's name to the earliest of the file of dead records. Handwriting succeeded typewriting as he went back through the years. Paper yellowed. Handwriting grew Spencerian. It approached the copperplate. But, in ink turned brown, in yellowed rag paper in the ruled record, books of the Eastern Pennsylvania Asylum, which was Meadeville Mental in 1850, there were the records of a patient named John Kingman for every year. Twice Braden came upon notes alongside the name. One was in 1880. Some staff doctor, there were no psychiatrists in those days, had written, "High fever." There was nothing else. In 1853 a neat memo stood beside the name. "This man has six functioning fingers on each hand." The memo had been made ninety-five years before.

Dr. Braden looked at the agitated clerk. The record of John Kingman was patently impossible. The clerk read it as a sign of inefficiency in his office and possibly on his part. He would be upset and apprehensible until the source of the error had safely been traced to a predecessor.

"Someone," said Braden dryly, but he did not believe it even then, "forgot to make a note of the explanation. An unknown must have been admitted at some time as John Kingman. In time, he died. But somehow the name John Kingman had become a sort of stock name like John Doe, to signify an unidentified patient. Look in the death records for John Kingman. Evidently a John Kingman died, and that same year another unidentified patient was assigned the same name. That's it!"

The clerk almost gasped with relief. He went happily to check. But Braden did not believe it. In 1853 someone had noted that John Kingman had six functioning fingers on each hand. The odds against two patients in one institution having six functioning fingers, even in the same century, would be enormous.

Braden went doggedly to the museum. There the devices used in psychiatric treatments in the days of New Bedlam were preserved, but not displayed. Meadeville Mental had been established in 1776 as New Bedlam. It was the oldest mental institution in the United States, but it was not pleasant to think of the treatment given to patients, then termed "madmen", in the early days.

The records remained. Calf-leather bindings. Thin rag paper. Beautifully shaded writing, done with quill pens. Year after year, Dr. Braden searched. He found John Kingman listed in 1820. In 1801. In 1795. In 1785 the name "John Kingthan" was absent from the annual list of patients. Braden found the record of his admission in 1786. On the 21st of May, 1786, ten years after New Bedlam was founded, one hundred and sixty-two years before the time of his search, there was a neat entry:

A poore madman admitted this day has been assigned the name of John Kingman because of his absurdly royal manner and affected dignity. He is five feet eight inches tall, appears to speak no English or any other tongue known to any of the learned men here about, and has six fingers on each hand, the extra fingers being perfectly formed and functioning. Dr. San Forde observed that he seems to have a high fever. On his left shoulder, when stripped, there appears a curious design which is not tattooing according to any known fashion. His madness appears to be so strong a conviction of his greatness that

he will not condescend to notice others as being so much his inferiors, so that if not committed hee would starve. But on three occasions, when being examined by physicians, he put out his hand imperiously for writing instruments, and drew very intricate designs which all agree have no significance. He was committed as a madman by a commission consisting of Drs. San Forde, Smyth, Hale, and Bode."

Young Dr. Braden read the entry a second time. Then a third. He ran his hands through his hair. When the clerk came back to announce distressedly that not in all the long history of the institution had a patient named John Kingman died, Braden was not surprised.

"Quite right," said Braden to the almost hysterical clerk. "He didn't die. But I want John Kingman taken over to the hospital ward. We're going to look him over. He's been rather neglected. Apparently he's had actual medical attention only once in a hundred and sixty-two years. Get out his committal papers for me, will you? He was admitted here May 21st, 1786."

Then Braden left, leaving behind him a clerk practically prostrated with shock. The clerk wildly suspected that Dr. Braden had gone insane. But when he found the committal papers, he decided hysterically that it was he who would shortly hold in one of the wards.

John Kingman manifested amusement when he was taken into the hospital laboratory. For a good ten seeonds, Braden watched him narrowly, he glanced from one piece of apparatus to another. It was impossible to doubt that after one glance he understood the function and operation of every appliance in the ultramodern, super, scientifically, equipped laboratory of the hospital ward. Bnt he was amused. In particular, he looked at the big X-ray machine and smiled with such contempt that the X-ray technician bristled.

"No paranoid suspicion," said Braden. "Most paranoid patients suspect that they're going to be tortured or killed when they're brought to a place where there's stuff they don't understand."

John Kingman turned his eyes to Braden. He put out his six-fingered hand and made the motion of writing. Braden handed him a pencil and a memo tablet. Negligently, contemptuously, he sketched. He sketched again. He handed the sketches to Braden and retreated into his enormous amused contempt for humanity.

Braden glanced at the scraps of paper. He jerked his bead, and the X-ray technician came to his side.

"This," said Braden dryly, "looks like a diagram of an X-ray tube. Is it?"

The technician blinked.

"He don't use the regular symbols," he objected, "but . . . well . . yes. That's what he puts for the target and this's for the cathode. Hm-m-m. Yes." Then he said suddenly: "Say! That's not right."

He studied the diagram. Then he said in abrupt excitement:

"Look! He's put in a field like in a electron microscope! That's an idea! Do that, and you'd get straightline electron flow and a narrower X-ray beam."

Braden said:

"I wonder! What's this second sketch? Another type of X-ray?"The X-ray technician studied the second sketch absorbedly. After a time he said dubiously:

"He don't use regular symbols. I don't know. Here's the same sign for the target and that for the cathode. This looks like something to . . . hm-m-m . . . accelerate the electrons. Like in a Coolidge tube.

Only it's," He scratched his head. "I see what he's trying to put down. If something like this would work, you could work any tube at any voltage you wanted. Yeah! And all the high EMF would be inside the tube. No danger. Hey! You could work this off dry batteries! A doctor could carry a X-ray outfit in his handbag! And he could get million-volt stuff!"

The technician stared in mounting excitement. Presently he said urgently:

"This is crazy! But . . . look, Doe! Let me have this thing to study over! This is great stuff! This is. . . Gosh! Give me a chance to get this made up and try it out! I don't get it all yet, but. . ."

Braden took back the sketch and put it in his pocket.

"John Kingman," he observed, "has been a patient here for a hundred and sixty-two years. I think we're going to get some more surprises. Let's get at the job on hand!"

John Kingman was definitely amused. He was amenable, now. His air of pitying condescension, as of a god to imbeciles, under other circumstances would have been infuriating. He permitted himself to be X-rayed as one might allow children to use one as a part of their play. He glanced at the thermometer and smiled contemptuously. He permitted his body temperature to be taken from an armpit. The electrocardiograph aroused just such momentary interest as a child's unfamiliar plaything might cause. With an air of mirth he allowed the tattooed design on his shoulder, it was there, to be photographed. Throughout, he showed such condescending contempt as would explain his failure to be annoyed.

But Braden grew pale as the tests went on. John Kingman's body temperature was 1050 F. A "high fever" had been observed in 1850, ninety-eight years before, and in 1786, well over a century and a half previously. But he still appeared to be somewhere between forty and sixty years old. John Kingman's pulse rate was one hundred fifty-seven beats per minute, and the electrocardiograph registered an absolutely preposterous pattern which had no meaning until Braden said curtly:

"If he had two hearts, it would look like that!"

When the X-ray plates came out of the fixing-bath, he looked at them with the grim air of someone expecting to see the impossible. And the impossible was there. When John Kingman was admitted to New Bedlam, there were no such things as X-rays on earth. It was natural that he had never been X-rayed before. He had two hearts. He had three extra ribs on each side. He had four more vertebrae than a normal human being. There were distinct oddities in his elbow joints. And his cranial capacity appeared to be something like twelve per cent above that of any but exceptional specimens of humanity. His teeth displayed distinct, consistent deviations from the norm in shape.

He regarded Braden with contemptuous triumph when the tests were over. He did not speak. He drew dignity about himself like a garment. He allowed an attendant to dress him again while he looked into the distance, seemingly thinking godlike thoughts. When his toilet was complete he looked again at Braden, with vast condescension, and his six-fingered hands again made a gesture of writing. Braden grew, if possible, slightly paler as he handed over a pencil and pad.

John Kingman actually designed to glance, once, at the sheet on which he wrote. When he handed it back to Bradeñ and withdrew into magnificently amused aloofness, there were a dozen or more tiny sketches on the sheet. The first was an exact duplicate of the one he had handed Braden before the Administration Building. Beside it was another which was similar but not alike. The third was a specific variation of the two together. The rest carried on that variation in precise, exact steps until the last pair of sketches divided again into two, of which one, by a perfectly logical extension of the change, pattern, had returned to the original design, while the other was a bewilderingly complex pattern with its formalized central part in two closely-linked Sections.

Braden caught his breath. Just as the X-ray man had been puzzled at first by the use of unfamiliar symbols for familiar ideas, so Braden had been puzzled by untraceable familiarity in the first sketch of all. But the last diagram made everything clear. It resembled almost exactly the standard diagrams illustrating fissionable elements as atoms. Once it was granted that John Kingman was no ordinary lunatic, it became clear that here was a diagram of some physical process which began with normal and stable atoms and arrived at an unstable atom, with one of the original atoms returned to its original state. It was, in short, a process of physical catalysis which would produce atomic energy.

Braden raised his eyes to the contemptuous, amused eyes of John Kingman.

"I think you win," he said shakenly. "I still think you're crazy, but maybe we're crazier still."

The commitment papers on John Kiagman were a hundred and sixty-two years old. They were yellow and brittle and closely written. John Kingman, said the oddly spelled and sometimes curiously phrased document, was first seen on the morning of April 10, 1786, by a man named Thomas Hawkes, as he drove into Aurora, Pennsylvania, with a load of corn. John Kingman was then clad in very queer garments, not like those of ordinary men. The material looked like silk, save that it seemed also to be metallic. The man Hawkes was astounded, but thought perhaps some strolling player had got drunk and wandered off while wearing his costume for a play or pageant. He obligingly stopped his horse and allowed the stranger to climb in for a ride to town. The stranger was imperious, and scornfully silent. Hawkes asked who he was, and was contemptuously ignored. He asked, seemingly, all the world was talking of such matters then, at least the world about Aurora, Pennsylvania, if the stranger had seen the giant shooting stars of the night before. The stranger ignored him. Arrived in town, the stranger stood in the street with regal dignity, looking contemptuously at the people. A crowd gathered about him, but he seemed to feel too superior to notice it. Presently a grave and elderly man, Mr. Wycherly, appeared and the stranger fixed him with a gesture. He stooped and wrote strange designs in the dust at his feet. When the unintelligible design was meaningless to Mr. Wycherly, the stranger seemed to fly into a very passion of contempt. He spat at the crowd, and the crowd became unruly and constables took him into custody.

Braden waited patiently until both the Director of Meadeville Mental and the man from Washington had finished reading the yellowed papers. Then Braden explained calmly:

"He's insane, of course. It's paranoia. He is as convinced of his superiority to us as, say, Napoleon or Edison would have been convinced of their superiority if they'd suddenly been dumped down among a tribe of Australian bushmen. As a matter of fact, John Kingman may have just as good reason as they would have had to feel his superiority. But if he were sane he would prove it. He would establish it. Instead, he has withdrawn into a remote contemplation of his own greatness. So he is a paranoid. One may surmise that he was insane when he first appeared. But he doesn't have a delusion of persecution because on the face of it no such theory is needed to account for his present situation."

The Director said in a tolerantly shocked tone:

"Dr. Braden! You speak as if he were not a human being!"

"He isn't," said Braden. "His body temperature is a hundred and five. Human tissues simply would not survive that temperature. He has extra vertebrae and extra ribs. His joints are not quite like ours. He has two hearts. We were able to check his circulatory system just under the skin with infrared lamps, and it is not like ours. And I submit that he has been a patient in this asylum for one hundred and sixty-two years. If he is human, he is at least remarkable!"

The man from Washington said interestedly:

"Where do you think he comes from, Dr. Braden?"

Braden spread out his hands. He said doggedly:

"I make no guesses. But I sent photostats of the sketches he made to the Bureau of Standards. I said that they were made by a patient and appeared to be diagrams of atomic structure. I asked if they indicated aknowledge of physics. "You", he looked at the man from Washington, "turned up thirty-six hours later. I deduce that he has such knowledge."

"He has!" said the man from Washington, mildly, "The X-ray sketches were interesting enough, but the others. . . Apparently he has told us how to get controlled atomic energy out of silicon, which is one of earth's commonest elements. Where did he come from, Dr. Braden?"

Braden clantped his jaw.

"You noticed that the commitment papers referred to shooting stars then causing much local comment? I looked up the newspapers for about that date. They reported a large shooting star which was observed to descend to the earth. Then, various credible observers claimed that it shot back up to the sky again. Then, some hours afterward, various large shooting stars crossed the sky from horizon to horizon, without ever falling."

The Director of Meadeville Mental said humorously:

"It's a wonder that New Bedlam, as we were then, was not crowded after such statements!"

The man from Washington did not smile.

"I think," he said meditatively, "that Dr. Braden suggests a spaceship landing to permit John Kingman to get out, and then going away again. And possible pursuit afterward."

The Director laughed appreciatively at the assumed jest.

"If," said the man from Washington, "John Kingrnan is not human, and if he comes from somewhere where as much was known about atomic energy almost two centuries ago as he has showed us, and, if he were insane there, he might have seized some sort of vehicle and fled in it because of delusions of persecution. Which in a sense, if he were insane, might be justified. He would have been pursued. With pursuers close behind him he might have landed here."

"But the vehicle!" said the Director, humorously. "Our ancestors would have recorded finding a spaceship or an airplane."

"Suppose," said the man from Washington, "that his pursuers had something like . . . say . . . radar. Even we have that! A cunning lunatic would have sent off his vehicle under automatic control to lead his pursuers as long and merry a chase as possible. Perhaps he sent it to dive into the sun. The rising shooting star and the other cruising shooting stars would be accounted for. What do you say, Dr. Braden?"

Braden shrugged.

"There is no evidence. Now he is insane. If we were to cure him. . ."

"Just how," said the man from Washington, "would you cure him? I thought paranoia was practically hopeless."

"Not quite," Braden told him. "They've used shock treatment for dementia praecox and schizophrenia, with good results. Until last year there was nothing of comparable value for paranoia. Then Jantzen suggested euphoric shock. Basically, the idea is to dispel illusions by creating

hallucinations."

The Director fidgeted disapprovingly. The man from Washington waited.

"In euphoric shock," said Braden carefully, "the tensions and anxieties of insane patients are relieved by drugs which produce a sensation of euphoria, or well being. Jantzen combined hallucination-producing drugs with those. The combination seems to place the patient temporarily in a cosmos in which all delusions are satisfied and all tensions relieved. He has a rest from his struggle against reality. Also he has a sort of supercatharsis, in the convincing realization of all his desires. Quite often he comes out of the first euphoric shock temporarily sane. The percentage of final cures is satisfyingly high."

The man from Washington said, "Body chemistry?"

Braden regarded him with new respect. He said, "I don't know. He's lived on human food for almost two centuries, and in any case it's been proved that the proteins will be identical on all planets under all suns. But I couldn't be sure about it. There might even be allergies. You say his drawings were very important. It might be wisest to find out everything possible from him before even euphoric shock was tried."

"Ah, yes!" said the Director, tolerantly. "If he has waited a hundred and sixty-two years, a few weeks or months will make no difference. And I would like to watch the experiment, but I am about to start on my vacation. . . "

"Hardly," said the man from Washington.

"I said, I am about to start on my vacation."

"John Kingman," said the man from Washington mildly, "has been trying for a hundred and sixty-two years to tell us how to have controlled atomic energy, and pocket X-ray machines, and God knows what all else. There may be, somewhere about this institution, drawings of antigravity apparatus, really efficient atomic bombs, spaceship drives or weapons which could depopulate the earth. I'm afraid nobody here is going to communicate with the outside world in any way until the place and all its personnel are gone over . . . ah rather carefully."

"This," said the Director indignantly, "is preposterous!"

"Quite so. A thousand years of human advance locked in the skull of a lunatic. Nearly two hundred years more of progress and development wasted because he was locked up here. But it would be most preposterous of all to let his information loose to the other lunatics who aren't locked up because they're running governments! Sit down!"

The Director sat down. The man from Washington said:

"Now, Dr. Braden. . ."

John Kingman spent days on end in scornful, triumphant glee. Braden watched him somberly. Meadeville Mental Hospital was an anned camp with sentries everywhere, and especially about the building in which John Kingman gloated. There were hordes of suitably certified scientists and psychiatrists about him, now, and he was filled with blazing satisfaction.

He sat in regal, triumphant aloofness. He was the greatest, the most important, the most consequential figure on this planet. The stupid creatures who inhabited it, they were only superficially like himself, had at last come to perceive his godliness. Now they clustercd about him. In their stupid language which it was beneath his dignity to learn, they addressed him. But they did not grovel. Even groveling would not be sufficiently respectful for such inferior beings when addressing John Kingman. He very probably devised in his own mind the exact etiquette these stupid creatures must practice

before he would condescend to notice them.

They made elaborate tests. He ignored their actions. They tried with transparent cunning to trick him into further revelations of the powers he held. Once, in malicious amusement, he drew a sketch of a certain reaction which such inferior minds could not possibly understand. They were vastly excited, and he was enormously amused. When they tried that reaction and square miles turned to incandescent vapor, the survivors would realise that they could not trick or force him into giving them the riches of his godlike mind. They must devise the proper etiquette to appease him. They must abjectly and humbly plead with him and placate him and sacrifice to him. They must deny all other gods but John Kinginan. They would realize that he was all wisdom, all power, all greatness when the reaction he had sketched destroyed them by millions.

Braden prevented that from happening. When John Kingusan gave a sketch of a new atomic reaction in response to an elaborate trick one of the newcomers had devised, Braden protested grimly.

"The patient," he said doggedly, "is a paranoid. Suspicion and trickiness is inherent in his mental processes.At any moment, to demonstrate his greatness, he may try to produce unholy destruction. You absolutely cannot trust him! Be careful!"

He hammered the fact home, arguing the sheer fact that a paranoid will do absolutely anything to prove his grandeur.

The new reaction was tried with microscopic quantities of material, and it only destroyed everything within a fifty-yard radius. Which brought the final decision on John Kingman. He was insane. He knew more about one overwhelmingly important subject than all the generations of men. But it was not possible to obtain trustworthy data from him on that subject or any others. while he was insane. It was worth while to take the calculated risk of attempting to cure him.

Braden protested again:

"I urged the attempt to cure him," he said firmly, "before I knew he had given the United States severe centuries head-start in knowledge of atomic energy was thinking of him as a patient. For his own sake, any risk was proper. Since he is not human, withdraw my urging. I do not know what will happen. Anything could happen."

His refusal held up treatment for a week. Then a Presidential executive order resolved the matter. The attempt was to be made as a calculated risk. Dr. Braden would make the attempt.

He did. He tested John Kingman for tolerance of euphoric drugs. No unfavorable reaction.He tested him for tolerance of drugs producing hallucination. No unf avorable reaction. Then he injected into one of John Kingman's veins a certain quantity of the combination of drugs which on human beings was most effective for euphoric shock, and whose separate constituents had been tested on John Kingman and found harmless. It was not a sufficient dose to produce the full required effect. Braden expected to have to make at least one and probably two additional injections before the requisite euphoria was produced. He was taking no single avoidable chance. He administered first a dosage which should have produced no more than a feeling of mild but definite exhilaration.

And John Kingman went into convulsions. Horrible ones.

There is such a thing as allergy and such a thing as synergy, and nobody understands either. Some patients collapse when given aspirin. Some break out in rashes from penicillin. Some drugs, taken atone, have one effect, and taken together quite another and drastic one. A drug producing euphoria was harmless to John Kingman. A drug producing hallucinations was harmless. But, synergy or allergy or whatever, the two taken together were deadly poison.

He was literally unconscious for three weeks, and in continuous convulsion for two days. He was kept alive by artificial nourishment, glucose, nasal feeding everything. But his coma was extreme. Four separate times he was believed dead.

But after three weeks he opened his eyes vaguely. In another week he was able to talk, From the first, his expression was bewildered. He was no longer proud. He began to learn English. He showed no paranoid symptoms. He was wholly sane. In fact, his I.Q., tested later, was ninety, which is well within the range of normal intelligence. He was not over-bright, but adequate. And he did not remember who he was. He did not remember anything at all about his life before rousing from coma in the Meadeville Mental Hospital. Not anything at all. It was apparently, either the price or the cause of his recovery.

Braden considered that it was the means. He urged his views on the frustrated scientists who wanted now to try hypnotism and "truth serum" and other devices for picking the lock of John Kingman's brain.

"As a diagnosis," said Braden, moved past the tendency to be technical, "the poor devil smashed up on something we can't even guess at. His normal personality couldn't take it, whatever it was, so he fled into delusions, into insanity. He lived in that retreat over a century and a half, and then we found him out, And we wouldn't let him keep his beautiful delusions that he was great and godlike and all-powerful. We were merciless. We forced ourselves upon him. We questioned him. We tricked him. In the end, we nearly poisoned him! And his delusions couldn't stand up. He couldn't I admit that he was wrong, and he couldn't reconcile such experiences with his delusions. There was only one thing he could do, forget the whole thing in the most literal possible manner. What he's done is to go into what they used to call dementia praecox. Actually, it's infantilism. He's fled back to his childhood. That's why his I.Q. is only ninety, instead of the unholy figure it must have been when he was a normal adult of his race. He's mentally a child. He sleeps, right now, in the foetal position. Which is a warning! One more attempt to tamper with his brain, and he'll go into the only place that's left for him, into the absolute blankness that is the mind of the unborn child!"

He presented evidence. The evidence was overwhelming. In the end, reluctantly, John Kingman was left alone.

He gets along all right, though. He works in the records department of Meadeville Mental now, because there his six-fingered hands won't cause remark. He is remarkably accurate and perfectly happy.

But be is carefully watched. The one question he can answer now is, how long he's going to live. A hundred and sixty-two years is only part of his lifetime. But if you didn't know, you'd swear he wasn't more than fifty.

A story of tomorrow's frontiers and the space-trails leading there.

Doughnut Jockey

Erik Fennel

FAINTLY THE unmistakable howl of a driver rocket drifted across the ten-mile-wide safety strip surrounding Mukilteo Spaceport. The new guard heard it, and frowned inquiringly.

Mike Kelly cocked one ear, yanked the lever opening the main gate, then jerked the new man bodily into the low pillbox-like gatehouse. He kicked the heavy door shut.

"That's Doughnut Merrill turning off the highway," he lectured. "If the gate ain't open, he'd as soon drive that hell-wagon automobile right through it. He's got a miniature Haskell driver bolted into the back deck of that roadster. Fixed it himself. The cops would throw away the keys if they caught him using it on the roads, so he plays out here like he's flying low. Wild as a coot, that fellow."

"But won't he stop to check in?" The new man took his duties seriously.

Kelly snorted. "He never does. And this morning he has a good excuse, for once."

"What's it all about, anyhow?"

Kelly looked serious. "Must be something bad wrong. Interplanet don't break schedule for fun."

Walter Merrill glanced toward the blast pits as he passed the perimeter fence. The squatty, ludicrous shape of *Doughnut II* was already on the supports. *Fireball* lay beside it in the retrieving cradle on which it had been dragged from Puget Sound after its last run, sleek and slender and, to anyone with an engineering brain, breathtakingly beautiful.

The three tall cranes were in position, their boom tips interlocked to form the stable tripod needed to set a Fire-class ship upright. They always made Merrill think of gawky long-necked geese whispering secrets.

Soon *Fireball* would be positioned in the hole of *Doughnut*, ready to go out. The scene was perfectly familiar, but this time it carried a special thrill. Merrill smiled happily. This was his big day.

He cut the jet, tromped brakes, and from sheer exuberance made it a spectacular squealing stop—one that streaked hot rubber across the parking lot beside the administration building. He felt eager and well disposed toward all mankind as he headed for Jerry Slidell's office.

The operations manager of Interplanet started to jump up, then remembered what long accelerations in the pre-Gravinol days had done to his heart valves, and rose more sedately. He was in his thirties, but his hair was white from radiation leakage, and his face was deeply lined.

"How long to blast-off?" Merrill began. "Tape ready? What's wrong at Mars Colony to need a special hop?" Slidell eased himself back into his chair.

"A pneumonia carrier—one of those people who have it in their systems without showing any symptoms—must have got through the medical check-up. And you know what high-level meson stuff and Rho shower-effect discharges from the hull plates do to viruses. This mutation is so damnably virulent it stands to wipe out the Colony."

Merrill whistled in dismay.

"Benson and his relief pilot were both coming down with it when they splashed *Firefly* in last night. But the doctors say this new serum should hold even a mutant virus—if we get it out there in time. We found a supply in Seattle—pure luck—and it's being loaded now to stand acceleration and shock.

"So *Fireball* goes out light, no load but the serum, no relief pilot even, and it'll be full boost, open throttle, and jets all the way."

"But—"

"I know, I know! She'll get in without enough fuel to come back, and there she sits out of action until the Marsport plant starts producing. It messes up the whole schedule, but there's nothing else to

do."

Merrill leaned forward, his hands gripping the edge of Slidell's desk.

"Jerry, I'll set you a speed record that will stand a long time," he declared.

He had a disturbing thought then, but before he could put it into words, the operations manager looked him in the eye.

"Walter!" He avoided the nickname he knew Merrill detested. "Just a minute. Don't you think—"

Instantly the smile was gone from Merrill's lean face. "Again?" he barked.

Slidell sighed. "All right, I promised," he said resignedly. "You can take *Fireball* if you insist."

"But you want me to—"

"Use your head, Walter. We need all the boost *Doughnut II* will put out. Not bare escape velocity. And you know there hasn't been time to check her properly since you boosted *Firestreak* out last Thursday. You're the one who—"

"How about Bob Ord?"

"He could, under normal conditions. But this won't be standard pattern. Besides, we haven't been able to find him yet. This would happen between schedules, when everybody's scattered to hell and gone!"

"Now, listen here, Jerry. I don't intend to get pushed—" "Walter, I'm doing my best. I caught Wraxton vacationing in Los Angeles, and he should be here in a couple hours to see what he can do."

Merrill grimaced. Wraxton of Chesapeake Spaceport was supposed to be a good boosterman, but *Doughnut* was touchy and Chesapeake used a different control system. The pleasant feeling of a few minutes earlier had evaporated completely.

Slidell's voice was suddenly crisp with authority. "Go get your shots. Thomas will take care of you. We'll settle later who takes what."

Merrill didn't argue, but if the door panel had been glass instead of plastic, it would have shattered as he slammed it. As he stomped toward the locker-room he had a rebellious suspicion that he was being had—again.

Haskell-Jenkins nuclear shift drivers had taken spaceflight out of the over-Niagara-in-a-barrel category, but they had the intrinsic drawback of critical mass limitation. Too much fuel, and a ship exploded spontaneously. Enough to stay under the e.c.m. and it could reach Mars—but on the return voyage it would run out of fuel before completing deceleration, and hit Earth's atmosphere fast enough to burn itself to powder.

The intricate equipment necessary made step-rockets, in which sections were jettisoned in space, fantastically uneconomical. So the great brains of Interplanet had conceived the *Doughnut* to boost its ships through the power-hogging lift from Earth.

Walter Merrill had been picked off the Luna experimental work for his uncanny power sense and delicate kinesthetic perceptions, for no auto-control had been devised capable of coping with all the variables of blast-off. He had become Interplanet's first and only boosterman.

In many ways it was a dream job. One boost-out a month, with the rest of the time almost entirely his own. A salary rating of Senior Pilot "A," which easily financed such financed such impractical hobbies as putting jets on an automobile, as well as a house and sailboat and all the trimmings. A sense of importance, too, for the fate of each spaceship was in the hands of the boosterman during the most

critical interval.

But dissatisfaction had set in. Boosting lacked the glamour of deep space. The line pilots and their relief men talked endlessly of the strange floating landings through the low .38 gravity of Mars, and of the remains of a vanished civilization there, and of the Colony that was beginning to grow at Marsport—and all he could do was keep his mouth shut.

He was a glorified elevator operator, missing out on the high adventure that lay out there, never getting much beyond Luna's orbit, and ending each flight with a hissing drop into Puget Sound beside the Mukilteo beacon, while his friends one after another had been given command of full-fledged space vessels.

Recently even men he had been forced to downcheck as potential boostermen had been taking ships through to the Colony. Here he was, stuck in a rut, and every time he had been promised a line run, something had gone sour!

He stripped and put on the buttonless one-piece knit garment he would wear beneath his circulation suit, then kicked his feet savagely into a pair of slippers and shuffled down the hall to the medical department. In the empty treatment-room he stuck two fingers into his mouth and whistled shrilly.

Bubsy Thomas emerged from the dispensary. She had auburn hair and green eyes; and her white stockings and starched nurse's uniform could not hide the fact she carried deluxe equipment throughout; but for once he was too disturbed to open the conversation with his customary suggestion of Matrimony.

"Limit dose," he told her. "And Neogravinol too. This hop will get rough."

She looked at him questioningly. The boosterman ordinarily did not need the more prolonged action of Neogravinol in addition to the regular Gravinol shot.

"You had breakfast before the office caught you," she accused.

"Coffee and toast," he hedged.

"—and three eggs and a pound of bacon. I've seen you eat. Now get your teeth out."

"Aw, honey!" he protested.

Impatiently she tapped a toe against the waxed flooring.

His front uppers had been removable ever since one of the Luna experimentals had set in with a smash that broke his shock chair straps, but still he felt there was something comical and faintly disreputable about wearing falsies. Too much like those females who wore padding to remedy natural deficiencies—which Bubsy definitely did not.

Grimly she watched him, and finally he took them out.

She measured a brownish liquid into a small glass while he cursed the medical records for telling her about his teeth. They hardly helped make him a romantic figure.

"The basin is over there," she directed. "Now drink this."

Two minutes later he had no further worries about gravity cramps from a full stomach. It was full no longer.

"Sometime you'll blast with that bridgework in, and get it knocked down your throat," she warned as she had often before.

"A lot you'd care," he growled, still retching.

"But I would," she declared sweetly. "You might wreck a ship."

Before he could think of a suitable rejoinder, she had the hypos ready.

"I shot your left arm last time," she remembered, and he rolled back his right sleeve.

Deftly she found the vein and pressed the plunger. Then, changing syringes, she began to inject the Neogravinol. "If you take—sit still, darn it!—who'll handle—"

His skin was prickling and itching, and a distinct rainbow aura was forming around every object in the room as the drugs took effect.

"Ord, maybe. Or Wraxton from Chesapeake. But I'm taking *Fireball*."

For a moment her hands were unsteady.

"And why not?" he asked sharply. "I can straighten out any trajectory error they hand me."

"If it's not too bad," she corrected. "But what about Mars Colony if *Fireball* gets a sour boost and has to abort?"

Merrill didn't want to think about that. "But I don't intend to keep on—"

Jerry Slidell banged through the door. His face was streaky pale from moving too violently, but his tongue was unimpaired.

"Wraxton was flying his own plane up," he told them at last with forced calmness. "At Medford some lard-headed student cut in on him during landing. He's got a fractured leg and concussion. Now what the hell?"

"Call Ord," Merrill snapped. He was in the depressive-irritant phase that followed a Gravinol injection. He started to get up, but the nurse pushed him back. He had to take it easy until the shots "settled in."

Slidell glared. "Been trying, and still am. You think I got holes in my head?"

"Yes, if you think I'm going to—" Merrill growled sullenly.

"Shut up, both of you!" Bubsy interrupted. "Barking at each other won't help."

Slidell's shoulders slumped, and his manner was almost pleading.

"You'll stay on call, Walter?"

"Yeah. I'll be around until you get me a boosterman."

A circulation suit was too heavy to put on until the last minute, so he had nothing to do but wait. It should have been pleasant, but the nurse ignored him while she cleaned up and put the hypodermics in the sterilizer. The few glances which she did cast his way were troubled, almost angry. He used her phone to get preliminary flight data from Calculations. Then he fidgeted.

"What's the idea of giving me the busy signal so much lately?" he asked at length. "You sore at me? Or is it that Fred Morgan off *Firesprite*?"

The girl turned quickly, as though she had been waiting for that question.

"I've been afraid."

"Huh?"

"Not of you. Of myself. Afraid moonlight and biochemistry would gang up on me."

"And that would be wrong, because I'm a boosterman instead of a line pilot?" he demanded belligerently.

Her eyes misted unexpectedly. "You and I both know there's something real under all our kidding. But Walter, I want a husband who's emotionally mature, who understands responsibilities and accepts them instead of acting like a brat in a temper tantrum."

Merrill frowned.

Jerry Slidell's voice interrupted, rattling abruptly through the inter-office call-box. "We've found Bob Ord. Get ready to give him his shots."

Instantly the nurse thrust personal matters aside.

Merrill felt better. Slidell wasn't giving him the runaround after all. But now he had a different worry.

He had let Bob handle a few splits, those critical moments when Doughnut and boosted spaceship parted company; and although Bob looked more promising than any of the other men sent to him for training, he hadn't yet quite got the feel. This was going to be a tough boost; and it had to be good—or else. He only hoped Bob could hold the trajectory skew below the limit that meant aborting the flight.

Slidell's voice came again, tinny through the speaker. "Walter, better get your suit on."

Automatically Merrill answered. "On my way!"

He turned to the nurse as the connection snapped off. "How'd he know I was here?" he demanded.

She smiled, half tenderly and half teasingly. "Everyone around here knows how long and painted and gray-furred your ears are. And since that front-office blonde—"

"She did not!" he retorted indignantly. "And I never made a pass at her, anyhow."

"Okay. So you didn't, and she didn't." Bubsy pulled that infuriating feminine trick of refusing to argue.

There were eighteen zippers and twenty-seven adjustment straps on the suit, and he checked each one personally while the two dressers made the suit-to-boots, suit-to-gloves, suit-to-helmet and helmet-to-face-mask hook-ups. Then he lumbered stiffly across the room and plugged in to the test modulator.

The over-all inflation went on, squeezing his body equally from all directions. He jiggled the manual control— in flight the pressure would compensate automatically with acceleration—and it responded perfectly.

He cut in the sectional controls, and felt the familiar yet eerie rippling sensations as a multitude of tiny compartments in the suit began rhythmic fluctuations in response to his body's needs as reported by built-in blood pressure and pulse and respiration meters. The suit's action had been patterned after the peristaltic movements of a digestive system, using the same idea of progressive, serially applied pressures, and his fingertips and toes tingled as the blood was hurried along.

In tree-dwelling days the human race had developed a reflex response to short-duration, one-G falls. Veins and arteries constricted; blood pressure shot up; and major changes took place in the action of the heart valves. This automatic reaction had minimized the injuries of many a falling man, and it was still right for its original purpose.

But under the hours-long, multi-G strains of space-light, it became a peril instead of a protection, putting strains on the body that meant permanent damage. Gravinol short-circuited the reflex, but if

used alone under heavy acceleration, it would bring blood circulation—and the pilot's life—to a dead stop. The answer, worked out at heavy cost in lives and health, was Gravinol plus a circulation suit.

The suit felt right, almost as though it were alive and part of his body. He nodded okay, unplugged, then loosened his face-mask for comfort. Then he turned heavily at a sound behind him.

"Hiya, Bob," said Merrill friendly enough. This finagling wasn't Ord's fault.

Ord squinted. He was having difficulty focusing his eyes. "Neo?" Merrill asked.

"Yeah. I still itch."

Merrill's lips tightened. Neogravinol for Ord meant that Slidell was still scheming.

"What'd Jerry tell you?" he demanded challengingly. "Nothing. Said get the dope from you."

Merrill made a face. That smelled like an attempt to appeal to his "better nature." Nuts to that!

He was just a bit sick with disappointment. All the while he had handled the *Doughnuts*, he had dreamed of his first real command, dreamed the day of his first deep space blastoff up into quite an event. Now those dreams had gone bust, and he felt sour and blue, cheated of the exhilaration he had anticipated.

Slidell's voice buzzed through the speaker. "You pilots hurry up! We don't want to recalculate."

Merrill was on his feet at once, anxious to give Slidell a hot earful and then climb into *Fireball*. After this flight, he'd see about a job with Chesapeake on the Venus run.

The pick-up car was waiting, the driver goosing his engine, and as Merrill climbed aboard, the operations manager thrust both autocontrol tapes into his gloved hands. There was no question which was which, for *Doughnut's* tape was much wider than *Fireball's*. Still, no tape could handle all the unpredictable variables. That was what made a pilot. Merrill skimmed the visual sheets and trajectory graphs, while Ord peered over his shoulder.

"What's the orders?" he asked truculently.

"Get it out hot and in line," Slidell said.

"But—"

"You know the situation and what's needed. I wash my hands of it." Slidell sounded thoroughly disgusted.

"But—"

Bubsy leaned across the car door and kissed him. "That's for luck," she whispered.

Then she drew back. "Don't forget your teeth," she said aloud.

"Listen here, Jerry," Merrill began, ignoring the girl for more important matters.

Slidell jerked a thumb at the driver, and in a second the car was streaking toward the blast pit.

"Damn him!" Merrill growled, handing *Doughnut's* graph sheets to his companion.

Ord whistled, then looked pained.

"You don't have to rub it in," he said, still irritable from his shots.

"Huh?" Merrill's eyes widened. Bob had nothing to gripe about. Either way, this day's work would get him a Senior Pilot rating, and Interplanet never downgraded a man without very good cause.

"Damn! This break would have to come now, on an off-standard boost and before I was ready for it!" the junior pilot said bitterly.

"You mean you actually want—" Merrill demanded incredulously.

"Why the hell do you think I requested tryout assignment on *Doughnut*?" Ord snapped.

Merrill took that idea for what it was worth.

"Well, okay. If you think you can boost me anywhere near trajectory, I'll take *Fireball*. Be glad to."

Ord looked grateful but uncertain as the car began to slow, and Merrill wasn't entirely happy either. . . .

Doughnut's jets were humming and the snoring nimble of *Fireball's* five big nozzles reverberated deep in the pit. The heat of the idling drivers sent a stinging breeze against Merrill's uncovered face.

Doughnut was nothing but a huge power ring fitting snugly around the middle of *Fireball*, designed to feed a maximum of fuel through her drivers in a minimum time. Her range was short, but she had a theoretical acceleration, minus ship, of better than forty gravities—which Merrill had never been so suicidal as to test.

Her thirty-six jets were fixed-mounted four degrees radially outward to save the aft half of the boosted ship from blast effect, and three of them were movable plus or minus one degree annularly for rotation correction. There were no vane deflectors, no full-swing jets, no heavy axial stabilizing gyros, no extras whatsoever; and control was accomplished entirely with the fractional throttles. Even turnovers were made without sidethrust or braking rockets, and with the inherently unstable ring design of *Doughnut*, that took handling. She was an ugly and ungraceful machine, strictly functional, a tug rather than a ship; and with her tremendous power she could easily break the neck of any pilot who made a single wrong move.

The pick-up car stopped beside the ground trap, and within seconds the two warm-up mechanics emerged from the tunnel.

"*Fireball's* ready. Everything's normal," one reported. The other acted uneasy. "Two, five and eleven—" he began. "Tell Bob too," Merrill interrupted.

"Two, five and eleven overheating, eleven the worst. Seventeen running incomplete shift as far as I dared try her, but may clear at full throttle. Thirty-two still sputtering as if the nozzle field is out of phase."

He turned back to Merrill. "That's the one you reported, sir. We were going to yank the tube, but didn't get time."

"It adds up how?" Merrill demanded.

"She'll be hell to balance."

"But she'll lift?"

"Yes. The dynes come up."

Merrill's face hardened. "Then we don't cancel. Well, Bob?"

Ord's face was pale. "That ties the ribbons on it," he said slowly. "Guess I'm plain scared. You're senior man; you call it."

But Merrill knew it was the thought of what a sour lift here would mean on Mars, rather than the chances of a crash, that had Bob Ord frightened. He sighed, feeling as harried as Jerry Slidell usually

looked, but admiring Ord's honesty.

"Here's your tape, Bob," he said. "Luck!"

Together they ducked into the tunnel leading to the ships. The mechanics tugged the counterweighted trapdoor shut behind them, and ran for the car.

Around the spaceport perimeter the sirens shrieked their warning to take cover or take the consequences.

Merrill crowded clumsily into the pilot chair, plugged in his suit, cinched the safety straps, tightened his face-mask,then cursed petulantly as he had to loosen it again to remove his bridgework. He slipped the tape into the robot, threaded the end through the drive sprockets, clipped the visual sheets into the holder where they'd be in sight for reference. He swung his chair back until he lay supine with reference to blast axis, for sitting up during initial acceleration was how pilots got ruptured intervertebral cartilage disks and pinched spinal cords. The control panel on which everything was crowded within fingertip-reach swung with him.

"*Ready*?" he asked. The hull-to-hull contact phone carried his words.

"Set."

He cut in the master intercontrol, and after a momentary pause to run through his mental check-list, he thumbed the Big Red Button. Relays clacked, and the tape hooked in the timers. They were on the roller coaster now—unless they canceled immediately.

He heard a faint click as the external feed lines that had been replacing the fuel burned during warm-up disconnected and retracted.

"Last chance," Merrill announced quickly.

"Clear to lift," the answer came back.

Slidell pulled the cobalt glass screen down across the slanting blast-proof window of his office. Conversation was impossible through the uproar of the sirens, so he glanced at the chronometer, he tapped the nurse's shoulder and held up five fingers.

Involuntarily she winced. Then even through the heavy purple shield the glare filled the room with blistering radiance. Around the pit a flattened sphere of flame more deadly than the heat of any blast furnace ballooned and burst. A shrieking cyclone of superheated gas bombarded the low, solid building with dust and gravel.

A few seconds later a second sun was rapidly fading overhead. The din of the sirens lowered and died.

"Was it—" she asked.

"It was very, very smooth—so far."

"But was it—"

Slidell shrugged. He raised the shield and stared unseeingly at the thermal dust-devils still dancing over the field. "But which one?" she insisted.

Slidell turned impatiently. "Don't you think I want to know too?"

"Sorry, boss."

"*Mr. Slidell? Radar Plot*," the intercom rasped suddenly.

Jerry gripped the speaker box as though to squeeze information from it. Haskell-Jenkins interference made direct radio contact impossible even on microwave, but three radar eyes were following the *Doughnut-Fireball* combination while a mechanical brain compared their findings with the theoretical flight path.

"How bad?" he demanded.

"Not too much deflection, sir, but a nasty gyration on the longitudinal axis."

"Power output?"

"Full."

Slidell exhaled gently. At least, the flight wasn't aborting —yet.

"*Keep me posted*," he ordered unnecessarily.

He slumped behind his desk, and from the workings of his face muscles the nurse knew that in spirit he was riding a control chair again, his body heavy under the acceleration stresses, watching the spots of light on the meter faces swing, and punching studs to steady them.

After a few minutes he snapped out of it and used his dictating machine to record a pungent memorandum on changes in medical procedure to prevent other virus carriers from getting aboard any spaceship.

Radar reports during the next hours were poor but maddeningly inconclusive. It was impossible to tell from them whether *Doughnut* was running well and being erratically piloted, or whether someone was really hand-riding a set of surging, unsteady jets. The data grew steadily less intelligible as the Earth turned, and the probing beams pierced the atmosphere at an increasingly oblique angle.

Finally the intercom spoke again. "*Below horizon. Contact broken*."

Honolulu would take over the tracking, and then Guam.

The nurse returned to the spaceport after a night of dream-haunted naps and headed directly for Slidell's office. He was already there, and the drawn, gray look on his face made it obvious he had slept no better than she. The current flight graphs were strewn across his desk.

He shoved the power output chart toward her. It was full of irregular sawtoothed peaks and valleys, and although she was not an engineer, she knew they signified jet malfunction. But Slidell was smiling faintly.

"They're still pretty close to plotted trajectory," he told her. "We'll know soon now."

The radiophone buzzed, and as Slidell snatched the handset, Bubsy leaned over to eavesdrop shamelessly.

"Guam? Reduced power on which unit?"

He listened a moment. *"Damn your foul driver emission meters! Why don't you get something sensitive?"*

The radio sputtered indignantly.

"*Okay, okay. Yes. I'll see the directors about an appropriation to develop one*," he promised, and broke contact. "They've split, but whether it's line-out or back-out we can't be certain until *Doughnut* and *Fireball* are far enough apart to read their power impulses separately," he explained.

They waited what seemed like ages before Guam called again, and then Slidell picked up the phone as though it might bite.

"Continuing steady full? Good! Other on intermittent low bursts? Thanks!"

That was Merrill's trademark, the signature of a smooth pilot, rocking Doughnut into turnover with minimum throttle settings to save his body and ship from the jarring shocks of suddenly applied power.

Bubsy knew it as well as Slidell did, for more than once Walter had diagrammed it for her on restaurant tablecloths. She grinned, and the operations manager grinned back. Then, suddenly and irrationally, she wanted to cry. She knew the intensity of Merrill's desires, but with a mutant virus loose in Mars Colony, the surest way had been the only decent way. Bob Ord might have flown a successful full-power boost, but then Slidell looked years younger as he switched his interphone into the public address system.

"All hands! Fireball is lined out!" he announced. *"Hot, straight and normal!"*

For a minute he leaned back and relaxed, then spoke. "Sit down, Miss Thomas."

She jerked around, startled by the unaccustomed formality, then saw the twinkle in his eyes.

"Are you a sufficiently loyal employee to enter into a private conspiracy for the good of the company?" he asked seriously.

"Just what are you talking about?" she demanded.

"This is off the record yet, but I'm slated to get myself heavily doped and ride deadhead to Marsport for some special development work. The new operations manager here—I just picked him—has guts enough so once he's stuck with this job, he'll hang tight and ride it.

"But he's going to beef and yank and kick at the traces—unless someone helps keep him contented."

Bubsy understood, and smiled as she nodded.

"But it's just for dear, old Interplanet, you understand." Slidell raised one eyebrow quizzically but said nothing. "Oh, you go to the devil!" she blurted, and blushed for the first time since her high-school days.

The yellow car actually paused at the gate.

"Checking out."

"Okay, Mr. Merrill, Miss Thomas."

It was one of those crystal nights that come occasionally to foggy Puget Sound, moonless and with a sky full of stars. South of the zenith, the faint pink dot of Mars twinkled invitingly.

Merrill sighed. "That scheming fox! Eighteen months before I get another chance, but I'll get there yet—if Van Zwaluvenberg's new emission meters and *Doughnut III* plans don't land me in the nuthatch first."

The girl let one hand slide along his arm. This was no night for talking shop.

"But they should have some decent transient facilities ready by then, as well as the fuel plant," he continued. "Might even be a good spot for a honeymoon."

"Eighteen months? *Second* honeymoon," she corrected firmly.

Relativity applies—even among gods!

Thang

Martin Gardner

THE EARTH had completed another turn about the sun, whirling slowly and silently as it always whirled. The East had experienced a record breaking crop of yellow rice and yellow children, larger stockpiles of atomic weapons were accumulating in certain strategic centers, and the sages of the University of Chicago were uttering words of profound wisdom, when Thang reached down and picked up the Earth between his thumb and finger.

Thang had been sleeping. When he finally awoke and blinked his six opulent eyes at the blinding light (for the light of our stars when viewed in their totality is no thing of dimness) he had become uncomfortably aware of an empty feeling near the pit of his stomach. How long he had been sleeping even he did not know exactly, for in the mind of Thang time is a term of no significance. Although the ways of Thang are beyond the ways of men, and the thoughts of Thang scarcely conceivable by our thoughts; still—stating the matter roughly and in the language we know—the ways of Thang are this: When Thang is not asleep, he hungers.

After blinking his opulent eyes (in a specific consecutive order which had long been his habit) and stretching forth a long arm to sweep aside the closer suns, Thang squinted into the deep. The riper planets were near the center and usually could be recognized by surface texture; but frequently Thanghad had to thump them with his middle finger. It was some time until he found a piece that suited him. He picked it up with his right hand and shook off most of the adhering salty moisture. Other fingers scaled away thin flakes of bluish ice that had caked on opposite sides. Finally, he dried the ball completely by rubbing it on his chest.

He bit into it. It was soft and juicy, neither unpleasantly hot nor freezing to the tongue; and Thang, who always ate the entire planet, core and all, lay back contentedly, chewing slowly and permitting his thoughts to dwell idly on trivial matters, when he felt himself picked up suddenly by the back of the neck.

He was jerked upward and backward by an arm of tremendous bulk (an arm covered with greyish hair and exuding a foul smell). Then he was lowered even more rapidly. He looked down in time to see an enormous mouth—red and gaping and watering around the edges—then the blackness closed over him with a slurp like a clap of thunder.

For there are other gods than Thang.

Do only "men" have human feelings?

Period Piece

J. J. Coupling

IT WAS at that particular party of Cordoban's that he began actually to have doubts—real doubts. Before, there had been puzzlement and some confusion. But now, among these splendid people, in this finely appointed apartment, he wondered who he was, and where he was.

After his friend—or, his keeper?—Gavin had introduced him to his host, there had been a brief conversation about the twentieth century. Cordoban, a graying man with both dignity and alertness, asked the usual questions, always addressing Smith with the antique title, Mister, which he seemed to relish as an oddity. To Smith it seemed that Cordoban received the answers with the sort of rapt attention a child might give to a clever mechanical toy.

"Tell me, Mr. Smith," Cordoban said, "some of the scientists of your day must have been philosophers as well, were they not?"

Smith could not remember having been asked just this question before. For a moment he could think of nothing. Then, suddenly, as always, the knowledge flooded into his mind. He found himself making a neat little three-minute speech almost automatically. The material seemed to arrange itself as he spoke, telling how Einstein forced an abandonment of the idea of simultaneity, of Eddington's idea that the known universe is merely what man is able to perceive and measure, of Milne's two time scales, and of the strange ideas of Rhine and Dunne concerning precognition. He had always been a clever speaker, ever since high school, he thought.

"Of course," he found himself concluding, "it was not until later in the century that Chandra Bhopal demonstrated the absurdity of time travel."

Cordoban stared at him queerly. For a moment Smith was scarcely conscious of what he had said. Then he formulated his thoughts.

"But time travel must be possible," he said, "for I'm a twentieth century man, and I'm here in the thirty-first century."

He looked about the pleasant room, softly lighted, with deep recesses of color, for assurance, and at the handsome people, grouped standing or sitting in glowing pools of pearly illumination.

"Of course you're here, fellow," Cordoban said, reassuringly.

The remark was so true and so banal that Smith scarcely heard it. His thoughts were groping. Slowly, he was piecing together an argument.

"But time travel is absurd," he said.

Cordoban looked a little annoyed and made a nod with his head which Smith did not quite follow.

"It was shown in the twentieth century to be absurd," Smith said.

But, had it been shown in his part of the twentieth century, he wondered?

Cordoban glanced to his left.

"We know very little about the twentieth century," he said.

Gavin knows about the twentieth century, Smith thought.
Then, following Cordoban's glance, he saw that a young
woman had detached herself from a group and was moving toward them. A segment of the pearly illumination followed her, making her a radiant creature indeed.

"Myria," Cordoban said, smiling, "you particularly wanted to meet Mr. Smith."

Myria smiled at Smith.

"Indeed, yes," she said. "I've always been curious about the twentieth century. And you must tell me about your music."

Cordoban bowed slightly and withdrew, the light which had been playing on him, seemingly from nowhere, detaching itself from the pool about Myria and Smith. And Smith's doubts fled to the back of his mind, crowded out, almost, by a flood of thoughts about music. And Myria was an enchanting creature.

Smith felt very chipper the next morning as he rose and bathed. The twentieth century had nothing like this to offer, he reflected. He knit his brows for a moment, trying to remember just what his room had been like, but at that moment the cupboard softly buzzed and he withdrew the glass of bland liquid which was his breakfast. His mind wandered while he sipped it. It wasn't until he walked down the corridor and sat in the office opposite Gavin that his doubts at Cordoban's returned to his mind.

Gavin was droning out the schedule. "We have a pretty full day, Smith," he said. "First, a couple of hours at the Lollards' country estate. We can stop by the Primus's on the way back. Then, a full afternoon at a party given by the decorators' council. In the evening—"

"Gavin," Smith said, "why do we see all these people?"

"Why," Gavin answered, a little taken aback, "everyone wants to see a man from the twentieth century."

"But why these people?" Smith persisted. "They all ask the same questions. And I never see them again. I just go on repeating myself."

"Are we too frivolous by twentieth century standards?" Gavin asked, smiling and leaning back in his chair.

Smith smiled back. Then his thoughts troubled him again. Cordoban hadn't been frivolous.

"How much do you know about the twentieth century, Gavin?" he asked, keeping his tone light.

"Pretty much what you do," Gavin replied.

But this couldn't be! Gavin appeared to be a kind of social tutor and arranger of things. As far as Smith could remember, mostly, information had passed from Gavin to him, not from him to Gavin. He decided to pursue the matter further, and as Gavin learned forward to glance at the schedule again, Smith spoke once more.

"By the way, Gavin," he asked, "who is Cordoban?" "Director of the Historical Institute, of course. I told you before we went there," Gavin replied.

"Who is Myria?" Smith asked.

"One of his secretaries," Gavin said. "A man of his position always has one on call."

"Cordoban said that not much was known about the twentieth century," Smith remarked mildly.

Gavin started up as if he had been stung. Then he sank back and opened his mouth. It was a moment before he found the words.

"Directors—" he said, and waved his hand as if brushing the matter aside. Smith was really puzzled now. "Gavin," he said, "is time travel possible?"

If Gavin had been startled, he was at his ease now. "You're here," he said, "not in the twentieth

century." Gavin spoke in so charming and persuasive a manner that Smith felt like a fool for a moment. His thoughts were slipping back toward the schedule when he realized, that wasn't an answer. It wasn't even couched as one. But this was silly, too. If it wasn't an answer, it was just what one would say. Still, he'd try again.

"Gavin," he said, "Cordoban—"

"Look," Gavin said with a smile, "you'll get used to us in time. We'll keep the Lollards and their guests waiting if we don't start now. It isn't asking too much of you to see them now, is it? And you'll like it. They have a lovely fifteenth-century Chinese garden, with a dragon in a cave."

After all, Smith thought, he did owe his collective hosts of the thirty-first century something. And it was amusing.

The Lollards' garden was amusing, and so was the dragon, which breathed out smoke and roared. Primus's was dull, but the decorators' council had a most unusual display of fabrics which tinkled when they were touched, and of individual lighting in color. The evening was equally diverting, and delightful but strange people asked the same frivolous questions. Smith was diverted enough so that his doubts did not return until late that night.

But when Gavin left him at the door, Smith did not go to his bed and his usual dreamless sleep. Instead, he sat down in a chair, closed his eyes, and thought.

What did these people know about the twentieth century? Gavin had said, what he, Smith, knew. But that must be a great deal. An adult man, he, for instance, had a huge store of memories, accumulated over all his years. The human brain, he found himself thinking, has around ten billion nerve cells. If these were used to store words on a binary basis, they would hold some four hundred million words—a prodigious amount of learning. Tokayuki had, in 2117—

Strange, but he didn't remember talking with Gavin or anyone else about Tokayuki! And he could not have remembered about a man who had lived a century after his. But he could pursue this later.

Getting back to the gist of the matter, Cordoban had said that he knew little about the twentieth century. Yet Cordoban had not seemed anxious to question him at length. A few words about the philosophy of science, a dry enough subject, and he had called his secretary Myria—yes, Smith now saw, Cordoban had called Myria to relieve himself of Smith's presence. Here was an obviously astute man, and an historian, foregoing an opportunity to learn about an era of which he professed ignorance.

Well, I suppose one untrained man doesn't know much about an era, even his own, Smith thought. That is, not by thirty-first century standards. But, then, how do they know what I know? he wondered. Nobody has asked me any very searching questions.

Gavin and his schedules, now! All the occasions were purely social. That was strange! Most of the people weren't those likely to have much detailed interest in another era. Decorators, some, like the Lollards, apparently entirely idle-retired, perhaps. Anyway, the conversation was so much social chitchat.

Cordoban, now, had been an historian, even though he hadn't been curious. But that, too, was a purely social occasion. And Gavin himself! Just a sort of guide to a man from another age. Certainly not a curious man. Why not? Were men of the twentieth century so common here? But certainly he would have been brought into contact with others. Besides, time traveling was absurd!

But that was getting off the track. He *was* here. He didn't need Cordoban or Gavin to assure him of that. Being here, he would expect serious questioning by a small group—not all these frivolous, if delightful, parties. Surely he could tell them a great deal they had not asked.

Well, for instance, what could he tell them? His own personal experiences. What had happened day by day. But what had happened day by day? His schooling, for one thing. High school, in particular. As he thought about high schools, there quickly rose in his mind a sequence of facts about their organization and curriculum. It was as if he were reviewing a syllabus on the subject.

The three-minute talks were getting him, he decided. He was so used to these impersonal summaries that they came to his mind automatically. Right now, he must be tired. He would spend more time thinking in the morning.

So Smith went to bed, thought about the events of the day a little, including the Lollards' amusing fire-breathing dragon, and was quickly asleep.

The following morning Smith did not feel chipper. He rose and bathed out of a sense of duty and routine. But then he sat down and ignored the buzzing of the cupboard which announced his breakfast. A pattern had crystallized in his mind over night. His thoughts in their uncertainty had paved the way for this, no doubt. But what was in his mind was no uncertain conclusion.

He, Smith, was no man of the twentieth century! He had carefully implanted memories, factual theses concerning his past, summaries of twentieth century history. But no real past! The little details that made a past were missing. Time travel was absurd. He was a fraud! An impostor!

But whom was he fooling? Not Gavin, he saw now. Not men like Cordoban. Was he fooling anyone? All of the people seemed eager to talk with him. Cordoban himself had been eager to talk with him. Cordoban had not been feigning. Cordoban had not been fooled. It seemed likely that Smith himself was the only one fooled.

But why? It was a stupid trick for people so obviously intelligent. What did they get out of this silly game? It could hardly be any personal quality of his—any charm. They were all so charming themselves.

Myria, Cordoban's secretary, for instance. A lovely woman. Handsome, poised, beautifully dressed. Suddenly a little three-minute talk about women in the twentieth century formed in Smith's mind. In part of his mind, that is. In away, he watched it unfold. And with surprise.

He had thought of Myria as merely handsome and handsomely dressed. But even across the centuries—no, he must remember that he was not from the twentieth century. Across whatever gulf there was, there could have been more than this. Just how did he, Smith, differ from other men?

Well, what did he know of mankind? He reviewed matters in his mind, and went through little summaries on psychology, anthropology and physiology. It was in the midst of this last that he felt a horrible conviction which changed his course from thought to action.

His first action was to wind a small gold chain which was a part of his clothing tightly around the tip of his index finger. The tip remained smooth and brown.

Dropping the chain, he dug the sharp point of a writing instrument into his fingertip, ignoring the pain. The point passed into the rubbery flesh. There was no blood! But there was a little flash and a puff of vapor, and the finger went numb.

He was a cleverly constructed period piece, like the Lollards' dragon! Like a clockwork nightingale! That was why these people admired him briefly, for what he was—a charming mechanical toy!

Smith scarcely thought. The little review of twentieth century psychology returned to his mind, and automatically he opened the door onto the balcony and stepped over the railing. Consistent to the last,

he thought in dull pain as he fell toward the ground twenty stories below.

But it wasn't the last. There was a terrible wrenching shock, a clashing noise, and confusion. Afterwards, there were still vision and hearing. True, the world stood at an odd angle. He saw the building leaning crazily into the sky. From the brief synopsis of physiology he gleaned that his psychokinetic sense was gone. He no longer felt which way his head and eyes were turned. Other senses than sight and sound were gone as well, and when he tried he found that he could not move. Junk, lying here, he thought bitterly. Not even release! But now he could see Gavin bending over him, and another man who looked as if he might be a mechanic.

"Junk," the mechanic said. "It's lucky we couldn't put the brain in that, or it would be gone, too. Making a new body won't be so bad: he added.

"I suppose we'll have to turn off the brain and reform the patterns," Gavin mused.

"You'd have had to, anyway," the mechanic said. "You must have put in something inconsistent or we wouldn't have had this failure."

"It's a shame, though," Gavin said. "I got to like him. Silly, isn't it? But he seemed so nearly alive. We spent a lot of time together. Now everything that happened, everything he learned, will have to be wiped out."

"You know," the mechanic said, "it gives me the creeps, sometimes. I mean, thinking, if I were just a body, connected by a tight beam to a brain off somewhere. And if, when the body was destroyed, the brain—"

"Nonsense," said Gavin.

He gestured toward Smith's crumpled body, and then up toward the building where, presumably, was Smith's brain.

"You'll be thinking that that thing was conscious, next," he said. "Come on, let's turn the brain off."

Smith stared numbly at the crazily leaning building, waiting for them to turn off his brain.

Who knocks on the door of the last man on earth?

Knock

Fredric Brown

There is a sweet little horror story that is only two sentences long:

"The last man on Earth sat alone in a room. There was a knock on the door..."

Two sentences and an ellipsis of three dots. The horror, of course, isn't in the two sentences at all; it's in the ellipsis, the implication: what knocked at the door? Faced with the unknown, the human mind supplies something vaguely horrible.

But it wasn't horrible, really.

The last man on Earth - or in the universe, for that matter - sat alone in a room. It was a rather peculiar room. He'd just noticed how peculiar it was and he'd been studying out the reason for its

peculiarity. His conclusions didn't horrify him, but it annoyed him.

Walter Phelan, who had been associate professor of anthropology at Nathan University up until the time two days ago when Nathan University had ceased to exist, was not a man who horrified easily. Not that Walter Phelan was a heroic figure, by any wild stretch of the imagination. He was slight of stature and mild of disposition. He wasn't much to look at, and he knew it.

Not that his appearance worried him now. Right now, in fact, there wasn't much feeling in him. Abstractedly, he knew that two days ago, within the space of an hour, the human race had been destroyed, except for him and, somewhere, a woman - one woman. And that was a fact which didn't concern Walter Phelan in the slightest degree. He'd probably never see her and didn't care too much if he didn't.

Women just hadn't been a factor in Walter's life since Martha had died a year and a half ago. Not that Martha hadn't been a good wife - albeit a bit on the bossy side. Yes, he'd loved Martha, in a deep, quiet way. He was only forty now, and he'd been only thirty-eight when Martha had died, but - well - he just hadn't thought about women since then. His life had been his books, the ones he read and the ones he wrote. Now there wasn't any point in writing books, but he had the rest of his life to spend in reading them.

True, company would be nice, but he'd get along without it. Maybe after a while, he'd get so he'd enjoy the occasional company of one of the Zan, although that was a bit difficult to imagine. Their thinking was so alien to his that there seemed no common ground for discussion, intelligent though they were, in a way.

An ant is intelligent, in a way, but no man ever established communication with an ant. He thought of the Zan, somehow, as super-ants, although they didn't look like ants, and he had a hunch that the Zan regarded the human race as the human race had regarded ordinary ants. Certainly what they'd done to Earth had been what men did to ant hills-and it had been done much more efficiently.

But they had given him plenty of books. They'd been nice about that, as soon as he had told them what he wanted, and he had told them that the moment he had learned that he was destined to spend the rest of his life alone in this room. The rest of his life, or as the Zan had quaintly expressed it, forever. Even a brilliant mind - and the Zan obviously had brilliant minds - has its idiosyncracies. The Zan had learned to speak Terrestrial English in a manner of hours but they persisted in separating syllables. But we disgress.

There was a knock on the door.

You've got it all now, except the three dots, the ellipsis, and I'm going to fill that in and show you that it wasn't horrible at all.

Walter Phelan called out, "Come in," and the door opened. It was of course, only a Zan. It looked exactly like the other Zan; if there was any way of telling one of them from another, Walter hadn't found it. It was about four feet tall and it looked like nothing on earth - nothing, that is, that had been on Earth until the Zan came there.

Walter said, "Hello, George." When he'd learned that none of them had names he decided to call them all George, and the Zan didn't seem to mind.

This one said, "Hel-lo, Wal-ter." That was ritual; the knock on the door and the greetings. Walter waited.

"Point one," said the Zan "You will please henceforth sit with your chair turned the other way."

Walter said, "I thought so, George. That plain wall is transparent from the other side, isn't it?"

"It is trans-par-ent."

"Just what I thought. I'm in a zoo Right?"

"That is right."

Walter sighed. "I knew it. That plain, blank wall, without a single piece of furniture against it. And made of something different from the other walls. If I persist in sitting with my back to it, what then? You will kill me? - I ask hopefully."

"We will take a-way your books."

"You've got me there George. All right I'll face the other way when I sit and read. How many other animals besides me are in this zoo of yours?"

"Two hun-dred and six-teen."

Walter shook his head. "Not complete, George. Even a bush league zoo can beat that - could beat that, I mean, if there were any bush league zoos left. Did you just pick at random?"

"Ran-dom sam-ples yes All spe-cies would have been too man-y. Male and female each of one hundred and eight kinds,"

"What do you feed them? The carnivorous ones, I mean."

"We make food Syn-thet-ic."

"Smart," said Walter. "And the flora? You got a collection of that, too?"

"Flo-ra was not hurt by vi-bra-tions. It is all still grow-ing."

"Nice for the flora," said Walter. "You weren't as hard on it, then, as you were on the fauna, Well, George, you started out with 'point one.' I deduced there is a point two kicking around somewhere. What is it?"

"Some-thing we do not un-der-stand. Two of the oth-er a-nimals sleep and do not wake? They are cold."

"It happens in the best regulated zoos, George," Walter Phelan said. "Probably not a thing wrong with them except that they're dead."

"Dead? That means stopped. But nothing stopped them. Each was a-lone."

Walter stared at the Zan. "Do you mean, George, you don't know what natural death is?"

"Death is when a be-ing is killed, stopped from liv-ing."

Walter Phelan blinked. "How old are you, George?" he asked.

"Six-teen-you would not know the word. Your pla-net went a-round your sun a-bout sev-en thousand times, I am still young."

Walter whistled softly. "A babe in arms," he said. He thought hard a moment. "Look, George," he said, "you've got something to learn about this planet you're on. There's a guy here who doesn't hang around where you come from. An old man with a beard and a scythe and an hour-glass. Your vibrations didn't kill him."

"What is he?"

"Call him the Grim Reaper, George. Old Man Death. Our people and animals live until somebody -

Old Man Death stops them ticking."

"He stopped the two crea-tures? He will stop more?"

Walter opened his mouth to answer, and then closed it again. Something in the Zan's voice indicated that there would be a worried frown on his face, if he had had a face recognizable as such.

"How about taking me to these animals who won't wake up?" Walter asked. "Is that against the rules?"

"Come," said the Zan.

That had been the afternoon of the second day. It was the next morning that the Zan came back, several of them. They began to move Walter Phelan's books and furniture. When they'd finished that, they moved him. He found himself in a much larger room a hundred yards away.

He sat and waited and this time, too, when there was a knock on the door, he knew what was coming and politely stood up. A Zan opened the door and stood aside. A woman entered.

Walter bowed shghtly, "Walter Phelan," he said, "in case George didn't tell you my name. George tries to be polite, but he doesn't know all of our ways."

The woman seemed calm; he was glad to notice that. She said, "My name is Grace Evans, Mr. Phelan. What's this all about? Why did they bring me here?"

Walter was studying her as she talked. She was tall, fully as tall as he, and well-proportioned. She looked to be somewhere in her early thirties, about the age Martha had been. She had the same calm confidence about her that he'd always liked about Martha, even though it had contrasted with his own easygoing informality. In fact, he thought she looked quite a bit like Martha.

"I think I know why they brought you here but let's go back a bit," he said. "Do you know just what has happened otherwise?"

"You mean that they've killed everyone?"

"Yes. Please sit down. You know how they accomplished it?" She sank into a comfortable chair nearby.

"No," she said, "I don't know just how. Not that it matters does it?"

"Not a lot. But here's the story - what I know of it from getting one of them to talk, and from piecing things together. There isn't a great number of them - here, anyway. I don't know how numerous a race they are where they came from and I don't know where that is, but I'd guess it's outside the Solar System. You've seen the space ship they came in?"

"Yes It's as big as a mountain."

"Almost. Well it has equipment for emitting some sort of a vibration - they call it that, in our language, but I imagine it's more like a radio wave than a sound vibration - that destroys all animal life. It - the ship itself - is insulated against the vibration. I don't know whether its range is big enough to kill off the whole planet at once, or whether they flew in circles around the earth, sending out the vibratory waves. But it killed everybody and everything instantly and, I hope, painlessly. The only reason we, and the other two-hundred-odd animals in this zoo, weren't killed was because we were inside the ship. We'd been picked up as specimens. You do know this is a zoo, don't you?"

"I - I suspected it."

"The front walls are transparent from the outside The Zan were pretty clever at fixing up the inside of each cubicle to match the natural habitat of the creature it contains. These cubicles, such as the one we're in, are of plastic, and they've got a machine that makes one in about ten minutes, If Earth had had a machine and a process like that, there wouldn't have been any housing shortage. Well, there isn't any housing shortage now, anyway. And I imagine that the human race - specifically you and I - can stop worrying about the A-bomb and the next war. The Zan certainly solved a lot of problems for us."

Grace Evans smiled faintly. "Another case where the operation was successful, but the patient died. Things were in an awful mess. Do you remember being captured? I don't. I went to sleep one night and woke up in a cage on the space ship."

"I don't remember either " Walter said. "My hunch is that they used the vibratory waves at low intensity first, just enough to knock us all out. Then they cruised around, picking up samples more or less at random for their zoo. After they had as many as they wanted, or as many as they had space in the ship to hold, they turned on the juice all the way. And that was that. It wasn't until yesterday they knew they'd made a mistake and had underestimated us. They thought we were immortal, as they are."

"That we were - what?"

"They can be killed but they don't know what natural death is. They didn't anyway, until yesterday. Two of us died yesterday."

"Two of - Oh!"

"Yes, two of us animals in their zoo. One was a snake and one was a duck. Two species gone irrevocably. And by the Zan's way of figuring time, the remaining member of each species is going to live only a few minutes, anyway. They figured they had permanent specimens."

"You mean they didn't realize what short-lived creatures we are?"

"That's right," Walter said. "One of them is young at seven thousand years, he told me. They're bi-sexual themselves, incidentally, but they probably breed once every ten thousand years or thereabouts. When they learned yesterday how ridiculously short a life expectancy we terrestrial animals have, they were probably shocked to the core - if they have cores. At any rate they decided to reorganize their zoo - two by two instead of one by one. They figure we'll last longer collectively if not individually."

"Oh!" Grace Evans stood up and there was a taint flush on her face. "If you think - If they think -" She turned toward the door.

"It'll be locked," Walter Phelan said calmly "But don't worry. Maybe they think, but I don't think. You needn't even tell me you wouldn't have me if I was the last man on Earth; it would be corny under the circumstances."

"But are they going to keep us locked up together in this one little room?"

"It isn't so little; we'll get by. I can sleep quite comfortably in one of these overstuffed chairs. And don't think I don't agree with you perfectly, my dear. All personal considerations aside, the least favor we can do the human race is to let it end with us and not he perpetuated for exhibition in a zoo."

She said "Thank you," almost inaudibly, and the flush receded from her checks. There was anger in her eyes, but Walter knew that is wasn't anger at him. With her eyes sparkling like that, she looked a lot like Martha, he thought.

He smiled at her and said, "Otherwise -'

She started out of her chair, and for an instant he thought she was going to come over and slap him. Then she sank back wearily. "If you were a man, you'd be thinking of some way to - They can be killed,

you said?" Her voice was bitter.

"The Zan? Oh, certainly. I've been studying them. They look horribly different from us, but I think they have about the same metabolism we have, the same type of circulatory system, and probably the same type of digestive system. I think that anything that would kill one of us would kill one of them."

"But you said -"

"Oh, there are differences, of course. Whatever factor it is in man that ages him, they don't have. Or else they have some gland that man doesn't have, something that renews cells."

She had forgotten her anger now. She leaned forward eagerly. She said, "I think that's right. And I don't think they feel pain."

"I was hoping that. But what makes you think so, my dear?"

"I stretched a piece of wire that I found in the desk of my cubicle across the door so my Zan would fall over it. He did, and the wire cut his leg."

"Did he bleed red?"

"Yes but it didn't seem to annoy him. He didn't get mad about it; didn't even mention it. When he came back the next time, a few hours later, the cut was one. Well, almost gone. I could see just enough of a trace of it to be sure it was the same Zan."

Walter Phelan nodded slowly.

"He wouldn't get angry, of course," he said. "They're emotionless. Maybe, if we killed one, they wouldn’t even punish us. But it wouldn't do any good. They'd just give us our food through a trap door and treat us as men would have treated a zoo animal that had killed a keeper. They'd just see that he didn't have a crack at any more keepers.

"How many of them are there?" she asked.

"About two hundred, I think, in this particular space ship. But undoubtedly there are many more where they came from. I have a hunch this is just an advance guard, sent to clear off this planet and make it safe for Zan occupancy,"

"They did a good-"

There was a knock at the door, and Walter Phelan called out, "Come in."

A Zan stood in the doorway.

"Hello George," said Walter.

"Hel-lo Wal-ter," said the Zan.

It may or may not have been the same Zan, but it was always the same ritual.

"What's on your mind?" Walter asked.

"An-oth-er crea-ture sleeps and will not wake. A small fur-ry one called a wea-sel."

Walter shrugged.

"It happens, George. Old Man Death. I told you about him."

"And worse. A Zan has died. This morning."

"Is that worse?" Walter looked at him blandly. "Well, George, you'll have to get used to it, if you're going to stay around here."

The Zan said nothing. It stood there.

Finally Walter said, "Well?"

"A-bout wea-sel. You ad-vise same?"

Walter shrugged again. "Probably won't do any good. But sure, why not?"

The Zan left.

Walter could hear his footsteps dying away outside. He grinned. "It might work, Martha," he said.

"Mar - My name is Grace, Mr Phelan. What might work?"

"My name is Walter, Grace. You might as well get used to it. You know, Grace, you do remind me a lot of Martha. She was my wife. She died a couple of years ago."

"I'm sorry," said Grace "But what might work? What were you talking about to the Zan?"

"We'll know tomorrow," Walter said. And she couldn't get another word out of him.

That was the fourth day of the stay of the Zan.

The next was the last.

It was nearly noon when one of the Zan came. After the ritual, he stood in the doorway, looking more alien than ever. It would be interesting to describe him for you, but there aren't words.

He said, "We go. Our coun-cil met and de-cid-ed,"

"Another of you died?"

"Last night This is pla-net of death "

Walter nodded. "You did your share. You're leaving two hundred and thirteen creatures alive, out of quite a few billion. Don't hurry back."

"Is there an-y-thing we can do?"

"Yes. You can hurry. And you can leave our door unlocked, but not the others. We'll take care of the others."

Something clicked on the door; the Zan left.

Grace Evans was standing, her eyes shining.

She asked, "What -? How -?"

"Wait," cautioned Walter. "Let's hear them blast off. It's a sound I want to remember."

The sound came within minutes, and Walter Phelan, realizing how rigidly he'd been holding himself, relaxed in his chair.

"There was a snake in the Garden of Eden, too, Grace, and it got us in trouble," he said musingly. "But this one made up for it. I mean the mate of the snake that died day before yesterday. It was a rattlesnake."

"You mean it killed the two Zan who died? But -"

Walter nodded, "They were babes in the woods here. When they took me to look at the first creatures who 'were asleep and wouldn't wake up,' and I saw that one of them was a rattler, I had an

idea, Grace. Just maybe, I thought, poison creatures were a development peculiar to Earth and the Zan wouldn't know about them. And, too, maybe their metabolism was enough like ours so that the poison would kill them. Anyway, I had nothing to lose trying. And both maybes turned out to be right."

"How did you get the snake to -"

Walter Phelan grinned. He said, "I told them what affection was. They didn't know. They were interested, I found, in preserving the remaining one of each species as long as possible, to study the picture and record it before it died. I told them it would die immediately because of the loss of its mate, unless it had affection and petting - constantly. I showed them how with the duck. Luckily it was a tame one, and I held it against my chest and petted it a while to show them. Then I let them take over with it - and the rattlesnake."

He stood up and stretched, and then sat down again more comfortably.

"Well, we've got a world to plan," he said. "We'll have to let the animals out of the ark, and that will take some thinking and deciding. The herbivorous wild ones we can let go right away. The domestic ones, we'll do better to keep and take charge of; we'll need them. But the carnovora - Well, we'll have to decide. But I'm afraid it's got to be thumbs down."

He looked at her. "And the human race. We've got to make a decision about that. A pretty important one."

Her face was getting a little pink again, as it had yesterday; she sat rigidly in her chair.

"No!" she said.

He didn't seem to have heard her. "It's been a nice race, even if nobody won it," he said. "It'll be starting over again now, and it may go backward for a while until it gets its breath, but we can gather books for it and keep most of its knowledge intact, the important things anyway. We can -"

He broke off as she got up and started for the door. Just the way his Martha would have acted, he thought, back in the days when he was courting her, before they were married.

He said, "Think it over, my dear, and take your time. But come back."

The door slammed. He sat waiting, thinking out all the things there were to do, once he started, but is no hurry to start them; and after a while he heard her hesitant footsteps coming back.

He smiled a little. See? It wasn't horrible, really.

The last man on Earth sat alone in a room. There was a knock on the door...

A pair of rabbits once were let loose in Australia—and overran the country in no time fiat. Now start with a whole planet of geniuses. . . .

Genius

Poul Anderson

"THE EXPERIMENT has been going on for almost fifteen hundred years," said Heym, "and it's

just starting to get under way. You *can't* discontinue it now."

"Can and will," replied Goram, "if the situation seems to justify it. That's what I'm going to find out."

"But—one planet! One primitive planet! What sort of monsters do you think live here? I tell you, they're people, as human as I—" Heym paused. He had meant to add—"and you," but couldn't quite bring himself to it. Goram seemed less than human, an atavistic remnant of screaming past ages, an ape in uniform. "—as I am," finished Heym.

The hesitation seemed lost on Goram. The marshal stood regarding the psychologist out of sullen little black eyes, blocky form faintly stooped, long arms dangling, prognathous jaw thrust ahead of the broad flat-nosed countenance. The fluorotubes gleamed down on his shining shaven bullet skull. The black gold-braided uniform fitted him closely, a military neatness and precision that was in its way the most primitive characteristic of all.

He said in his hoarse bass: "So are the rebels. So are the barbarians and pirates. So are the serfs and slaves and criminals and insane. But it's necessary to suppress all of them. If Station Seventeen represents a menace, it must be suppressed."

"But what conceivable danger—one barbarian planet—under constant surveillance throughout its history! If that can menace an empire of a hundred thousand star systems, we're not safe from anything!"

"We aren't. For three thousand years of history, the Empire has been in danger. You have to live with it, as we soldiers do, to realize how ultimately unstable the stablest power in history really is. Oh, we can smash the peripheral barbarians. We can hold the Taranians and the Comi and Magellanics in check." The marshal's heavy-ridged eyes swept contemptuously up and down the scientist's long weedy form. "I'm in no danger from you. I could break you with my bare hands. But a dozen viruses of Antaric plague, entering my body and multiplying, would paralyze me in agony and rot the flesh off my bones and probably empty this ship of life."

The office quivered, ever so faintly. The muffled throb of the great engines was vibrant in its walls and floor and ceiling, in the huge ribs and plates of the hull, in guns that could incinerate a continent and the nerves and bones of the two thousand men manning that planetoidal mass. Monstrously the ship drove through a night of mind-cracking empty distances, outpacing light in her furious subdimensional quasivelocity, impregnable and invincible and inhuman in her arrogance. And a dozen blind half-living protein molecules could kill her.

Heym nodded stiffly. "I know what you mean," he said. "After all"—deliberate snobbery edging his voice—"applied psychological science is the basis of the Empire. Military power is only one tool for—us."

"As you will. But I am not a researcher's tool, I belong to practical men, and they have decided this mission. If I report Station Seventeen potentially dangerous, they will order me to destroy it. If I decide it is already dangerous, I have the authority to order it destroyed myself."

Heym kept his gaunt face impassive, but for a moment he felt physically ill. He looked across the sparsely furnished office at the marshal's squat simian form, he saw the barely suppressed triumph-smile in the heavy coarse visage, and a wave of sick revulsion swept over him.

He thought wearily: *Fifteen hundred years . . . patience, work, worry, heartbreak, and triumph and a gathering dawn . . . generation after generation, watching from the skies, learning, pouring their whole lives into the mighty project—As if I didn't know the danger, the fear which is the foundation and the reason for the Empire . . . and here we have the first glimmerings of what may be a way out of the*

rattrap which history has become . . . and it's now all dependent on him! On the whim of a two-legged animal which will strike out in blind fear to destroy whatever it doesn't understand . . . or even understanding, will destroy just for the satisfaction of venting an inferiority complex, of watching better men squirm in pain.

Calmness came, a steadiness and an icy calculation. After all, he thought, he was a psychologist and Goram was a soldier. It should be possible for him to handle the creature, talk him over, deftly convince him that he himself wanted what Heym wanted and had in fact thought of it himself and had to argue the scientist into agreement.

Yet—slow, easy, careful. He, Sars Heym, was a research man, not a practicing psychotechnician. He wasn't necessarily able to handle the blind brutal irrationality of man, any more than a physicist was ordinarily capable of solving an engineering problem. And so much depended on the outcome that . . . that—

Briefly, he sagged beneath the burden of responsibility. The load seemed for a dizzying instant too much to bear—unfair, unfair, to load one man with the weight of all the future. For Station Seventeen was the key to the next phase of history—of that Heym was certain. The history of man, his evolution—the whole universe seemed to open vertiginously before him, and he stood alone with the cosmos blazing on his shoulders.

He shook himself, as if to get rid of a clinging burden, and with a convulsive effort forced coolness on himself. Detached argument—well, he had used that often enough at Sol without convincing anyone who mattered. He could still use it on Goram, but not for itself, only as a means of flattery by appealing to reason—among other means.

Intolerable, to have to play sycophant to this—atavist but there was too much at stake for pride to count. "I understand your position, of course," said Heym, "even if I do not agree. I am sure that a glance at our records will convince you there is no danger."

"I'm not interested in records," said the marshal. "I could have had all that transvised to me at Sol if I wanted to see it. But that's the psychologists' department. I want to make a personal inspection."

"Very well. Though we could just as well have transvised the scenes revealed on the spy devices from our headquarters to Sol."

"I'm not interested in telescreen images either. I want to land on the planet, see its people with my own eyes, hear them talk, watch them at work and play. There's a feel to a race you can only get by direct observation." Goram's bulldog face thrust aggressively forward. "Oh, I know your fancy theories don't include that—you just watch from afar and write it all down in mathematical symbols nobody can read without twenty years of study. But I'm a practical man, I've dealt with enough barbarians to have an instinct for them."

Superstition! thought Heym bitterly. *Typical primitive mind reaction—magnifying his own ignorant guesses and impulses into an "instinct." No doubt he also believes hair turns gray from fear and drowned Men always float face down. Behold the "practical man"!*

It was surprisingly hard to lie, after a lifetime's training in the honesty of science and the monastic community of observers at the station. But he said calmly enough: "Well, that's very interesting, Marshal Goram. We've often noticed curious talents—precognition, telepathy, telekinesis, and the rest, appearing sporadically among people who have some use for them, but we've never been able to pin them down. It's as if they were phenomena inaccessible to the ordinary scientific method. I see your point."

And I flatter myself that's good flattery—not too obviously in agreement, but still hinting that he's

some kind of superman.

"Haven't you ever landed at all?" asked Goram.

"Oh, yes, fairly often—usually invisible, of course. However, we can generally see quite enough through the strategically planted recording televisors and other spy devices."

"You think," grunted Goram. "But a planet is mighty big, I tell you. How do you know what they're cooking up in places your gadgets don't see?"

Heym was unable to keep all the weariness and disgust out of his voice. "Because history is a unity," he said. "The whole can be inferred from the part, since the part belongs to the whole. Why should the only unwarlike people in the Galaxy suddenly start building weapons?"

"Oh, we don't fear their military power—yet," replied Goram. "I should think you, as epsychologist, would know what sort of a danger Station Seventeen represents—a danger that can wreck civilization. They can become a *disrupting factor*—the worst in all history."

"Progress is disruption."

"Maybe. But the Empire is based on stasis. It's sacrificed progress for—survival."

"True—but here we may have a clue to controlled progress, safe advancement. Even stasis isn't safe, as we well know. It's a poor makeshift, intended to keep civilization alive while something else is worked out. Well—we're working it out at Station Seventeen."

Goram grunted again, but remained silent.

Valgor's Star lay a good hundred parsecs from Sol, not far from the Empire's border, though sufficiently within the garrisoned marches to be protected from barbarian raids. The early researchers, looking for an uninhabited Earth-like planet, had found the obscure GO-type sun far off the regular space lanes; an ancient planetographic expedition had stopped briefly there, recording that the third world was practically terrestrial, but this whole galactic sector was so isolated and unprofitable that there had been no further visits, and the old report lay for centuries in the Imperial files before the Psychotechnic Foundation resurrected it. The remoteness and unknownness were assets in any such project.

At an easy cruising speed, the battleship used three days going from Sol to Valgor's Star. Sars Heym spent most of that time getting on the right side of Tamman Goram. It involved listening to endless dreary reminiscing of border warfare and the consummate ability required to rise from simple conscript to Imperial Marshal, but the price was small if it could save Station Seventeen.

"Nobody appreciates the border garrisons who hasn't served in them," declared Goram, "but I tell you, if it weren't for them the Empire wouldn't last a year. The barbarians would sweep in, the rival empires would gobble up all they could hold and go to war over the spoils. The Spirit alone knows what the Magellanics would do—but it wouldn't be pleasant—and the whole structure would disintegrate—three thousand years of stability might as well never have been!"

A high official would be used to open flattery. Heym disagreed just enough to seem sincerely to agree on all important points. "We couldn't do without the border patrols," he said, "but it's like any organism, requiring all its part to live—we couldn't dispense with internal police either, and certainly not with the psychotechnicians who are the government."

"Spirit-damned bureaucrats," snorted Goram. "Theoreticians—what do they know of real life? Why, d'you know, I saw three stellar systems lost once to the barbarians because we didn't have enough

power to stand them off. There was a horde of them, a dozen allied suns, and we had only three garrisoned planets. For months we begged—wrote to Antares and Sirius and Sol itself begging for a single Nova-class battleship. Just one, and we could have beaten off their fleet and carried the war to them. But no, it was 'under consideration' or 'deferred for more urgent use'—three suns and a hundred thousand men lost because some soft-bellied psychotechnician mislaid a file."

"Robot-checked files don't get mislaid," said Heym softly. "I have friends in administration, and I've seen them weep at some of the decisions they had to make. It isn't easy to abandon an army to its fate—and yet the power that could have saved them is needed elsewhere, to drive off a larger invasion or to impress the Taranians or to take a star cluster of strategic value. The Empire has sacrificed a lot for sheer survival. Humanness in government is only one thing lost.

"And it isn't only in the military field," argued Heym. "After all, you know the Empire isn't interested in further expansion. It wants to keep civilization alive on the planets where it exists, and keep the non-human imperia out. Ever since the Founder, our military policy has been basically defensive—because we can't handle more than we have. The border is always in a state of war and flux, but the Empire is at peace, inside the marches.

"Yet how long would the Empire last, even assuming no hostile powers outside, without the most rigid form of psychotechnocratic government? There are roughly three times ten to the fourteenth power humans in the Solarian Empire. The nonhuman aborigines have been pretty thoroughly exterminated, assimilated as helots, or otherwise rendered harmless, but there are still all those humans, with all the terrific variations and conflicting desires inherent in man and intensified by radically different planetary and consequently social environments. Can you imagine a situation where three hundred trillion humans went their own uncoordinated ways—with atomic energy, biotoxic weapons, and interstellar spaceships to back up their conflicting demands?"

"Yes, I can," said Goram, "because after all it has happened—for nearly a thousand years before the Empire, there was virtual anarchy. And"—he leaned forward, the hard black glitter of his eyes nailing Heym—"that's why we can't take chances, with this experiment of yours or anything else —anything at all. In the anarchic centuries, with a much smaller population, there was horror—many planets were blasted back to savagery, or wiped out altogether. Have you seen the dead worlds? Black cinders floating in space, some still radioactive, battlegrounds of the ancient wars. The human barbarians beyond the Imperial borders are remnants of that age—some of them have spaceships, even a technology matching our own, but they think only of destruction—if they ever got past the marches, they'd blast and loot and fight till nothing was left. Not to mention the nonhuman border barbarians, or the rival empires always watching their chance, or the Magellanics sweeping in every century or so with weapons such as we never imagined. Just let any disrupting factor shake the strength and unity of the Empire and see how long it could last."

"I realize that," said Heym coldly. "After all, I *am* a psychologist. I know fully what a desperate need the establishment of the Empire filled. But I also know that it's a dead end—its purpose of ultimate satisfied-stasis cannot be realized in a basically dynamic cosmos. Actually, Imperial totalitarianism is simply the result of Imperial ignorance of a better way. We can only find that better way through research, and the project at Station Seventeen is the most promising of all the Foundation's work. Unless we find some way out of our dilemma, the Empire is doomed—sooner or later, something will happen and we'll go under."

Goram's eyes narrowed. "That's near lese majeste," he murmured.

Heym laughed, and gave the marshal a carefully gauged you-and-I-know-better-don't-we look, as he went over to the wall of the officers' lounge and touched a button. The telescreen sprang to life with a simulacrum of the outside view. An uncounted host of stars blazed against the infinite blackness, a

swarming magnificent arrogance of unwinking hard jewels strewn across the impassive face of eternity. The Milky Way foamed around the sky, the misty nebulae and star clusters wheeled their remote godlike way around heaven, and the other galaxies flashed mysterious signals across the light-years and the centuries. As ever, the psychologist felt dwarfed and awed and numbed by the stupendous impact.

"It was a great dream," he whispered. "There never was a higher dream than man's conquest of the universe—and yet like so many visions, it overleaped itself and shattered to bits on the rocks of reality—in this case, simple arithmetic defeated us. How reconcile and coordinate a hundred thousand stars except by absolutism, by deliberate statism—by chaining ourselves to our own achievements? What other answer is there?"

He turned around to Goram. The soldier sat unmoving, face stone-hard, like a primitive idol. "We're looking for anew way," said Heym. "We think we're finding it, at Station Seventeen. It's the first hope in four thousand years."

The planet might almost have been Earth, a great blue spheroid swinging majestically against the incredible spatial sky with a softly shining moon for companion. Auroras wavered over the ice-capped poles, and cloud masses blurred the greenish-brown continents. They were storms, those clouds, snow and rain and wind blowing out of a living heaven over broad fair fields and haughty mountains; and looking down from the sterile steel environment of the ship, remembering the world city sprawling over Earth and the cold hard mechanized pattern of all Imperial life, Heym felt a brief wistfulness. All at once, he envied his experimental animals, down there on the green young planet. Even if they were to be destroyed, they had been more fortunate than their masters.

But they wouldn't be destroyed. They mustn't be. "Where is your observation post?" asked Goram.

"On an asteroid well away from here and rendered invisible."

"Why not on the satellite? It'd be a lot closer."

"Yes, but distance doesn't mean anything to a transvisor. Also, if—when—the colonists learn the means of interplanetary travel, we'd have had to move off the Moon, while we can remain hidden indefinitely on the invisible planetoid."

"I'd say 'if' rather than 'when'," amended Goram grimly. "It was your report that the inhabitants were experimenting with rockets that alarmed the rulers enough to order me here to see if it weren't best simply to sterilize the planet."

"I've told you before, there's no need for alarm," protested Heym. "What if the people do have a few rocketships? They have no reason to do more than visit the other worlds of this system, which aren't habitable—certainly no reason to colonize, with their own planet still practically uninhabited. The present population is estimated at only some eight hundred million."

"Nevertheless, as soon as they have a whole system to move about in they'll be dangerous. It'll no longer be possible to keep track of everything of importance they may do. They'll be stimulated by this success to perfect an interstellar drive—and even you will agree that that cannot be permitted. That engine may be developed without our knowledge, on some remote world of this system—and once even a few of them are running loose between the stars we'll have no further control—and the results may well be catastrophic! Imagine a pure-bred line of geniuses allied with the barbarians!"

"I tell you, they're not warlike. They haven't had a single war in all their history."

"Well, then they'll try to innovate within the Empire, which would be just as bad if not worse. Certainly they won't be satisfied with the status quo—yet that status quo means survival to us."

"They can be co-ordinated. Good Spirit, we have plenty of geniuses in the Galaxy today! We couldn't do without them. They are the very ones who run the Empire. Advancement is on a strict merit basis simply because we must have the best brains of mankind for the gigantic job of maintaining the social order."

"Sure—everyone's strictly brought up to accept the Empire, to identify its survival with his own. We have plenty of tame geniuses. But these are wild—a planetful of undomesticated intellects! If they can't be tamed, they must be killed."

"They can be," insisted Heym. "Rather, they can become the leaders to get us out of status quo safely—if not directly, then indirectly through knowledge gained by observing them. Already administrative techniques have been improved, within the last five hundred or so years, because by watching unhampered intellect at work we have been able to derive more accurate psychomathematical expressions for the action of logic as a factor in society. A group in the Psychotechnic Foundation is working out a new theory of cerebration which may become the basis of a system of mind training doubling the efficiency of logical processes—just as semantic training has already increased mind power by applying it more effectively. But in order to develop and test that theory, as well as every other psychological research project, we must have empirical data such as the observation stations, above all Seventeen, furnish us. Without such new basic information, science comes to a standstill."

"I've heard it all before," said Goram wearily. "Now I want to go down there and look."

"Very well. I'll come along, of course. Do you wish to take anyone else?"

"Do I need to?"

"No, it's perfectly safe."

"Then I won't. Meet me at Lifeboat Forty in half an hour." Goram tramped off to give such orders as might be needed.

Heym stood for a while, chain smoking and looking out the visiplate at the silently rolling planet. Like an ominous moon, the warship swung in an orbit just beyond the atmosphere. For all its titanic mass, it was insignificant against the bulk of a world. Yet in guns and bombs and death-mists, gravitational beams and long-range disintegrators and mass-conversion torpedoes, in coagulative radiations and colloid-resonant generators, in the thousand hells man had made through all his tormented existence, lay the power to rip life off that surface and blanket the shuddering continents in smoke and flame and leave the blackened planet one great tomb under the indifferent stars.

No—no, that was wrong. The power did not lie in the ship, it was inert metal and will-less electronic intellect, a cosmic splinter that without man would spin darkly into eternity. The will, and hence the power, to destroy lay in men—in one man. One gorilla in uniform. One caveman holding a marshal's baton. One pulsing mass of colloidal tissue, ultimately unstable, not even knowing its own desire.

Heym scowled and drew heavily on his cigarette. Goram had been soothed into comparative geniality, but his frantic notion of death as panacea was as strong as ever. The creature wasn't even consistent—one moment talking philosophy of history as if he had brains, the next snarling his mindlessly destructive xenophobia. There was something wrong about Goram—*Though it might only be my own ignorance of practical psychology*, thought Heym. *As a research man, I'm used to dealing with only one factor at a time. A situation in life is really too complex for me—I don't have enough rules of thumb. I wish I'd brought a practicing technician along, say Kharva or Lunn—they'd soon analyze the mental mechanism of our marshal and push the appropriate buttons.*

The old sickening fear fell anew on him. What if, after all, he should fail—what if fifteen hundred years of work were to be sponged out at the arbitrary whim of a superstition-ridden military moron? *If I fail, the Empire fails with me—I know it. And it isn't fair! I should have been told what I was being recalled to Sol for. I should have had a chance to prepare my arguments better. I should have been allowed to take a practical psycho along—but no, they obviously couldn't permit me to do that or I'd have had everything my own way.*

But couldn't they see? Can't they understand? Or has the worship of statism penetrated so deep that it's like an instinct, a blind need for which everything else must be sacrificed?

He turned and went heavily toward his cabin to make ready.

Screened by an invisibility field, the lifeboat spiraled down toward the surface. Goram let the robo-pilot handle the vessel, and spent most of his time peering through a field-penetrating visiscope.

"Not much sign of habitation," he said.

"No, I told you the population was still small," replied Heym. "After, all, only a few thousand were planted originally and the struggle for existence was as hard as with any savages for the first few centuries. Only lately has the population really begun growing."

"And you say they have cities now—machines—civilization? It's hard to believe."

"Yes, it is. The whole result has been a triumphant confirmation of the psychotechnic theory of history, but nevertheless the sheer spectacular character of the success has awed us. I can understand it's a little frightening. One naturally thinks a race which can go from naked savages to mechanized civilization in fifteen hundred years is somehow demonic. Yet they're humans, fully as human as anyone else in the Galaxy, the same old Earthly stock as all men. They've simply enjoyed the advantage of freedom from stupidity."

"How many stations are there?"

"About a hundred—planetary colonies, with colonists in ignorance of their own origin, where various special conditions are maintained. Different environments, for instance, or special human stocks. The progress of history is being observed on all of them, secretly, and invaluable data on mass-psychologic processes are thereby gained. But Seventeen has been by far the most fruitful."

Goram wrinkled his low forehead. With concealed distaste, Heym thought how very like an ape he looked—throwback, atavist, cunning in his own narrow field but otherwise barely above moron level—typical militarist, the biped beast who had ridden mankind's back like some nightmarish vampire through all history—except on the one planet of Valgor's Star—

"I don't quite see the point," admitted the marshal. "Why spend all that time and money on creating artificial conditions that you'd never meet in real life?"

"It's the scientific method," said Heym, wondering at what elementary level he would have to begin his explanation. How stupid could one be and hold a marshal's position? "The real world is an interaction of uncounted factors, constantly changing in relation to themselves and each other, far too vast and complex to be understood in its entirety. In order to find casual relationships, the scientist has to perform experiments in which he varies only one factor at a time, observing its effect—and, of course, running control experiments at the same time. From these data he infers similar relationships in the real world. By means of theoretical analysis of observed facts he can proceed to predict new phenomena —if these predictions are borne out by further observation, the theory is probably—though never certainly—right, and can be used as a guide in understanding and controlling the events of the real world."

In spite of himself, Heym was warming up to his subject. After all, it was his whole life.

"Hm-m-m." Goram looked out the visiscope. The boat was sweeping over a broad plain, yellow with ripening grain. A few primitive villages, houses built of stone and wood and brick, were scattered over the great landscape, a peaceful scene, reminiscent of civilization's dawn. "The planet *looks* backward enough," grunted Goram dubiously.

"It is," said Heym eagerly. "I assure you it is."

"Well . . . you were saying—" Goram didn't look at all sure of what Heym had been saying. "Get to the point."

"The early students of culture were struck by the similarity of development of different civilizations, as if man went along one inevitable historic path. And in a way he did—because one thing leads to another. The expanding units of a culture clash, there are ever fiercer wars, old fears and grudges intensify, economic breakdowns increase the misery, finally, and usually unwittingly and even unwillingly, one nation overcomes all others to protect itself and found a 'universal state' which brings a certain peace of exhaustion but eventually decays and collapses of its own weaknesses or under the impact of alien invaders. That's exactly what happened to mankind as a whole, when he exploded into the Galaxy—only this time the fearful scale and resources of the wars all but shattered the civilization; and the Solarian Empire, the passive rigidity solving the problems of the time of troubles by force, has lasted immensely longer than most preceding universal states, because its rulers have enough knowledge of mass-psychologic processes to have a certain control over them, and all the power of a hundred thousand planetary systems to back their decisions."

Goram looked a little dazed. "I still don't see what this has to do with the Foundation and its stations," he complained.

"Simply this," said Heym, "that though history is a natural process, like anything else, it is peculiarly hard to understand and hence almost impossible to control. This is not only because of the very complex character of the interactions but because we ourselves are concerned in it—the observer is part of the phenomenon. And also, it had long been impossible to conduct controlled experiments in history and thus separate out causal factors and observe their unhindered working. On the basis of thousands of years of history as revealed—usually quite incompletely—by records and by archeology, and of extrapolations from individual and mob psychological knowledge, and whatever other data were available, the scientists of the period preceding the Empire worked out a semi-mathematical theory of history which gave some idea of the nature of the processes involved causal factors and the manner of their action. This theory made possible qualitative predictions of the behavior of masses of men under certain conditions. Thus the early emperors knew what factors to vary in order to control their provinces. They could tell whether a certain measure might, say, precipitate a revolt, or just what phrasing to use in proclamations for the desired effect. If you want a man to do something for you, you don't usually slap him in the face—it's much more effective to appeal to his vanity or his prejudices, best of all to convince him it's what he himself wants to do. But once in a while, a face slapping becomes necessary. Why, even today the barbarians are held at bay more by subtle psychological and economic pressures dividing them against each other and putting them in awe of us than by actual military might."

An ocean rolled beneath the boat, gray and green, showing white mane on the restless horizon. "Swing northeast," said Heym. "The planet's greatest city lies that way, on a large island."

"Good. A city's a good place to observe a people. Can we go around incognito?"

"Naturally. I know the language well enough to pass for a traveler from some other part of the world. There's a lot of intercourse between continents. The cities are quite cosmopolitan."

"Well—go on. You've still not explained why the station and all this rigmarole of secrecy."

"I was laying the background," said Heym, unable to keep all the tiredness out of his voice. *Can I really talk this moron over? Can anyone? Reason is wasted on an ape*. "It's really very simple. The crude psychotechnology available made it possible for the early emperors to conquer most of the human-inhabited Galaxy, hold it together, and reach an uneasy truce with the Taranian and Comi Empires. Our military might can hold off the barbarians and the Magellanic raiders, and have sufficient power left over to police the three hundred trillion citizens.

"Yet our science is primitive. On that vast scale, it can only deal with the simplest possible situations. It's all we can do to keep the Empire stable. If it should develop, on the colossal scale of which it is capable and with all the unpredictable erraticness of the free human mind, it would simply run away from us. We have trouble enough keeping industry and commerce flowing smoothly when we know exactly how it should work. If we permitted free invention and progress, there'd be an industrial revolution every year—there is never a large proportion of discoverers, but with the present population the number would be immense. Our carefully evolved techniques of control would become obsolete; there'd be economic anarchy, conflict, suffering, individuals rising to power outside the present social framework and threatening the co-ordinating authority—with planet-smashing power to back both sides and all our enemies on the watch for a moment's instability.

"That's only one example. It applies to any field. Science, philosophy—we can control known religions, channel the impulses to safe directions—but a new religion, rousing discontent, containing unknown elements—a billion fanatics going to war—No! We have to keep status quo, which we understand, at the cost of an uncontrollable advance into the unknown.

"The Empire really exists only to simplify the psychotechnic problem of co-ordination. Enforcement of population stability—good, we don't have to worry about controlling trillions of new births; there's no land hunger. Stable industry, ossified physical science, state religion, totalitarian control of the entire life span—good, we know exactly what we're dealing with and our decisions will be obeyed—imagine the situation if three hundred trillion people were free to do exactly as they pleased in the Galaxy!" Heym shrugged. "Why go on? You know as well as I do that the Empire is only an answer to a problem of survival—not a good answer, but the best our limited knowledge can make."

"Hah!" Goram's exclamation was triumphant. "And you want to turn a world of unpredictable geniuses loose in that!"

"If I thought for an instant there was any danger of this people's becoming a disrupting factor, I'd be the very first to advocate sterilization," said Heym. "After all, I want to live, too. But there's nothing to fear. Instead, there is—hope."

"What hope?" snorted Goram. "Personally, I can't see what you want, anyway. For three thousand years, we've kept man satisfied. Who'd want to change it?"

Heym bit back his temper. "Aside from the fact that the contentment is like death," he said, "history shows that universal states don't endure forever. Sooner or later, we'll face something that will overwhelm us. Unless we've evolved ourselves. But safe evolution is only possible when we know enough psychotechnics to keep the process orderly and peaceful—when our science is really quantitative. The Stations, and especially Seventeen, are giving us the information we must have to develop such a science."

The island lay a few kilometers north of the great northern continent. A warm stream in the ocean made the climate equable, so that the land lay green in the gray immensity of sea, but polar air swept

south with fog and rain and snow, storms roaring over the horizon and the sun stabbing bright lances down through a mightily stooping sky of restless clouds and galloping winds. Heym thought that the stimulating weather had as much to do as the favorable location along the northern trade routes with the islanders' leadership in the planet's civilization.

Many villages lay in the fields and valleys and on the edges of the forest that still filled the interior, but there was only one city, on an estuary not far from the southern coast. From the air, it was not impressive to one who had seen the world cities of Sol and Sirius and Antares, a sprawling collection of primitive, often thatch-roofed dwellings that could hardly have housed more than a million, the narrow cobbled streets crowded with pedestrians and animal-drawn vehicles, the harbor where a few steam- or oil-driven vessels were all but lost in the throng of wind-powered ships, the almost prehistoric airport—but the place had the character, subtle and unmistakable, of a city, a community knowing of more than its own horizon inclosed and influencing events beyond the bounds of sight.

"Can we land without being detected?" inquired Goram.

Heym laughed. "An odd question for a military man to ask. This boat is so well screened that the finest instruments of the Imperial navy would have trouble locating us. Oh, yes, we observers have been landing from time to time all through the station's history."

"I must say the place *looks* backward enough," said Goram dubiously. "The existence of cities is certainly evidence of crude transportation."

"Well"—honesty forced Heym to argue—"not necessarily. The city, that is, the multi-purpose community, is one criterion of whether a society is civilized or merely barbaric, in the technical anthropological sense. It's true that cities as definite centers disappeared on Earth after the Atomic Revolution, but that was simply because such closely spaced buildings were no longer necessary. In the sense of close relation to the rest of mankind and of resultant co-ordination, Earth's people kept right on having cities. And today the older planets of the Empire have become so heavily populated that the crowded structures are reappearing—in effect, the whole world becomes one vast city. But I will agree that the particular stage of city evolution existing here on Seventeen is primitive."

Goram set the boat down in a vacant field outside the community's limits. "What now?" he asked.

"Well, I suppose you'll want to spend a time just walking around the place." Heym fumbled in a bag. "I brought the proper equipment, clothes and money of the local type. Planetary type, that is—since a universal coinage was established at the same time as a common language was adopted for international use, and nobody cares what sort of dress you wear." He unfolded the brief summer garments, shorts and sandals and tunic of bleached and woven plant fiber. "Funny thing," he mused, "how man has always made a virtue of necessity. The lands threatened with foreign invasion came to glorify militarism and war. The people who had to work hard considered idleness disgraceful. Dwellers in a northern climate, who had to wear clothes, made nudity immoral. But our colonists here are free of that need for compensation and self-justification. You can work, think, many, eat, dress, whatever you want to do, just as you please, and if you aren't stepping on someone else's toes too hard nobody cares. Which indicates that intolerance is characteristic of stupidity, while the true intellectual is naturally inclined to live and let live."

Goram struggled awkwardly and distastefully into the archaic garments. "How about weapons?" he asked.

"No need to carry them. No one does, except in places where wild animals might be dangerous. In fact, arms are about the only thing in which the colonists' inventiveness has lagged. They never got past the bow and arrow. Aside from a few man-to-man duels in the early stages of their history, and now abandoned, they've never fought each other."

"Impossible! Man is a fighting animal."

Heym tried to find a reply which was not too obviously a slap at the whole military profession. "There's been war on all our other colonies," he said slowly, "and, of course, through all human history —yet there's never been any real, logical reason for it. In fact, at one stage of prehistoric man, the late neolithic, war seems to have been unknown—at least, no weapons were found buried with the men of that time. And your whole professional aim today is to maintain peace within the Empire, isn't it?

"It takes only one to make a quarrel unless the other lacks all spirit to resist—and a people like these are obviously spirited, in fifteen hundred years they've explored their whole planet. But suppose neither side wants to fight. Whenever two tribes met, in the history of Station Seventeen, they were all too intelligent to suffer from xenophobia or other nonlogical motivations to murder, and certainly they had no logical reason to fight. So they didn't. It was as simple as that."

Goram snorted, whether in disbelief or contempt Heym didn't know. "Let's go," he said.

They stepped out of the boat and its invisibility screen into the field. Tall breeze-rippled grass tickled their bare legs, and the wind in their faces had the heady scent of green growing life brought over the many kilometers of field and forest across which it had rushed—incredible, that pulsing warm vitality after the tanked sterility of the ship, of the Empire. And up in the blue cloud-fleeced sky a bird was singing, rising higher and ever higher toward the sun, drunk with wind and light.

The two men walked across the field to a road that led cityward. It was a narrow rutted brown track in the earth, and Goram snorted again. They walked along it. On a hill to the right stood a farm, a solid substantial, contented-looking cluster of low tile-roofed stone buildings amid the open fields, and ahead of the horizon was the straggling misty line of the city. Otherwise they were alone.

"Are all your colonies this wild?" asked Goram.

"Just about," said Heym, "though the environments are often radically different—everything from a planet that's barely habitable desert to one that's all jungle and swamp. That way, we can isolate the effects of environment. We even have one world equipped with complex robot-run cities, to see how untutored humans will react. There are three control stations, Earth-like planets where ordinary human types were left, and from them we're getting valuable information on the path which terrestrial history actually took; we can test basic anthropological hypotheses and so on. Then there are a number of planets where different human types are planted —different races, different intelligence levels, and so on, to isolate the effects of heredity and see if there is any correlation of civilization with, say physiology. But only here on Seventeen, populated exclusively by geniuses, has progress been rapid. All the other colonies are still in the stone ages or even lower, though there have been some unique responses made to severe environmental stimuli."

"And you mean you just dumped your subjects down on all these worlds?"

"Crudely put, yes. For instance, before colonizing Seventeen we—that is, the Foundation—spent several generations breeding a pure genius strain of man. On Imperial orders, the Galaxy's best brains were bred, and genetic control and selection were applied, until a stock had been developed whose members had only genius in the intellectual part of their heredity. Barring mutation or accident, both negligible, the people here and their children can only be geniuses. Then the few thousand adult end-products, who had naturally not been told what was in store for them, were seized and put under the action of memory erasers which left them able to walk and eat and little else. Then a couple of hundred were planted in each climatic region of this planet, near strategically placed invisible spy devices, and the observers sat back on their asteroid to see what would happen. That was fifteen hundred-odd years

ago, but even in the forty or so years I've been in charge the change here has been very noticeable. In fact, on choosing the proper psychomathematical quantities to represent the various types of progress and plotting them against time, almost perfect exponential curves were obtained."

Goram scowled. "So on that exponential advance, you can expect them to work out interplanetary travel in a matter of years," he said. "They'll know the principles of the star drive in a few more generations, and invent a faster-than-light engine almost at once. No—they aren't safe!"

It was strange to walk through the narrow twisting streets and among the high archaic facades of a city which belonged to the almost forgotten past. To Goram, who must have visited uncivilized planets often, it could not be as queer as to Heym, and, also, the military mind would be too unimaginative to appreciate the situation. But even though Heym had spent the better part of his life watching this culture, it never failed to waken in him a dim feeling of dreamlike unreality.

Mere picturesqueness counted for a little, though the place was colorful enough. Along those cobbled ways went the traffic of a world. There were fantastic-looking beasts, variations of the horned ungulate genus which the colonists had early tamed to ride and load with their burdens, and still more exotic pets; and steering cautiously between them came trucks and passenger vehicles which for all their crudeness of material and principle had a cleanness of design, all the taut inherent beauty of the machine, that only Imperial mechanisms matched. More significant were the people.

There was nothing marking them out as obviously different. Many physical types were in evidence here, from the tall fair islanders to the stocky arctic dwellers or the sun-burned southern folk; and costumes varied accordingly, though even strangers tended to wear some form of the light local summer dress. If perhaps a tendency toward higher foreheads and more clean-cut features than the Galactic average existed, it was not striking, and there was as wide deviation from it as could be found anywhere. The long hair of both sexes and the full beards worn by many men screened any intellectuality of appearance behind a hirsute veil associated with the peripheral barbarians.

No—the difference from any other world in the Galaxy was real and unmistakable, but it wasn't physical. It was in the clear air of the city, where all chimneys were smokeless, and in the clean-swept streets. It was in the orderliness of traffic, easy movement without jostling and confusion. It was in the clean bodies and soft voices of the people, in the casually accepted equality of the sexes even at this primitive level of technology. It was negative, in the absence of slums and jails, and positive, in the presence of parks and schools and hospitals. There were no weapons or uniforms in sight, but many in the street carried books or wore chemical-stained smocks. There were no ranting orators, but a large group sat on the grass of one park and listened to a lecture on ornithology. Laughter was quiet, but there was more of it than Heym had heard elsewhere in the Empire.

Goram muttered once: "I seem to hear quite a few languages here."

"Oh, yes," replied Heym. "Each region naturally developed its own tongue and generally sticks to it for sentimental reasons and also because the thoughts of a people are best expressed in the speech they themselves developed. But as soon as contact between the lands became common, an international language was worked out and learned by all concerned. In fact, only about fifty years ago a completely new world language was adopted, one correct according to the newly established principles of semantics. That's more than the Empire has yet done. We can talk Terrestrial safely enough, it'll pass for some local dialect, and I can do the talking for both of us with the natives."

"Still"—Goram scowled—"I don't like it. Everybody here has a higher I. Q. than myself—that's not right for a bunch of barbarians. I feel as if everyone was looking at me."

"Most of them observe us, yes, geniuses being naturally observant," said Heym. "But we aren't conspicuous in any way. Our men have often been on the planet in person without attracting attention."

"Didn't you say you'd appeared openly?"

"Yes—a few times, some centuries back, we made the most awe-inspiring possible descents, coming down through the air on gravibeams in luminous clothes and performing seeming miracles. You see, even the primitive tribes had shown no signs of organized religion beyond the usual magic rites which they soon outgrew. We wanted to see if god-worship couldn't be induced." Heym smiled wryly. "But after the generation which had actually seen us, there was no sign of our manifestation. I suppose the young, being of independent mind, simply refused to believe their elders' wild stories. Not that the people are without religious sense. There is a high proportion of unbelievers, but there is also a large philosophical and even devotional literature. But nobody founds a school of thought, rather everybody reaches his own conclusions."

"I don't see how progress is possible then."

You *wouldn't*, thought Heym contemptuously, but he only smiled and said, "Apparently it is."

An aircraft roared low overhead, and a wagon driver fought to control his suddenly panicky animals. Goram said: "The biggest paradox here is the anachronism. Sailships and oilburners docked side by side, animal power in the same street with chemical engines, stone and wood houses with efficient smoke precipitators—how come?"

"It's partly a matter of the extremely rapid progress," declared Heym. "A new invention appears before the economy has become geared to it. There won't be many machines until mass-production factories are set up to produce them in quantity, and that will have to wait till mechanical knowledge is sufficiently advanced to develop factories almost entirely automatic—for few if any geniuses could stand to work on an assembly line all day. Meanwhile, the people are in no hurry to advance their standard of living. Already they have sufficient food, clothing, and other necessities for all, as well as abundant free time—why strain themselves to go beyond that? This isn't the first time a brilliantly creative civilization has existed without interest in material progress; I might cite the Hellenistic phase of the ancient Classical culture on Earth as another case."

Goram, who had obviously heard nothing and cared less about Hellenic culture, was silent for a while, then at last a blurted protest: "But they're working on rockets!"

"Oh, yes—but there's a difference between exploration and exploitation. The social system here is unique, and doesn't lend itself to imperialism. The Empire doesn't have to fear Station Seventeen."

"I've told you before I'm not worried about their military power," snarled Goram.

Heym fell silent, for he felt the sudden sickening fear that the marshal might, without reason or provocation, decide to annihilate the colony—destroy it out of pure spite, pique with the psychologists and their dominion over the soldiers, vent for gathering wrath at the subconscious, frantically denied realization of his own basic inferiority to these barbarians. If he killed them, it would be proof, the militarist's twisted proof, that he was superior after all.

With a growing desperation, Heym looked around at the people—the fortunate children of an open sky, quiet, glad, urbane, and strong with the unconquerable strength of intelligence. Here was truly Homo sapiens, man the wise—man who had plucked fire from the mouth of a volcano, far back in the lost ages of the ice, and started on a long journey into darkness. He had come far since then, but he had ended in a blind alley. Only here, on this one insignificant world of the countless millions swarming around the stars, only here was the old quest being renewed, the path of hope being trodden. Elsewhere lay only the sorry road of empire and death. Where the path of Station Seventeen led, Heym could not imagine. Unguessably far it went, out beyond the glittering stars, his mind reeled at thought of the

infinities open to mankind if he took the right turning.

The psychologist said, with desperation raw in his voice, "Goram—Marshal Goram—surely you can see the experiment is harmless. More than that, it's the most beneficial thing that has yet happened in all human history. Good Spirit, here's hope for the Empire! A race which can progress as this has done can show us the way."

"The Empire," said Goram tightly, "isn't interested in progress. It's only interested in survival."

"But—this is the way to survive. Every civilization—yes, every species—that quit advancing has become extinct."

"I'm a practical man," snapped Goram. "I'm not interested in crackpot schemes to save the universe."

"What's so practical about clinging to a system that in all history has consistently failed to work?" When the officer's face remained cold and shut, Heym said with forced persuasiveness, "After all, in physical science the planet is still centuries behind us. In fact, strangely enough, though their advance in that branch of knowledge has been as extremely rapid as you can see, they have shown a proportionately greater concentration on biological and sociological work. I don't know why, unless it is that genius is less afraid than mediocrity to study subjects which strike close to home. On Earth, astronomy, the most remote science, was the oldest, and psychiatry and sociology the youngest, but here all the sciences have got off to an even start. The mere absence of war is enough to show how far ahead of us these people are, and I could list any amount of supporting evidence. Their social system has achieved the miracle of combining progressiveness and stability. Just give the Foundation a chance to learn from them—or even, if they do work out an interstellar drive, give them a chance to teach us themselves. They're the most reasonable race in the universe—they'll be on the side of civilization, and even while overhauling it they'll be better able to preserve it than we ourselves."

"Let a bunch of barbarians take over the holy throne?" muttered Goram.

Heym closed his mouth, and a gathering determination tightened his gaunt face. He looked around the pulsing city, and a vast tenderness and pity welled up in him—poor geniuses, poor helpless unwitting supermen—and answering it came a steely implacable resolve.

There was too much at stake to let his own personal fate matter. Certainly a mindlessly destructive atavist could not be allowed to block history. He would keep trying, he'd do his best to talk Goram over, because the alternative was fantastically risky for the station and against all his own training and principles—including elementary self-preservation.

But if he failed, if Goram remained obdurate, then he'd have to apply the same primitive methods as the soldier. Goram would have to die.

Rain clouds came out of the west with sunset, thunder rolling over the sky and a cool wet wind blowing from the sea. Goram and Heym finished a primitive but satisfying meal in a small restaurant and the psychologist said: "We'd better look for a place to stay tonight. Will you be in this city tomorrow?"

"Don't know," answered Goram curtly. He had been silent and withdrawn during the day's tour of the metropolis. "I have to think over what I've seen today. It may be enough basis for a decision, or I may want to see more of the planet."

"I'll pay the score," offered Heym. He fought to keep his voice and face blank. "And I'll ask the waiter to recommend a tavern."

He followed the man toward the kitchen. "Please," he said in the common tongue, "I wish to pay the check."

"Very well," answered the native. He was a tall young fellow with the faintly weary eyes of a scholar—probably a student, thought Heym, doing his stint here and getting his education free. He took the few coins casually.

"And—is there a place to stay overnight near here?"

"Right down the street. Stranger, I take it?"

"Yes. From Caralla on business. Oh—one other thing." It was a tremendous effort to meet that steady gaze. Heym was aware of his own clumsiness as he blurted the request:

". . . uh . . . I've lost my knife and I need it to prepare some handicraft samples for display tomorrow. The stores are all closed now. I wonder if you have an extra one in the kitchen I could buy."

"Why—" The native paused. For an instant, Heym thought he was going to ask questions, and he braced himself as if to meet a physical impact. But on a world where crime was virtually unknown and lying hardly ever went beyond the usual polite social fibs, even so crude a fiction could get by. "Yes, I suppose we have," said the waiter. "Here, I'll get one."

"No . . . It come along . . . save you the trouble ... choose one for my purpose if . . . uh . . . if you have several you can spare." Heym stuck close to the waiter's heels.

The kitchen was spotlessly clean, though it seemed incredible that cooking should still be done with fire. Heym chose a small sharp knife, wrapped it in a rag, and slipped it into his pocket. The waiter and chef refused his money. "Plenty where this one came from—a pleasure to help out a visitor."

"What were you out there for?" asked Goram.

Heym licked stiff lips. "The waiter was new here himself and went to ask the cook about hotels."

The first raindrops were falling as the two came out into the street. Lightning forked vividly overhead. Goram shuddered in the raw damp chill. "Foul place," he muttered. "No weather control, not even a roof for the city—uncivilized."

Heym made no reply, though he tried to unlock his jaws. The blade in his pocket seemed to have the weight of a world. He looked down from his stringy height at the soldier's squat massiveness. *I've never killed*, he thought dully. *I've never even fought, physically or mentally. I'm no match for him. It'll have to be a sneak thrust from behind.*

They entered the hotel. The clerk was reading a journal whose pages seemed purely mathematical symbols. He was probably a scientist of some kind in his main job. There was, luckily for Goram, no register to sign; the clerk merely nodded them casually toward their room.

"No system here," muttered Goram. "How can they keep track of anybody without registry?"

"They don't," said Heym. "And they don't have to."

The room was large and airy and well furnished. "I've slept in worse places," said the soldier grudgingly. He flopped into a chair. "But it's the first place I've seen where the hired help reads technical journals."

"That's easy enough to explain. Even though no high-grade mind could be put to the myriad routine and menial tasks essential to running a civilization, everything from garbage collection to government, someone must do the work. The present set-up is a compromise, in which everyone puts in a small

proportion of his time at those jobs. He can do manual work, or teach, or run a public-service enterprise like a farm or restaurant—whatever he wishes. And he can work steadily at it for a few years and then have all his needs taken care of for the vest of his life, or else put in a few hours a day, two or three, over a longer period of time. The result is that needs and a social surplus are available for all, as well as education, health services, entertainment, or whatever else is considered desirable. The planet could, in fact, do without money, but it's more convenient to pay in cash than fill out credit slips.

"Incidentally, that's probably one reason there's no great interest in providing more material goods for all—it would mean that everyone would have to put in more time in the mines and factories and less on his chosen work. Which is apparently a price that genius is unwilling to pay. I don't think there'll be any great progress in applied science until the research project established some time back perfects the robots it's set for a goal."

"Uh-huh," muttered Goram. "And just let them expand into the Galaxy and find we have such robots—left unproduced since the Imperial populace has to be kept busy—and see what they'll do. They'd be able to wreck the whole set-up, just by inventing and distribution, and they'll know it."

"Can't you credit them with being smart enough to see the reasons for maintaining the status quo?" asked Heym. "They don't want the barbarians on their necks any more than we do. They'll help us maintain the Empire until they have developed a way to change conditions safely."

"Maybe." Goram's mouth was tight. "Still, they'll hold the balance of power, which is something no group except the Imperium can be permitted to do. Spirit! How do you even know they'll be on our side? They may decide their best advantage lies with our rivals. Or they may be irritated with our having used them so cavalierly all these centuries."

"They won't hold grudges," said Heym. "A genius doesn't." "How do you know?" Goram sprang out of his chair and paced the floor. His voice rose almost to a shout. "You've said all along that the genius is naturally peaceful and tolerant and unselfish and every other of the milk-and-water virtues.

Yet, your own history is against you all the way. Every great military leader has been a genius. There've been sadistic geniuses, and bigoted geniuses, and criminal geniuses—yes, insane geniuses! Why, every one of the, hundred billion or so important men in the Imperial government is a genius—on our side—and more than half the barbarian chiefs are known to have genius intellect." He swung a red and twisted face on the psychologist. "How do you know this is a planet of saints? Answer me that!"

Heym took out a cigarette pack with fingers that shook. He held it out to Goram, who shook his heavy bullet head in angry refusal. The psychologist took time to bring one of the cylinders into his mouth and puff it into lighting. He drew smoke deeply into his lungs, fighting for steadiness.

It was his last real chance to convince Goram. If this failed, he'd just have to try to murder the soldier. If that attempt miscarried—oh, Spirit, then Station Seventeen and the Empire were doomed. But if he succeeded, well, he might be able to convince the Imperial police that it had been an accident, a runaway animal or something of the sort, or they might send him to the disintegration chamber for murder. In any case, there would be a faint hope that the next inspector would be a reasonable man.

He said slowly: "To explain the theory of historical progress, I'd have to give you a fairly long lecture."

Goram sprawled back into his chair, crude and strong and arrogant. His little black eyes were drills, boring into the psychologist's soul. "I'm listening," he snapped.

"Well"—Heym walked up and down the floor, hands clasped behind his back—"it's evident from a study of history that all progress is due to gifted individuals. Always, in every field, the talented or otherwise fortunate few have led and the mass has dumbly followed. A republic is the only form of

state which even pretends to offer self-government, and as soon as the population becomes any size at all the people are again led by the nose, their rulers struggling for power with money and such means of mass hypnotism as news services and other propaganda machines. And all republics become dictatorships, in fact if not in name, within a few centuries at most. As for art and science and religion and the other creative fields, it is still more obviously the few who lead.

"The ordinary man is just plain stupid. Perhaps proper mind training could lift him above himself, but it's never been tried. Meanwhile he remains immensely conservative, only occasional outbreaks of mindless hysteria engineered by some special group stirring him out of his routine. He follows, or rather he accepts what the creative or dominant minority does, but it is haltingly and unwillingly.

"Yet it is society as a whole which *does*. History is a mass action process. Gifted individuals start it off, but it is the huge mass of the social group which actually accomplishes the process. A new invention or a new land to colonize or a new philosophy or any other innovation would have no significance unless everybody eventually adopted or exploited or otherwise made use of it. And society as a whole is conservative, or perhaps I should say preservative. Civilization is ninety-nine percent habit, the use of past discoveries or the influence of past events. Against the immense conservatism of mankind in the mass, and in comparison to the tremendous accumulation of past accomplishment, the achievement of the individual genius or the small group is almost insignificant. It is not surprising that progress is slow and irregular and liable to stagnation or violent setbacks. The surprising thing is really that any event of significance can happen at all."

Heym paused. Goram stirred impatiently. "What are you leading up to?" he muttered.

"Simply this." Heym's hand fell into his pocket and closed on the smooth hard handle of the knife. Goram slumped in his chair, head lowered, staring sullenly at the floor. If the blade were driven in now, right into that bull neck, a paralyzing blow and then a swift slash across the jugular—

The intensity of the hatred welling up in him shocked Heym. He should be above the brutal level of his enemy. Yet—to see the blood spurt!

Steady—steady— That move of desperation might not be necessary.

"Two factors control the individual in society," said Heym, and the detached calm of his voice was vaguely surprising to him. "They are only arbitrarily separable, being aspects of the same thing, but it's convenient to take them up in turn.

"There is first the simple weight of social pressure. We all want to be approved by our fellows, within reasonable limits at least. The mores of the society, whatever they may be, are those of the individual. Only a psychopath would disregard them completely. Not only does society apply force on the nonconformist, but mere disapproval can be devastating. It takes a really brave—and somewhat neurotic—individual to be different in any important respect. Many have paid with their lives for innovating. So a genius will be hampered in making original contributions, and they are adopted only slowly. It usually takes a new idea many generations to become accepted. The astonishing rate of growth of science, back in the days when free research was permitted and even encouraged, indicates how rapid progress can be when there are no barriers.

"And, of course, this social pressure usually forces conformity even on reluctant individuals. A scientist may be naturally peaceful, for instance, but he will hardly ever refuse to engage in war research when so directed.

"The second hold of the mass on the individual is subtler and more effective. It is the mental conditioning induced by growing up in a society where certain conditions of living and rules of thought

are accepted. A 'born' pacifist, growing up in a Warlike culture, will generally accept war as part of the natural order of things. A man who might have been a complete skeptic in a science-based society will nearly always accept the gods of a theocracy if he has been brought up to believe in them. He may even become a priest and direct his logical talents toward elaborating the accepted theology —and help in the persecution of unbelievers. And so on. I needn't go into detail. The power of social conditioning is unbelievable—combined with social pressure, it is almost insuperable.

"And—this is the important point—the rules and assumptions of a society are accepted and enforced by the mass—the overwhelming majority, shortsighted, conservative, hating and fearing all that is new and strange, wishing only to remain in whatever basic condition it has known from birth. The genius is forced into the strait-jacket of the mediocre man's and the moron's mentality. That he can expand any distance at all beyond his prison is a tribute to the supreme power of the high intellect."

Heym looked out at the empty street. Rain blew wildly across its darkened surface. "The Solarian Empire is nothing but the triumph of stupidity over intelligence. If every man could think for himself, we wouldn't need an empire."

"Watch yourself," muttered Goram. "The ruling class has a certain latitude of speech, but don't overstep it." And more loudly: "What does this mean in the case of Station Seventeen?"

"Why, it's a triumphant confirmation of the historical theory I was just explaining," said Heym. "We've isolated pure genius from mediocrity and left it free to work out its own destiny. The result has even exceeded our predictions.

"No doubt there are aggressive and conservative and selfish people born. But on this world the weight of social conditioning and social pressure is away from those tendencies, they don't get a chance to develop themselves.

"It seems"—Heym's voice rose over the whistle of wind—"that genius shows a qualitative distinction, due to quantitative differences, from mere human intelligence. The genius is basically a distinct type, just as the moron is on the other end of the scale. And here—on Seventeen—the new type has been set free."

He turned around from the window. Goram sat motionless, staring at the floor, and the slow seconds ticked away before he spoke.

"I don't know—" he murmured. "I don't know—"

Defeat and despair and a binding hatred rose into Heym's throat, tasting of vomit. *You don't know!* His mind screamed the thought, it seemed incredible that Goram should sprawl there, not moving, not hearing. *No, you don't know. Your sort never does, never has known anything but its own witless bestial desires, its own self-righteous rationalization of impulses that should have died with Smilodon. You'll destroy Seventeen, in spite of all reason, in sheer perversity—and you'll say you did it for the good of the Empire!*

The knife seemed to spring of its own accord into his hand. He was lunging forward before he realized it. He saw the blade gleam down as if another man were wielding it. The blow shocked back into his muscles and for an instant his mind wavered, it wasn't real—*what am I doing?*

No time to lose. Goram twisted around in his seat, yelling, grabbing for Heym. The knife was deep in his neck. Heym yanked at it—pull it loose, stick it in the throat, kill—

Something struck him from behind. The world shattered in a burst of stars, he crashed to the floor and rolled over. Through a haze of dizzy pain he saw men bending over Goram—men of the planet, rescuers for the monster who would annihilate them.

Words tumbled from the hotel clerk, anxious, shaken: "Are you hurt? Did you—Still, lie still, here comes a doctor—"

Pain Burled Goram's lips back from his teeth, but he muttered a reply: "No . . . I'm all right . . . flesh wound—" The doctor bent over his bloody form. "Deep," he said, "but it missed the important veins. Here, I'll just pull it out—"

"Go ahead," whispered Goram. "I've taken worse than this, though . . . I never expected it here."

Heym lay on the floor while they worked over the soldier. His ringing, whirling head throbbed toward steadiness, and slowly, with so tremendous an impact that it overloaded his nerves and entered his consciousness without emotional shock, the realization grew.

Goram had spoken to the natives—in their own language. A man bent over the psychologist. "Are you all right?" he asked. "I'm sorry I had to hit you so hard. Here—drink this." Heym forced the liquid down his throat. It coursed fierily through his veins, he sat up with an arm supporting him about his waist and held his head in his hands.

Someone else spoke, the voice seemed to come from across an abyss: "Did he hear?"

"I'm afraid so." Goram, his neck bandaged, spoke painfully. A rueful smile crossed his ugly face. "The excitement was too much for me, or I would have kept silent. This is going to be—inconvenient."

The men of the planet helped Heym into a chair. He began to revive, and looked dazedly across at the man he had tried to kill. The others stood around the chairs, tall bearded men in barbaric dress, watching him with alertness and a strange pity.

"Yes," said Tamman Goram very quietly, "the assistant Grand Marshal of the Solarian Empire is a native of Station Seventeen."

"Who else?" whispered Heym. "How and why? I tried to kill you because I thought you meant to order the planet sterilized."

"It was an act," said Gomm. "I meant to concede at last that the station was harmless and could be safely left to the Foundation's observers. Coming from one who had apparently been strongly inclined to the opposite view, the statement would have been doubly convincing to Imperial officialdom. It was a powerful and suspicious minister who ordered the investigation, and I went to soothe his feelings. His successor will be one of our men, who will see that Station Seventeen drops into safe obscurity as an unimportant and generally unsuccessful experiment conducted by a few harmless cranks."

"But . . . aren't you . . . weren't you—"

"Oh, yes. My history is perfectly genuine. I was planted as an obscure recruit in the border guards many years ago, and since then my rise has been strictly in accord with Imperial principles. All our men in the Empire will bear the most searching investigation. Sometimes they come from families which have lived several generations on Imperial planets. Our program of replacing key personnel with our men is planned centuries ahead of time, and succeeds by the simple fact that on the average, over long periods of time, they are so much more capable than anyone else."

"How long—?"

"About five hundred years. You underestimated the capabilities of your experimental animals." Goram rested for a moment, then asked, "If human intelligence is qualitatively different from animal intelligence, and genius is different from ordinary reasoning power—then tell me, what about the equivalent of geniuses in a world where the average man is a genius by the usual standards?

"Pure genius strains kept right on evolving, more rapidly indeed than can be explained on any other basis than the existence of an orthogenetic factor in evolution. Supergenius —give it a different name, call it transcendence, since it is a different quality—has capabilities which the ordinary mind can no more comprehend than pure instinct can comprehend logic.

"Your spectacular god-revelations were not forgotten, they were treated discreetly. Later, when a theory of evolution was developed, it seemed strange that man, though obviously an animal, should have no apparent phylogenesis. The stories of the 'gods,' the theories of evolution and astronomy—we began to suspect the truth. With that suspicion, it was not hard for a transcendent to spot your masquerading psychologists. Kidnapping, questioning under drugs developed by psychiatry, and release of the prisoner with memory of his experience removed told us the rest. Later, disguised as other prisoners, with their knowledge, and his own intelligence to fill the gaps, one transcendent after another made his way to the observation asteroid—thence out into the Galaxy, where a little spying was sufficient to reveal the principles of the interstellar drive and the other mechanisms of the Empire." Heyni murmured: "The whole planet has been—acting?"

"Yes." Goram chuckled. "Rather fun for all concerned. You'd be surprised at the installations we have, out of spy-machine range. As soon as they are old enough to carry out the deception, our children are told the truth. It has actually made little difference to our lives except for those few million who are out in the Galaxy taking it over."

"Taking . . . it . . . over?" Heym's mind seemed to be turning over slowly, infinitely slowly and wearily.

"Of course." A strange blend of sternness and sympathy overlay Goram's harsh features. "One planet obviously cannot fight the Galaxy, nor do we wish to. Yet we cannot permit it to menace us. The only answer is—annexation."

"And . . . then?"

"I'm sorry." Goram's voice came slowly, implacably, "but I'm afraid you overrated the good intentions of the pure genius strain. After all, Homo intelligens can no more be expected to serve Homo sapiens than early man to serve the apes.

"We're taking over barbarians and Empire alike. After that, the Galaxy will do as we wish. Oh, we won't be hard masters.. Man may never know that he is being ruled from outside, and he will enter a period of peace and contentment such as he has never imagined.

"As for you—"

Heym realized with vague shock that he had not even wondered or cared what was to become of him personally.

"You are sympathetic to us—but your loyalty is to the Empire. You have thought of us only in relation to our usefulness to the Imperium. Perhaps we could trust you to keep our secret, perhaps not. We can't take the risk. You might even release the truth inadvertently. Nor can we erase your memory of this—it would leave traces that an expert psychiatrist could detect, and all high officials undergo regular psychoanalytic checkups.

"I'll just have to report you as accidentally killed on the planet." Goram smiled. "I don't think you'll find life exile on this world, out of sight of the observers, uncongenial. And we might as well see about making your successor one of our men. It was about ready for that."

He added thoughtfully: "In fact, the Galaxy may be ready for a new Solarian Emperor."

Although Mars had long been a dead planet, one "Martian" remained—among the crew of Earth's spaceship. One was enough.

And the Moon Be Still As Bright

Ray Bradbury

I

IT WAS so cold that when they first came from the ship into the night, Spender began to gather the dry Martian wood and build a small fire. He didn't say anything about a celebration, he merely gathered the wood, set fire to it and watched it burp.

In the flare that illumined the thin air of this dried up sea of Mars he looked over his shoulder and saw the rocket ship that had brought them all, Wilder and Cheroke, and Gibbs and McClure and himself across a silent black space of stars to land upon a dead, dreaming world.

Jeff Spender waited for the noise. He looked at the other men and waited for them to jump around and shout. It would happen as soon as the numbness of being the first men to Mars wore off.

Gibbs walked over to the freshly ignited fire and said, "Why don't we use the ship chemical fire instead of that wood?"

"Never mind," said Spender, not looking up.

It wouldn't be right, the first night on Mars, to make a loud noise, to introduce a strange silly bright thing like a stove. It would be a kind of imported blasphemy. There'd be time for that later; time to throw condensed milk cans in the proud Martian canals, time for copies of the New York Times to blow and caper and rustle across the lone gray Martian sea-bottoms, time for banana peels and picnic papers in the fluted delicate ruins of old Martian valley towns. Plenty of time for that. And he gave a small inward shiver at the thought.

He fed the fire by hand and it was like an offering to a dead giant. They were on an immense tomb. They had landed on a tomb planet. Here, a civilization had died. It was only simple courtesy that the first night be spent quietly, in reverence to a world that had once moved with life and was now buried and lifeless.

"This is not my idea of a landing celebration," said Gibbs. He looked at Captain Wilder. "Sir, I thought we might break out rashers of gin and meat and whoop it up a bit."

Captain Wilder looked off toward a dead city, a mile away. "We're all of us tired," he said, remotely, as if his whole attention was upon the city and the men were forgotten. "Tomorrow night, perhaps. Tonight we should be glad we got across all that space without getting a meteor in our bulkhead or having one man of us die."

The men shifted around. There were twenty of them and they stood around, some of them holding on to each other's shoulders quietly. Spender watched them. They were not satisfied. They had risked their lives to do a big thing, and now they wanted to be shouting drunk and firing off guns to show how wonderful they were to have kicked a hole in space and ridden a rocket all the way to Mars.

But nobody was yelling. Especially Captain Wilder and Spender himself. The captain gave a quiet

order. One of the men ran into the ship and brought forth tins of food which were opened and dished out without much noise. The men were beginning to talk now. The captain sat down and recounted the trip to them. They already knew it all, but it was good to hear about it, as something over and done and safely finished. They would not talk about the return trip. Someone brought that up, but they told him to keep quiet. The spoons moved in the double moonlight; the food tasted good and the wine was even better.

Spender did not take his eyes off them. He left his food on the plate under his hands. He felt the land getting colder. The stars drew closer, very clear.

When anybody talked too loudly, the captain would reply in a low voice that made them talk quietly from imitation.

The air smelled clean and new. Spender sat for a long time just enjoying the way it was made. It had a lot of things in it he couldn't identify; flowers, Chemistries, dusts, winds.

"Then, there was the time in New York when I got hold of that blonde, what was her name—Ginnie!" cried Biggs. "That was it!"

Spender sat there, tightening in. His hand began to tremble. His eyes moved behind the thin, sparse lids. His mouth was shut.

"And Ginnie said to me . . ." cried Biggs. The men listened and roared.

"So I smacked her one," shouted Biggs, with a bottle in his hand.

Spender put down his food tray. He listened to the wind over his ears, cool and whispering. He looked at the cool ice of the Martian buildings over there on the empty sea lands.

"Let me tell you, what a woman, what a woman!" Biggs emptied his bottle into his open mouth. "Of all the women I ever knew!"

The smell of Biggs' sweating body was on the air. Spender let the fire die. "Hey, kick her up there, Spender," said Biggs, looking at him for a moment, then back to his bottle. "Well, one night, me and Ginnie .. ."

"This," murmured Spender to his empty hands in front of him, "is the first night on Mars."

"What?" said Biggs, pausing.

"Nothing," said Spender.

"As I was saying—" Biggs turned to the other men. They laughed.

A man named Schoenke got out his accordion. He began to do a kicking dance. The dust sprang up under him. "Ahoo—I'm alive!" he shouted.

"Yay!" roared the men. Their eyes brightened. They threw down their empty plates. Two or three of them lined up and kicked like chorus maidens, joking coarsely. The others, clapping hands, cried for something to happen. Cheroke pulled off his shirt and his undershirt and showed his naked chest, sweating, as he whirled around. The moonlight shone on his crew-cut hair and his young clean shaven cheeks glinted with light.

In the sea bottom, the wind stirred along faint pieces of vapor, and from the mountains, great stone visages looked upon the moonlight and the rocket and the small fire.

Spender closed his hands into fists.

The noise got a little louder and a little louder. More of the men got up and the accordion was

squeezed dry of its music. Somebody sucked on a mouth-organ.

"A perverted pastime!" observed Biggs with a slap on the player's back. Somebody blew on a tissue-papered comb. Twenty more bottles were brought out, opened, drunk.

Biggs staggered about, wagging his arms to direct the dancing men.

"Come on, sir!" cried Cheroke to the captain, jumping around, one foot in the air, wailing a song. The captain shook his head.

"Come on, sir!" called several others.

The captain had to join the dance. He didn't do a very good one. His face was solemn. Spender watched, thinking, you poor man, oh, you poor man, what a night this is! A good man among fools. They don't know what they're doing. They should have been prepared for this. Before they came to Mars they should have been told how to look and how to walk around and be good for a few days.

"That does it." The captain begged off and sat down, saying he was exhausted. Spender looked at the captain's chest. It wasn't moving up and down very fast. His face wasn't sweaty either.

Accordion, harmonica, wine, shout, dance, wail, roundabout, clash of pan, break of bottle, laughter, giggle, stamping—all of it. They had quite a time.

Biggs weaved to the rim of the canal. He carried six bottles in his arms and he dropped one of them, empty, down into the blue canal waters. It made an empty hollow drowning sound as it sank.

"I christen thee, I chrisien thee, I christen thee—" said Biggs, thickly, unable to say it. "I christen thee Biggs Canal, Biggs, Biggs Canal!" And he dropped two more bottles.

Spender was on his feet and over the fire and alongside of Biggs before anybody could move. He hit Biggs once in the teeth, and once in the ear and then pushed him so Biggs toppled and fell down into the canal water. Spender did it all without so much as a word. After the splash he just stood there, waiting for Biggs to climb back up onto the rim stones. By that time, the men were holding Spender.

"Hey, hey—what's wrong?" they asked.

"What's eating you, Spender? Hey?" Spender stared brightly into the canal waters where Biggs floundered like a large fat beetle.

The wind came in off the dead sea.

Biggs climbed up and stood dripping. "Who kicked me off?" he said. He saw the men holding Spender. "Well," he said, and started forward.

"That's enough," said Captain Wilder. The men broke and left Spender standing there. Biggs did riot continue his movement. He stopped and looked at the captain.

"Sir," he said.

"All right, Biggs, go climb into some dry clothes," ordered the captain. Biggs went into the ship.

"Here now!" Captain Wilder gestured at Spender. The captain waved his hand at the men. "Carry on with your party! You come with me, Spender."

The men took up the party. Captain Wilder walked off with Spender after him, and stopped quite some distance from the other men.

"I suppose you can just explain what happened now," Wilder said.

Spender looked at the canal. "I don't know. I was ashamed."

"Of what?"

"Of Biggs and us and the noise. Pah, what a spectacle!"

"They've got to have their fun, it's been a long trip."

"Where's their respect, sir? Where's their sense of the right thing?"

"You're tired, too, and you have a different way of looking at things, Spender. That'll be a fifty-dollar fine for you."

"Yes, sir. It was just the idea of Them watching us make vile fools of ourselves."

"Them, Spender?"

"The Martians, dead or not."

"Most certainly dead," said the captain. "But do you think They know we're here?"

"Doesn't an old thing always know when a new thing comes?" said Spender.

"I suppose so. You sound as if you believe in ghosts and spirits."

"I believe in the things that were done, sir, and there are evidences of many things done on Mars. There are streets and there are houses and there are books, I imagine, and big canals and clocks and places for stabling, if not horses, well then some domestic animal, perhaps with twelve legs, who knows. Everywhere I look I see things that were used. They were touched and handled for centuries.

"Ask me if I believe in the spirit of the things as they were used, and I'll say yes. They're all here. All the things which had uses. All the mountains which had names. And we'll never be able to use them without feeling uncomfortable. And somehow the mountains will never sound right to us, we'll give them new names, but the old names are there, somewhere, in time, and the mountains were shaped and seen under those names. The names we'll give to the canals and mountains and cities will fall like so much water on the back of a mallard. No matter how we touch Mars, we'll never touch it. And then we'll get mad at it, and you know what we'll do. We'll rip it all up, rip the skin off and change it to fit ourselves."

"We won't ruin Mars," said the captain. "It's too big and too good."

"You think not? We earth men have a talent for ruining big, beautiful things. The only reason we didn't set up hot dog stands in the midst of the Temple of Karnak in Egypt is because it was out of the way, and served no large commercial purpose. And Egypt is a small part of Earth. But here, this whole thing is ancient and different, and we have to set down somewhere and start fouling it up. I haven't any faith in humans. We'll call the canal the Rockefeller Canal and we'll call the mountain King George Mountain and we'll call the sea the Dupont Sea and we'll call the cities Roosevelt and Lincoln and Coolidge City and it won't ever be right, when there are the proper names to these places."

"That'll be your job, as archaeologist, to find out the names and we'll use them."

"A few men like myself, against all the commercial interests?" Spender looked at the iron mountains. "They know we're here tonight, and I imagine they hate us because we've come to pry and ruin things."

The captain shook his head. "There's no hatred here." He listened to the wind. "From the look of their cities, they were a graceful, aesthetic, beautiful and philosophical people. They accepted what came to them. They acceded to racial death, that much we know, and without a last-moment war of frustration to tumble down their cities. Everyone we've seen so far has been flawlessly intact. They probably don't mind us being here, any more than they'd mind children playing on the lawn, knowing

and understanding children for what they are. And, anyway, perhaps all this will change us for the better.

"Did you notice the peculiar quiet of the men, Spender, until Biggs forced them to get happy? They looked pretty humble and frightened. Looking at all this we know we're not so hot, we're young kids in rompers, shouting with our play-rockets and our atoms, loud and alive. But, one day, Earth will be this way, too. This will sober us up. It's an object lesson in civilizations. We'll learn from Mars. Now, suck in your chin and let's go back and play happy. That fifty-dollar fine still stands."

II

The party was not going too well. The wind kept coming in off the dead sea. It moved around the men and it moved around the captain and Jeff Spender as they returned to the group. The wind pulled at the dust and the shining rocket and pulled at the accordion and the dust got into the vamped harmonica. The dust got in their eyes and the wind made a high singing sound in the air. As suddenly as it had come the wind died.

But the party had died, too.

The men stood upright against the dark cold sky. They had their pale hands to their eyes, some of them coughed. Spender and the captain sat down.

"Come on, gents, come on!" Biggs bounded from the ship, in a fresh uniform, not looking at Spender even once. "Come on, you guys!" His voice was like someone in an empty auditorium. It was alone. It sounded like bad oratory.

Nobody did anything but stand there.

"Come on, Whitie, your harmonica!"

The wind passed on away along the length of the canal, stirring the cool deep clear waters like so much distilled wine lying in the stone channel.

"Oh," said Whitie, and blew a harmonica chord. It sounded funny and alone and wrong. Whitie knocked the moisture from the harmonica and put it in his pocket.

The party was over.

"Come on," insisted Biggs. "What kind of a party is this?" Somebody hugged the accordion. It gave a sound like a dying animal. That was all.

Biggs put his hands down. "We're tired," said Whitie.

"Well, me and my bottle will go off and have our own party, by gosh!" Biggs held a bottle to his chest. He walked to the ship and squatted against it, taking a drink from the flask.

Jeff Spender watched him. Spender did not move for a long time. Then his fingers crawled up along his trembling leg to his holstered pistol very quietly and stroked and tapped the leather sheath for a moment.

"All of those who want to can come into the city with me. Come along," said the captain. "We'll need a guard posted here at the rocket, of course, and we'll go armed, in case anything untoward happens."

The men counted off. Fourteen of them wanted to go along, including Biggs, who laughed when he

included himself and waved his bottle. Six others stayed behind.

The party moved out into the night, through the moonlight, saying not a word, Captain Wilder and Jeff Spender in the lead, Biggs bringing up the rear, stumbling and swearing.

"Here we go!" Biggs shouted.

They stood on the outer rim of the dreaming dead city in the light of the racing twin moons. Their shadows, under them, were double shadows. They did not breathe, or it seemed they did not, perhaps, for a long time. They were waiting for something to stir in the dead city, some gray form to rise, some ancient, ancestral shape to come galloping across the vacant sea bottom on an ancient, armored steed of impossible lineage, of unbelievable derivation.

Spender filled the streets with his eyes and his mind. People moved like blue vapor lights on the cobbled avenues, and there were faint murmurs of sound, and odd animals scurrying across the gray-red sands. Each window was given a person who leaned from it and waved slowly, as if under a timeless water, at some moving form in the fathoms of space below the moonsilvered towers. Music was played on some inner ear, and Spender imagined the shape of such instruments to evoke such music. The land was haunted.

"Hey!" shouted Biggs, standing tall, his hands around his open mouth. He pointed his face at the city. "Hey, you people in there, you!"

"Biggs!" said the captain.

Biggs quieted.

They walked forward on a tiled avenue. They were all whispering now, for it was like entering a vast open library or a mausoleum in which the wind lived and over which the stars shone. The captain talked. He wondered where the people had gone, and what they had been, and who their kings were and how they died? And he wondered, quietly aloud, how they had built this city to last the ages through, and had they ever come to Earth? Were they ancestors of

Earth men, ten thousand years removed? And had they loved and hated similar loves and similar hates, and done similar silly things when silly things were done?

Nobody moved. The moons held and froze them, the wind beat slowly around them, the sand shifted in little tremors over their feet.

"Lord Byron," said Jeff Spender.

"Lord who?" The captain turned and regarded the man.

"Lord Byron, a Nineteenth Century poet. He wrote a poem a long time ago that fits this city and how the Martians may feel, if there's anything left of them to feel. It might have been written by the last Martian poet."

The men stood motionless, their shadows under them. The captain said, "How does it go, Spender?"

"What, sir?"

"The poem, how does it go?"

Spender shifted, put out his hands to remember, squinted silently a moment; then, remembering, his slow quiet voice repeated the words and the men listened to everything he said:

So we'll no more a-roving

So late into the night

Though the heart be still as loving

And the moon be still as bright

The city was gray and high and motionless. The men's faces were turned in the light.

For the sword outwears its sheath

And the soul wears out the breast

And the heart must pause to breathe

And love itself must rest.

Though the night was made for loving

And the day returns too soon

Yet we'll go no more a-roving

By the light of the moon.

Without a word, the Earth men stood in the center of the city. It was a clear night. There was riot a sound, except the wind. At their feet lay a tile court, worked into the shape of ancient animals and peoples. They stood looking down upon it.

Biggs made a noise in his throat. His eyes were dull. He groped out thick senseless fingers, shuffled forward upon the tiles, there to hesitate. His hands went up to his neck, he choked several times, shut his eyes, bent, and a thick rush of fluid filled his mouth, came out, fell to and lay upon the tiles, covering the patterns. Biggs repeated this twice and a sharp stench filled the quiet air.

Nobody moved to help Biggs. He went on being sick.

Spender stared for a moment, then turned and walked off into the avenues of the city, lost to their sight, alone in the moonlight. Never once did he pause to look back at the gathered men there.

They turned in at four in the morning. They lay down upon the blankets with pillows under their heads and shut their eyes and breathed the quiet air. Captain Wilder sat feeding the fire little sticks. His hands hung down between his muscular legs. He watched the fire steadily.

McClure opened his eyes for a moment. "Are you sleeping, sir?"

"Never you mind." The captain smiled faintly. "I'm waiting for Spender."

"Isn't he back, sir?"

Captain Wilder shook his head.

McClure thought it over a moment. "You know, sir, I don't think he'll ever come back. I don't know how I know it, but that's the way I feel about him, sir, he'll never come back."

McClure rolled over into sleep. The fire crackled and died out.

Spender did not return in the following week. The captain sent out a party for him, but they came

back saying they didn't know where he could have gone. He would be back when he got good and ready. He was a sorehead, they said. To the devil with him.

The captain said nothing, but wrote it down in the log....

It was a morning that might have been a Monday or a Tuesday or any day on Mars. Biggs was sitting at the edge of the canal, now and again lifting his bare feet up and peering at them while he spread the toes with his fingers. Then he hung the feet back down into the cool water and sat there.

A man came walking along the rim of the canal. The man threw a shadow down upon Biggs and Biggs looked up. "Well, I'll be blistered!" said Biggs.

"I'm the last Martian," said the man, taking out a gun.

"What did you say?" asked Biggs.

"I'm going to kill you."

"Cut it. What kind of joke is that, Spender?"

"Stand up and take it in the stomach."

"For Christ's sake, put that gun away."

Spender pulled the trigger only once. Biggs sat on the edge of the canal for a moment before he leaned forward and fell into the water. The body drifted with slow unconcern under the slow tides of the canal. It went away and down, making a hollow bubbling sound that ceased after a moment.

Spender shoved his gun into its holster and walked away quietly. The sun was shining down upon Mars. He felt it burn his hands and slide over the sides of his tight face. He did not run, he walked as if nothing was new except the daylight. It was good to take it easy. He walked down to the rocket and some of the men were having a freshly cooked breakfast under a shelter built by Cookie.

"Here comes the Lonely One," somebody said.

"Hello, Spender! Long time no see."

The four men at the table regarded the silent man who stood looking back at them.

"You and them shoddy ruins," said Cookie, stirring a black substance in a crock. "You're like a dog in a boneyard."

"Maybe." Spender sat down and said, "I've been finding out things. What would you say if I said I'd found a Martian prowling around?"

The four men laid down their forks.

"Did you? Where?"

"I'm not saying I did, I just said 'supposing.' "

The four men relaxed. Cookie went on stirring the stuff in the crock. "Well, supposing," said Cheroke, at the table, waiting.

"How would you feel if you were a Martian and people came to your land and started tearing it up?" asked Spender.

"I know exactly how I'd feel," said Cheroke. "I've got some Cherokee blood in me. My grandfather told me a lot of things about the Oklahoma Territory. If there's a Martian around, I'm all for him."

"What about you other men?" asked Spender, carefully.

Nobody said anything, but the silence they maintained was talk enough. Catch as catch can, finder's keepers, if the other fellow turns his cheek slap it hard. Et cetera.

"Well," said Spender. "I've found a Martian."

"Where?" The men squinted at him.

"Up in the ruins. I didn't think I'd find him. I didn't intend to find him. I don't know what he was doing there. I've been living in a little valley town for about a week, learning how to read the ancient books and looking at their old art forms. And one day I saw this Martian. He stood there for a moment and then he was gone. He didn't come back for another day. And I sat around, learning how to read the old writing and the Martian came back, each time a little nearer, until, on the day I learned how to read the old writing—it's an amazingly simple language to learn, and there are tile picture-graphs to help you, and old song-spools you can listen to."

"On that day when I learned the language, the Martian appeared before me. He said to me, 'Give me your boots,' and I gave him my boots and he said, 'Give me your shirt and all the rest of your clothes,' and I gave him all of that, and then he looked at me and he said, 'Give me your gun,' and I gave him my gun. Then he said, 'Now come along, and watch what happens.' And the Martian walked down into camp and he's here now."

The men looked around and then looked at each other. "I don't see any Martian," said Cheroke.

"I'm sorry."

Spender took out his gun. The first bullet got the man on the left, the second and third bullets got the men on the right and the center of the table. Cookie turned in horror from the fire to receive the fourth bullet. He fell back into the fire and lay there while his clothes caught the flames. It was like stamping your foot lightly, for all the sound it made.

The rocket lay in the sun. Three men sat at breakfast, their hands on the table, not moving, their food getting cold in front of them. Cheroke, untouched, sat alone, staring in numb disbelief at Spender.

"You can come with me," said Spender to Cheroke. Cheroke said nothing. His lips moved but nothing came out. His eyes widened into a kind of dull blindness. "You can be with me on this." Spender waited.

Finally Cheroke was able to speak. "You killed them," he said, daring to look at the men around him.

"They deserved it."

"You killed them. Why? You're crazy."

"Maybe I am. But you can come with me."

"Come with you, for what?" cried Cheroke, the color out of his face, his eyes watering. "Go on, get out."

"You won't come with me?"

"No, no, you idiot!"

Spender's face hardened. "And of all of them, I thought you would understand."

"Go on, get out." Cheroke reached for his gun.

Spender pressed the trigger of his own gun once more. Cheroke stopped moving.

Now Spender swayed. He put his hand to his sweating face. He glanced at the rocket and suddenly

began to shake all over. He almost fell down, the physical reaction was so overwhelming. His face held an expression of one awakening from hypnosis, from a dream. He sat down for a moment and told the shaking to go away.

"Stop it, stop it," he commanded his body. Every fibre of him was quivering and shaking. "Stop it!" He crushed his body with his mind until all the shaking was squeezed out of it. His hands lay calmly now upon his silent knees.

He arose and strapped a portable storage locker on his back with quiet efficiency. His hand began to tremble again, just for a breath of an instant, but he said, "No!" very firmly and the trembling passed. Then, walking stiffly, he moved out between the hot red hills of the land, alone.

III

As the day advanced, it grew nice and warm. The sun burned further along the sky. An hour later, the captain climbed down out of the ship to get some ham and eggs. He was just saying hello to the four men sitting there when he stopped and noticed a faint smell of powder fumes on the air. He saw the cook lying on the ground, with the camp fire under him. The four men at the table sat before food that was cold.

From the ship, a moment later, Whitie and two other men climbed down. The captain stood in their way, fascinated by the silent men before him and the way they sat so quietly at their breakfast. The others moved past him and stopped.

The captain's face was pale. "Get the men, all of them."

"Yes, sir." Whitie hurried off down the canal rim.

The captain walked up and touched Cheroke. Cheroke twisted quietly and fell from his chair. Sunlight burned in his bristled short hair and on his high cheekbones.

The men were called in. They looked at each other's faces and counted each other, one, two, three, four, and said each other's names.

"Who's missing?"

"Just a moment."

"It's still Spender, sir."

"Spender!"

The captain saw the hills rising in the daylight. The sun showed the captain's teeth in a grimace as he stared at the hills. "Blast him," he said, in tired tones. "Why didn't he come and talk to me?"

"He should've come and talked to me," cried Whitie, his eyes blazing. "I'd 've shot his bloody brains out, that's what I'd 've done, and I'll do it now, by God! I'll spill them all over the place!"

Captain Wilder nodded at two of the men. "Get shovels. There'll be a service, and then we'll go up in the hills and find Spender."

"We'll beat his brains out," said Whitie.

It was hot digging the graves. A warm wind came from over the vacant sea and blew the dust up into their faces as the captain turned the Bible pages and said the few necessary words. They were all sweating around the opened earth. When the captain closed the book, somebody began shoveling slow

streams of sand down upon the wrapped figures.

They walked back to the rocket, clicked the mechanisms of their stifles, put thick packets of grenades on their backs and checked the free play of pistols in their holsters. They were each assigned to a certain part of the hills. The captain directed them without raising his voice or moving his hands from his belt at the waist. It was like a little sermon on fishing.

"Let's go," he said. . . .

Spender saw the thin dust rising in several places in the valley and he knew the pursuit was organized and ready. He put down the thin aluminum book that he had been reading as he perched easily on a flat boulder. The pages were tissue-thin pure aluminum, stamped in black and gold. It was a book of philosophy at least 10,000 years old he had found in one of the buildings of a Martian valley town. He was reluctant to lay it aside.

For a long time he had thought, What's the use? I'll sit here reading until they come along and shoot me.

The first reaction to his killing the five men at breakfast had caused a period of stunned blankness, then sickness, and now, a strange peace. But the peace was passing too, for he saw the dust going up from the trails of the hunting men and experienced the return of resentment.

He took a drink of cool water from the hip canteen. Then he stood up, stretched, yawned, and listened to the peaceful wonder of the valley around him. How very fine if he and a few others that he knew on Earth could be here, live out their lives here, without a sound or a worry.

He carried the book with him in one hand, the pistol ready in the other hand. There was a little swift running stream filled with white pebbles and rocks where he undressed and waded in for a brief washing. He took all the time he wanted before dressing and picking up the gun again.

The firing began about three in the afternoon. By then, Spender was high in the hills. They passed through three small Martian towns. Really, it looked to all of them, as if the Martians were a tribal or family lot. One or another of the families from one town would find a green spot in the hills and a villa would be built with a pool and a library and some sort of stage and a good many balustrades and tiled terraces. Spender spent half an hour in one, bathing once more in a pool filled by the seasonal rains, waiting for the men to catch up with him. The shots rang out just as he was leaving the little family town, and some tile chipped up about twenty feet behind him. He broke into a trot, got behind a series of little hills, turned, and, with the first shot, dropped one of the men dead in his tracks.

They would form a net, a circle, Spender knew that. They would go around and close in and they would get him. It was a strange thing that the grenades were not used. Captain Wilder could easily order the grenades tossed.

But I'm much too nice to be blown to bits, thought Spender, that's what the captain thinks. He wants me with only one hole in me. Now isn't that strange? The captain wants my death to be clean. Nothing messy. Because why? Because he understands me and, because he understands, therefore is willing to risk his good men to give me a clean shot in the head?

Seven, eight, nine shots broke out in a rattle. The rocks around him flew up at the explosions. Spender fired steadily, sometimes while looking at the aluminum book he carried in his hand.

The captain ran in the hot sunlight, with a rifle in his hand. Spender followed him in the sights of his pistol, but did not fire. Instead he shifted over and blew the top off a rock where Whitie lay, and heard an angry shout. Suddenly the captain stood up and he had a white handkerchief in his hands. He said something to the men and came walking up the mountain after putting aside his rifle. Spender lay

there, then arose to his feet, his pistol ready.

The captain came up and sat down on a warm boulder, not looking at Spender for a moment.

When he reached into his pocket, Spender waved his pistol a little.

The captain said, "Cigarette?"

"Thanks." Spender took one.

"Light?"

"Got my own."

They took one or two puffs and let it out.

"Warm," said the captain.

"It is."

"Are you comfortable up here?"

"Enough."

"How long do you think you can hold out?"

"About twelve men's worth."

"Why didn't you kill all of us this morning when you had the chance. You could have, you know."

"I know. I got sick. When you want to do a thing badly enough you lie to yourself. You say the other is all wrong. Well, soon after I started killing people, I realized they were just fools and I shouldn't be killing them. But it was too late. I couldn't go on with it then, so I came up here so I could lie to myself some more and get angry, to build it all up."

"Is it built up?"

"Not very high. Enough."

The captain puffed on a cigarette. "Why did you do it?"

Spender quietly laid his pistol at his feet. "Because I've seen that what these Martians had was just as good as anything we'll ever hope to have. They stopped where we should have stopped a hundred years ago. I've walked in their cities and I know these people and I'd be glad to call them my ancestors."

"They have a beautiful city there." The captain nodded at one of several places.

"It's not that alone. Yes, they have a good city here. They knew how to blend art into their living. It's always been a thing apart for Americans. Art was something you kept in the crazy son's room upstairs. Art was something you took in Sunday doses, mixed with some religion, maybe. Well, these Martians have art and religion and everything." "You think they knew what it was all about, do you?"

"For my money."

"And for that reason, you started shooting people." "When I was a kid my folks took me on a visit to Mexico City. I'll always remember the way my father acted—loud and big. And my mother didn't like the people because they were dark and didn't wash right. And my sister wouldn't talk to some of them. I was the only one really liked it. And I can see my mother and my father coming to Mars and doing the same.

"Anything that's strange is no good to the average American. If it doesn't have Chicago plumbing,

it's nonsense. The thought of that! Oh God, the thought of that! And then—the war. You heard the Congressional speeches before we left. If things work out they hope to establish three atomic research and atom bomb depots on Mars. And that means Mars is doomed, all of this wonderful stuff gone. How would you feel if a Martian came and vomited stale liquor all over the White House floor?"

Quietly the captain sat blinking in the smoke.

"And then the other power interests coming hi," said Spender. "The mineral men and the travel men. Do you remember what happened to Mexico when Cortez and his very fine good friends arrived from Spain? A whole civilization destroyed by greedy, righteous bigots. History will never forgive Cortez."

"You haven't been acting ethically yourself, today," observed the captain.

"What could I do? Argue with you? It's simply me against the whole crooked grinding greedy setup on earth. They'll be flopping their filthy atom bombs up here, fighting for bases to have wars. Isn't it enough they're ruining one planet, without ruining another; do they have to foul someone else's manger? The simple-minded wind-bags. When I got up here, I felt I was not only free of their so called culture, I felt I was free of their ethics and their customs. I'm out of their frame of reference, I thought. All I have to do is kill you all off, and live my own life."

"But it didn't work out," said Captain Wilder.

"No, after the fifth killing at breakfast, I discovered I wasn't all new, all Martian, after all. I couldn't throw away everything I had learned on earth so easily. But now I'm all right. I'll kill all of you off. That'll delay the next trip in a rocket for a good five years. There's no other rocket in existence today, save this one. The people on Earth will wait a year, two years, and then when they hear nothing from us, they'll be very afraid to build a new rocket. They'll take twice as long, and make a hundred extra experimental models to insure themselves against another failure."

"You're correct."

"A good report from you, on the other hand, when you returned, would hasten the whole invasion of Mars. If I'm lucky, I'll live to be sixty years old. Every expedition that lands on Mars will be met by me. There won't be more than one ship at a time coming up, one every year or so, and never more than twenty men. After I've made friends with them and explained that our rocket blew up one day—I intend to blow it up after I finish my job, today—I'll kill them off, every one of them. Mars will be untouched for the next half century. After awhile, perhaps the people of Earth will give up trying. Remember how they grew leery of the idea of building Zeppelins that were always going down in flames?"

"You've got it all planned," said the captain.

"I have."

"And yet you're outnumbered and in about an hour we'll have you surrounded and you'll be dead."

"I've found some underground passages and a place to live that you'll never find. I'll withdraw there and live for a few weeks. Until you're off guard. Then I'll come out and pick you off, one by one."

"Will you have something to drink?" The captain threw down his cigarette.

"I don't mind."

The captain poured two drinks from a hip flask.

"If you don't mind, sir, I'll take your cup, you take mine. That way we won't have anyone falling down poisoned." The captain looked him in the face. "You don't think I'd pull a thing like that."

Spender said, "No. No, I guess you wouldn't. Here." They drank the whisky slowly.

"Tell me about your civilization here," suggested the captain, casually examining his man.

"They knew how to live with nature and get along with nature. They didn't try too hard to be all men and no animal. That's the mistake we made when Darwin showed up. We embraced him, and Huxley and Freud, all smiles. And then we discovered that Darwin and our religions didn't mix. Or at least we didn't think they did. We were fools. We tried to budge Darwin and Huxley and Freud, and they wouldn't move very well. So, like fools, we tried knocking down religion.

"We succeeded pretty well in many instances. We lost our faith and went around wondering what life was for. If art was no more than a frustrated outflinging of desire, if religion was no more than self-delusion, what good was life? Faith had always given us answers to all things. But it all went down the drain with Freud and Darwin. We were and still are a lost people."

Wilder was staring steadily at Spender whose eyes had taken on a dreamy expression.

"And these Martians are a found people?" asked the captain.

"Yes, They knew how to combine science and religion so the two worked side by side, neither denying the other, one enriching the other."

"That sounds ideal."

"It was. And do you know how the Martians did this? I'd like to show you."

"The men are waiting down the hill for me."

"We'll be gone hall an hour. Tell them that, sir."

The captain hesitated, then rose and called an order down the hill.

Spender took him down into a little mountain village built all of cool perfect marble. There were great friezes of beautiful animals, white-limbed cat things, and yellow-limbed sun symbols, and statues of bull-like creatures and statues of men and women and huge, fine-featured dogs.

"There's your answer, Captain."

"I don't see."

"The Martians discovered the secret of life in the animals. The animal does not question life. It lives. Its very reason for living is life, it enjoys and relishes life. You see—the statuary, the animal symbols, again and again."

"It looks pagan."

"On the contrary, those are God symbols, symbols of life. Man had become too much man, and not enough animal on Mars, too, one day. And man realized that, in order to survive, he would have to forego asking that one question any longer. Why live? Life was its own answer. Life was the propagation of more life and the living of as good life as possible. The Martians realized that they asked the question "Why live at all?" at the height of some period of war and despair, when there was no answer. But once the civilization calmed, quieted, and became economically sound, and wars ceased, the question became senseless in a new way: Life was good now, and needed no arguments."

"It sounds as if the Martians were quite naive."

"Only when it paid to be naive. They quit trying too hard to destroy everything, to humble everything. They blended religion and art and science, because, at base, science is no more than an investigation of a miracle we can never explain, and art is an interpretation of that miracle. They never

let science crush the aesthetic and the beautiful. It is all simply a matter of degree. The Earth man thinks:

"In that picture, color does not exist, really. A scientist can prove that color is only the way the cells are placed in a certain material to reflect light. Therefore color is not really an actual part of the thing I happen to see."

"A Martian, far cleverer, would say: "This is a fine picture. It came from the hand and mind of a man inspired. Its idea and its color are from life. This thing is good."

IV

Curiously the captain looked around at the little quiet cool town, sitting in the afternoon sun.

"I'd like to live here," he said.

"You may if you want."

"You ask me that?"

"Will any of those men under you ever really understand all this? They're professional cynics, and it's too late for them. Why do you want to go back with them? So you can keep up with the Joneses? To buy a gyro just like Smith has? To listen to music with your pocketbook instead of your glands? There's a little patio down here with a reel of Martian music in it at least fifty thousand years old. It still plays. Music you'll never hear in your life. You could hear it. There are books. I've gotten on well in reading them, already. You could sit and read."

"It all sounds quite wonderful, Spender."

"But you won't stay?"

"No. Thanks, awfully."

"And you certainly won't let me stay, without trouble. I'll have to kill you all."

"You're optimistic."

"I have something to fight for and live for, that makes me a better warrior. I've got a religion now. It's learning how to smell and breathe all over. And how to lie in the sun getting a tan, letting the sun get into you. And how to hear music and how to read a book. What does your civilization have to offer?" The captain shifted his feet. He shook his head. "I'm sorry all this is happening. I'm sorry about it all."

"I am too. I guess I'd better take you back now so you can start the attack."

"I guess so."

"I won't kill you, captain. When it's all over, you'll still be alive."

"What?"

"Yes. I decided that when I began all this. You would be the one I would leave alive. I never intended touching you. I don't intend to now."

"Well," said the captain.

"I won't kill you, I'll save you out from the rest," said Jeff Spender. "When they're all dead, maybe you'll change your mind."

"No," the captain said, "I won't change. There's too much Earth blood in me. I'll have to kill you."

"Even when you have a chance to stay here?"

"It's funny, but yes, even with that. I don't know why. I've never asked myself. Well, here we are." They had reached the place where they had met now. "Will you come on quietly with me, Spender? That is my last offer."

"Thanks, no." Spender put out his hand. "And one last thing? If you win, do me a favor? See what can be done to restrict tearing this planet apart, at least for fifty years, until the archaeologists have had a decent time of it, will you?" "Right."

"And one more thing. If it'll help you any, just think of me as a very crazy fellow who went berserk one summer day and never was right again. It'll be a little easier on you, perhaps. Do that."

"I'll think it over. So long, Spender. Good luck."

"You're an odd one," said Spender as the captain walked back down the trail in the warm blowing wind.

The captain returned like something lost to his dusty men. He kept squinting at the sun and breathing hard.

"Is there a drink?" he wondered. He felt the bottle put cool into his hand. "Thanks." He drank. He wiped his mouth. "All right," he said. "Take it easy, we have all afternoon. I don't want any more lost. You'll have to kill him. He won't come down. Make it a clean shot if you can. Don't mess him. Get it over with." He took another cool drink.

"I'll kick his bloody brains out," said Whitie.

"No, through the chest," said the captain. He could see Spender's strong, clearly determined face.

"His bloody brains," said Whitie.

The captain handed him the bottle jerkingly. "You heard what I said, through the chest."

Whitie talked to himself.

"Now," said the captain.

They spread again, walking and then running, and then walking on the hot hillside places where there would be sudden cool grottoes that smelled of moss, and sudden open blasting places that smelled of sun on stone.

I hate being clever, thought the captain, when you don't really feel clever and don't want to be clever. To sneak around and make plans and feel big about making them. I hate this feeling of thinking I'm doing right when I'm not really certain I am. Who are we, anyway? The majority? Is that the answer. The majority is always holy, isn't it? It is always right, is it not? Always, always; just never wrong for one little insignificant, tiny moment, is it? Never ever wrong in ten million years? He thought: What is this majority and who are in it? And what do they think and how did they get that way and will they ever change and how the devil did I get caught in this rotten majority? I don't feel comfortable. Is it claustrophobia, fear of crowds, or common sense? Can one man be right, while all the world thinks they are right. Let's not think about it. Let's crawl around and act exciting and glamorous and run around and pull the trigger. There, and there!

The men ran and ducked and ran and squatted in shadow and showed their teeth and tightened their eyes and lifted their guns and tore holes in the summer air, holes of sound and heat.

Spender remained where he was, firing only on occasion. "Bloody brains all over!" Whitie kept

yelling as he ran up the hill.

The captain aimed his gun at Whitie. He stopped and put it down and stared at it in horror. "What were you doing?" he asked of his limp hand and the gun. His eyes widened and shut and he gasped and could not breathe.

He had almost shot Whitie in the back.

"God help you!" breathed the captain. "What are you doing? What's happening!"

He opened his eyes to see Whitie still running, then falling to lie safe under an outcrop.

"What goes on?" The captain stared up. From where he lay he could see it all. Spender was being gathered in by a loose running net of men. At the top of the hill, behind two rocks, Spender lay, grinning with exhaustion, great islands of sweat under each arm. The captain saw the rocks. There was an interval of about four inches giving free access through to Spender's chest.

"Hey, you!" Whitie cried. "A bullet in your head, I will!" The captain waited. Go on, Spender, he thought. Get out, like you said you would. You've only got a few more minutes to escape. Get out and come back later. Go on, get out. You said you would. Go down in the tunnels you said you found and lie there and live for months and years, reading your fine books and bathing in your temple pools. Go on, now, man, before it's too late.

Spender did not move from his position on the hill. "What's wrong with him?" the captain asked himself. The captain picked up his gun. He watched the running, hiding men. He looked at the towers of the little clean Martian village, like sharply carved chess pieces lying in the afternoon. He saw the rocks and the interval between where Spender's chest showed through.

Whitie was running up, screaming in fury.

"No, Whitie," said the captain. "I can't let you do it. Nor the others. No, none of you. Only me." He raised the gun and sighted it.

Will I be clean after I do this? he thought. Is it right that it's me who does it? Yes, it is. I know what I'm doing for what reason and it's right, because I think I'm the right person. I hope and pray I can live up to this. He nodded his head in a jerking move at Spender.

"Go on," he called in a loud whisper which nobody heard. "I'll give you thirty seconds more to get away, to escape. Thirty seconds, boy!"

The watch ticked on his wrist. The captain watched it tick. The men were running. Spender did not move. The watch ticked for a long time, very loudly in his ears. "Go on, Spender, go on, get away!"

The thirty seconds were up.

The gun was sighted. The captain drew a deep breath. "Spender," he said, exhaling.

He pulled the trigger.

All that happened was that a faint powdering of rock went up in the sunlight. The echoes of the report faded.

The captain stood up and called to his men. "He's dead."

The other men did not believe him. Their angles had prevented their seeing that particular fissure in the rocks. They saw their captain run up the hill, alone, and thought him either very brave or insane.

The men came after him a minute later.

They gathered around the body and somebody said, "In the chest?"

The captain looked down. "In the chest," he said. He saw how the rocks had changed color under Spender. "I wonder why he waited, I wonder why he didn't escape like he planned. I wonder why he stayed on and got himself killed?"

"Who knows," someone said.

Spender lay there, with his hands clasped, one around the gun, another around an aluminum book that shone in the sun.

Was it because of me? thought the captain. Was it because I refused to give in, myself? Did Spender hate the idea of killing me? Am I any different than these others here? Is that what did it? Did he figure he could trust me? What other answer is there?

None. He squatted beside the silent body.

I've got to live up to this, he thought. I can't let him down, now. If he figured there was something in me that was like himself, and couldn't kill me because of it, then what a job I have ahead of me! That's it, all right. I'm Spender all over again, but I think before I shoot. I don't shoot at all; I don't kill. I do things with people. And he couldn't kill me because I was himself under a slightly different condition.

The captain felt the sunlight on the back of his neck. He heard himself saying, "If only he had come to me and talked it over before he shot anybody, we could have worked out something, somehow."

"Worked out what" said Whitie. "What could we have worked out with his likes?"

There was a singing of heat in the land, off the rocks and off the blue sky. "I guess you're right," said the captain. "We could never have got together. Spender and myself, maybe. But Spender and you and the others, no, never. He's better off now. Let me have a drink of water from that canteen."

It was the captain who suggested the empty sarcophagus for Spender. They put him into it with waxes and wine, his hands folded over his chest. The last they saw of him was his peaceful face.

They stood for a moment in the ancient vault. "I think it would be a good idea for you to think of Spender from time to time," said the captain.

They turned and walked from the hall and shut the marble door with the name Spender marked on it and the dates 1950-1978 under that.

The next afternoon, Whitie did some target practice in one of the dead cities, shooting out the crystal windows and blowing the tops off the fragile towers. The captain caught Whitie and knocked his teeth out.

Remember the three monkeys, Speak No Evil, Hear No Evil, and See No Evil? There should have been a fourth one, Do No Evil, but he became civilized…

No Connection

Isaac Asimov

Raph was a typical American of his times. Remarkably ugly, too, by American standards of our times. The bony structure of his jaws was tremendous and the musculature suited it. His nose was

arched and wide and his black eyes were small and forced wide apart by the span of said nose. His neck was thick, his body broad, his fingers spatulate, with strongly curved nails.

If he had stood erect, on thick legs with large, well-padded feet, he would have topped two and a half yards. Standing or sitting, his mass neared a quarter of a ton.

Yet his forehead rose in an unrestricted arc and his cranial capacity did not stint. His enormous hand dealt delicately with a pen, and his mind droned comfortably on as he bent over his desk.

In fact, his wife and most of his fellow-Americans found him a fine-looking fellow.

Which shows the alchemy of a long displacement along the time-axis.

Raph, Junior, was a smaller edition of our typical American. He was adolescent and had not yet lost the hairy covering of childhood. It spread in a dark, close-curled mat across his chest and back, but it was already thinning and perhaps within the year he would first don the adult shirt that would cover the proudly-naked skin of manhood.

But, meanwhile, he sat in breeches alone, and scratched idly at a favorite spot just above the diaphragm. He felt curious and just a little bored. It wasn't bad to come with his father to the museum when people were there. Today was a Closed-Day, however, and the empty corridors rang lonesomely when he walked along them.

Besides, he knew everything in it - mostly bones and stones.

Junior said: 'What's that thing?'

'What thing?' Raph lifted his head and looked over his shoulder. Then he looked pleased. 'Oh, that's something quite new. That's a reconstruction of Primate Primeval. It was sent to me from the North River Grouping. Isn't it a nice job, though?' And he returned to his work, in the grip of a momentary twinge of pleasure. Primate Primeval wasn't to go on exhibition for a week at least - not until he prepared an honorable place for it with suitable surroundings, but, for the moment, it was in his office and his own private darling.

Raph looked at the 'nice job' with quite other emotions, however. What he saw was a spindly figure of contemptuous size, with thin legs and arms, hair-covered and owning an ugly, small-featured face with large, protruding eyes.

He said: 'Well, what *is* it, Pa?'

Raph stirred impatiently: 'It's a creature that lived many millions of years ago, we think. That's the way we think it looks.'

'Why?' insisted the youngster.

Raph gave up. Apparently, he would have to root out the subject and do away with it.

'Well, for one thing we can tell about the muscles from the shape of the bones, and the positions where the tendons would fit and where some of the nerves would go. From the teeth we can tell the type of digestive system the animal would have, and from the foot-bones, what type of posture it would have. For the rest, we go by the principle of Analogy, that is, by the outside appearance of creatures that exist today that have the same kind of skeleton. For instance, that's why he's covered with red hair. Most of the Primates today - they're little insignificant creatures, practically extinct - are red-haired, have bare callosities on the rump —'

Junior scurried behind the figure and satisfied himself on that score.

'-have long, fleshy probosces, and short, shriveled ears. Their diets are unspecialized, hence the

rather all-purpose teeth, and they are nocturnal, hence the large eyes. It's all simple, really. Now, does that dispose of you, younester?'

And then Junior, having thought and thought about it, came out with a disparaging: 'He looks just like a Eekah to me, though. Just like an ugly, old Eekah.'

Raph stared at him. Apparently he had missed a point: 'An Eekah?' he said, 'What's an Eekah? Is that an imaginary creature you've been reading about?'

'Imaginary! Say, Pa, don't you *ever* stop at the Recorder's?'

This was an embarrassing question to answer, for 'Pa' never did, or at least, never since his maturity. As a child, the Recorder, as custodian of the world's spoken, written and recorded fiction, had, of course, had an unfailing fascination. But he had grown up —

He said, tolerantly: 'Are there new stories about Eekahs? I remember none when I was young.'

'You don't get it, Pa.' One would almost suppose that the young Raph was on the very verge of an exasperation he was too cautious to express. He explained in wounded fashion: 'The Eekahs are real things. They come from the Other World. Haven't you heard about *that!* We've been hearing about it in school, even, and in the Group Magazine. They stand upside down in their country, only they don't know it, and they look just like Ol' Primeval there.'

Raph collected his astonished wits. He felt the incongruity of cross-examining his half-grown child for archaeological data and he hesitated a moment. After all, he had heard *some* things. There *had* been word of vast continents existing on the other hemisphere of Earth. It seemed to him that there were reports of life on them. It was all hazy - perhaps it wasn't always wise to stick so closely to the field of one's own interest.

He asked Junior: 'Are there Eekahs here among the Groupings?'

Junior nodded rapidly: 'The Recorder says they can think as good as us. They got machines that go through the air. That's how they got here.'

'Junior!' said Raph severely.

'I ain't lying,' Junior cried with aggrieved virtue. 'You ask the Recorder and see what *he* says.'

Raph slowly gathered his papers together. It was Closed-Day, but he could find the Recorder at his home, no doubt.

The Recorder was an elderly member of the Red River Gur-row Grouping and few alive could remember a time when he was not. He had succeeded to the post by general consent and filled it well, for he was Recorder for the same reason that Raph was curator of the museum. He liked to be, he wanted to be, and he could conceive no other life.

The social pattern of the Gurrow Grouping is difficult to grasp unless born into it, but there was a looseness about it that almost made the word 'pattern' incongruous. The individual Gurrow took whatever job he felt an aptitude for, and such work as was left over and needed to be done was done either in common, or consecutively by each according to an order determined by lot. Put so, it sounds too simple to work, but actually the traditions that had gathered with the five thousand years since the first Voluntary Grouping of Gurrahs was supposed to have been established, made the system complicated, flexible - and workable.

The Recorder was, as Raph had anticipated, at his home, and there was the embarrassment of renewing an old and unjustly neglected acquaintanceship. He had made use of the Recorder's reference library, of course, but always indirectly -yet he had once been a child, an intimate learner at the feet of

accumulated wisdom, and he had let the intimacy lapse.

The room he now entered was more or less choked with recordings and, to a lesser degree, with printed material. The Recorder interspersed greetings with apologies.

'Shipments have come from some of the other Groupings,' he said. 'It needs time for cataloguing, you know, and I can't seem to find the time I used to.' He lit a pipe and puffed strongly. 'Seems to me I'll have to find a full-time assistant. What about your son, Raph? He clusters about here the way you did twenty years ago."

'You remember those times?'

'Better than you do, I think. Think your son would like that?'

'Suppose you talk to him. He might like to. I can't honestly say he's fascinated by archaeology.' Raph picked up a recording at random and looked at the identification tag: 'Um-m-m - from the Joquin Valley Grouping. That's a long way from here.'

'A long way.' The Recorder nodded. 'I have sent them some of ours, of course. The works of our own Grouping are highly regarded throughout the continent,' he said, with proprietary pride. 'In fact' - he pointed the stem of his pipe at the other -'your own treatise on extinct primates has been distributed everywhere. I've sent out two thousand copies and there are still requests. That's pretty good - for archaeology.'

'Well, archaeology is why I am here - that and what my son says you've been telling him.' Raph had a little trouble starting: 'It seems you have spoken of creatures called Eekahs from the Antipodes, and I would like to have such information as you have on them.'

The Recorder looked thoughtful: 'Well, I could tell you what I know offhand, or we could go to the Library and look up the references.'

'Don't bother opening the Library for me. It's a Closed-Day. Just give me some notion of things and I'll search the references later.'

The Recorder bit at his pipe, shoved his chair back against the wall and de-focused his eyes thoughtfully. 'Well,' he said, 'I suppose it starts with the discovery of the continents on the other side. That was five years ago. You know about that, perhaps?'

'Only the fact of it. I know the continents exist, as everyone does now. I remember once speculating on what a shining new field it would be for archaeological research, but that is all.'

'Ah, then there is much else to tell you of. The new continents were never discovered by us directly, you know. It was five years ago that a group of non-Gurrow creatures arrived at the East Harbor Grouping in a machine that flew - by definite scientific principles, we found out later, based essentially on the buoyancy of air. They spoke a language, were obviously intelligent, and called themselves Eekahs. The Gurrows, of the East Harbor Grouping, learned their language - a simple one though full of unpronounceable sounds - and I have a grammar of it, if you're interested —'

Raph waved that away.

The Recorder continued: The Gurrows of the Grouping, with the aid of those of the Iron Mountain Grouping - which specialize in steel works, you know - built duplicates of the flying machine. A flight was made across the ocean, and I should say there are several dozens of volumes on all that -volumes on the flying machine, on a new science called aerodynamics, new geographies, even a new system of philosophy based on the plurality of intelligences. All produced at the East Harbor and Iron Mountain Groupings. Remarkable work for only five years, and all are available here.'

'But the Eekahs - are they still at the East Harbor Groupings?'

'Um-m-m. I'm pretty certain they are. They refused to return to their own continents. They call themselves "political refugees."'

Toliti ... *what*?'

'It's their own language,' said the Recorder, 'and it's the only translation available.'

'Well, why *political* refugees? Why not geological refugees, or oompah refugees. I should think a translation ought to make sense.'

The Recorder shrugged: 'I refer you to the books. They're not criminals, they claim. I know only what I tell you.'

'Well, then, what do they look like? Do you have pictures?'

'At the Library.'

'Did you read my "Principles of Archaeology?"'

'I looked through it.'

'Do you remember the drawings of Primate Primeval?'

Tm afraid not.'

'Then, look, let's go down to the Library, after all.'

'Well, sure.' The Recorder grunted as he rose.

The Administrator of the Red River Gurrow Grouping held a position in no way different in essentials from that of the Museum Curator, the Recorder or any other voluntary job holder. To expect a difference is to assume a society in which executive ability is rare.

Actually, all jobs in a Gurrow Grouping - where a 'job' is defined as regular work, the fruits of which adhere to others in addition to the worker himself - are divided into two classes: one, Voluntary Jobs, and the other, Involuntary or Community Jobs. All of the first classification are equal. If a Gurrow enjoys the digging of useful ditches, his bent is to be respected and his job to be honored. If no one enjoys such burrowing and yet it is found necessary for comfort, it becomes a Community Job, done by lot or rotation according to convenience - annoying but unavoidable.

And so it was that the Administrator lived in a house no more ample and luxurious than others, sat at the head of no tables, had no particular title other than the name of his job, and was neither envied, hated, nor adored.

He liked to arrange Inter-Group trade, to supervise the common finances of the Group, and to judge the infrequent disagreements that arose. Of course, he received no additional food or energy privileges for doing what he liked.

It was not, therefore, to obtain permission, but to place his accounts in decent order, that Raph stopped in to see the Administrator. The Closed-Day had not yet ended. The Administrator sat peacefully in his after-dinner armchair, with an after-dinner cigar in his mouth, and an after-dinner book in his hand. Although there was something rather timeless about six children and a wife, even they had an after-dinner air about them.

Raph received a multiple greeting upon entering, and raised two hands to his ears, for if the various Administratelets (Only applicable title. Author.) had a job, it was noisemaking. Certainly, it was what they liked to do, and certainly others reaped most of the fruits therefrom, for their own eardrums were

apparently impervious.

The Administrator shooed them.

Raph accepted a cigar.

'I intend leaving the Grouping for a time, Lahr,' he said. 'My job necessitates it.'

'We won't enjoy your going, Raph. I hope it will not be for long.'

'I hope not. What have we in Common Units?'

'Oh, ample for your purposes, I'm sure. Where do you intend going?'

'To the East Harbor Grouping.'

The Administrator nodded and blew out a thoughtful puff of smoke: 'Unfortunately, East Harbor has a surplus in their favor registered in our books - I can verify that, if you wish -but the Common Units of Exchange on hand will take care of transportation and necessary expenses.'

'Well, that's fine. But tell me, what is my status on the Community Job Roster?'

'Um-m-m - I'll have to get the rolls. You'll excuse me a moment.' He trundled away, heaving his great weight across the room and out into the hallway. Raph paused to poke at the youngest of the children who rolled up to him, growling in mock ferocity with gleaming teeth - a black little bundle of thick fur, with the long, childish snout that had not yet broadened away from the shape of the animal ancestry of half a million years earlier.

The Administrator returned with a heavy ledger and large spectacles. He opened the ledger meticulously, riffled the pages to the proper place and then drew a careful finger down the columns.

He said: There's only the question of water supply, Raph. You're due on the Maintenance gang for this next week. There's nothing else due for at least two months.'

'I'll be back before then. Is there any chance of someone subbing for me on the Water Maintenance?'

'Um-m-m — I'll get someone. I can always send my oldest. He's getting to job age and he might as well taste everything. He may like working on the dam.'

'Yes? You tell me if he does, then. He can replace me, regularly.'

The Administrator smiled gently: 'Don't plan on that, Raph. If he can figure out a way of making sleeping useful to all of us, he'll certainly take it up as a job. And why are you going to East Harbor Grouping, by the way, if it's something you care to talk about?'

'You'll laugh, perhaps, but I have just found out that there exist such things as Eekahs.'

'Eekahs? Yes, I know.' The Administrator pointed a finger. 'Creatures from across the sea! Right?'

'Right! But that's not all. I've come from the Library. I've seen trimensional reproductions, Lahr, and they're *Primate Primeval,* or almost. They're primates, anyway, *intelligent* primates. They've got small eyes, flat noses and completely different jawbones - but they're at least second cousins. I've *got* to see them, Lahr.'

The Administrator shrugged. He felt no interest in the matter himself. 'Why? I ask out of ignorance, Raph. Does it matter, your seeing them?'

'Matter?' Raph was obviously appalled at the question. 'Don't you know what's been going on these last years? Have you read my archaeology book?'

'No,' said the Administrator, definitely, 'I wouldn't read it to save myself a turn at Garbage Disposal.'

Raph said: 'Which probably proves you more suited to Garbage Disposal than archaeology. But never mind. I've been fighting single-handed for nearly ten years in favor of my theory that Primate Primeval was an intelligent creature with a developed civilization. I have nothing on my side so far but logical necessity, which is the last thing most archaeologists will accept. They want something solid. They want the remains of a Grouping, or artifacts, structures, books - get it. All I can give them is a skeleton with a huge brain-pan. Stars above, Lahr, what do they expect to survive in ten million years? Metal dies. Paper dies. Film dies.

'Only stone lasts, Lahr. And bone that's turned to stone. I've got that. A skull with room for a brain. And stone, too, old sharpened knives. Ground flints.'

'Well,' said Lahr, 'there are your artifacts.'

'Those are called eoliths, dawn stones. They won't accept them. They call them natural products, fortuitously shaped by erosion into the shapes they have, the idiots.'

Then he grinned with a scientific ferocity: 'But if the Eekahs are intelligent primates, I've practically proven my case."

Raph had traveled before, but never eastward, and the decline of agriculture on the road impressed him. In early history, the Gurrow Groupings had been entirely unspecialized. Each had been self-sufficient, and trade was a gesture of friendliness rather than a matter of necessity.

And so it was still in most Groupings. His own Grouping, the Red River, was perhaps typical. Some five hundred miles inland, set in lush farm land, agriculture remained centric. The river yielded some fish and there was a well-developed dairy industry. In fact, it was food exports that provided cause for the healthy state of the store of Common Units.

As they traveled eastward, however, the Groupings through which they passed paid less and less mind to the shallowing soil and more and more to the smoking factory structures.

In the East Harbor Grouping, Raph found a trading center which depended for its prosperity primarily upon ships. It was a more populous Grouping than the average, more densely packed, with houses, on occasion, within a hundred yards of each other.

Raph felt an uncomfortable prickling at the thought of living in such close quarters. The docks were even worse, with Gurrows engaged at the huge Community Jobs of loading and unloading.

The Administrator of this East Harbor Grouping was a young man, new at his job, overwhelmed with the joy of his work, and beside himself with the pleasure of welcoming a distinguished stranger.

Raph sat through an excellent meal, and was treated to a long discourse as to the exact derivation of each dish. To his provincial ears, beef from the Prairie Grouping, potatoes from the Northeast Woods Grouping, coffee from the Isthmus Grouping, wine from the Pacific Grouping, and fruit from the Central Lakes Grouping were something strange and wonderful.

Over the cigars - South Island Grouping - he brought up the subject of the Eekahs. The East Harbor Administrator grew solemn and a little uneasy.

'The man you want to see is Lernin. He'll be glad to help you all he can. You say you know something of these Eekahs?'

'I say I would *like* to know something. They resemble an extinct species of animal I am familiar with.'

'Then *that* is your field of interest. I see.'

'Perhaps you can tell me some of the details of their arrival, Administrator,' suggested Raph, politely.

'I was not Administrator at the time, friend, so that I lack first-hand information, but the records are plain. This group of Eekahs that arrived in their flying-machine ... you've heard about these aeronautical devices?'

'Yes, yes.'

'Yes. Well... .apparently they were fugitives.'

'So I have heard. Yet they claim not to be criminals. Isn't that so?'

'Yes. Queer, isn't it? They admitted that they had been condemned - this was after long and skillful questioning, once we had learned their language - but denied that they were evildoers. Apparently, they had disagreed with their Administrator on principles of policy.'

Raph nodded his head knowingly: 'Ah, and refused to abide by the common decision. Is that it?'

'More confusing than that. They insist there was no common decision. They claim that the Administrator decided on policy of his own accord.'

'And was not replaced?'

'Apparently those who believe he should are considered criminals - as these were.'

There was a frank pause of disbelief. Then Raph said: 'Does that sound reasonable to you?'

'No, I merely relay to you their words. Of course, the Eekah language is quite a barrier. Some of the sounds can't be pronounced : words have different meanings according to position in the sentence and according to tiny differences in inflection. And it happens often that Eekah words even when best translated are a complete puzzle.'

'They must have heen surprised to find Gurrows here,' suggested Raph, 'if they are members of a different genus.'

'Surprised!' The Administrator's voice sank: 'I'll say they were surprised. Now, this information has not been generally published for obvious reasons, so I hope you remember that it's confidential. These Eekahs killed five Gurrows before they could be disarmed. They had an instrument that expelled metal pellets at high speed by means of controlled explosive chemical reaction. We have duplicated it since. Naturally, under the circumstances, we are not branding them criminals, for it is reasonable to assume that they did not realize we were intelligent beings. Apparently,' and the Administrator smiled ruefully, 'we resemble certain animals in their world. Or so they say.'

But Raph was galvanized into a sudden enthusiasm: 'Stars above! They said that, did they? Did they go into details? What kind of animals?'

The Administrator was taken back: 'Well, I don't know. They give names in their language. What meaning has that? They called us giant "bears."'

'Giant what?'

'Bears. I haven't the slightest idea what they are, except presumably that they look like us. I know of no such in America.'

'Bears. Bears.' Raph stumbled over the word. 'That's interesting. It's more than interesting. It's stupendous. Do you know, Administrator, that there is a great dispute among us as to the ancestry of

Gurrows? Living animals related to Gurrow sapiens would be of immense importance.' Raph rubbed his huge hands with pleasure.

The Administrator was pleased at the sensation he had caused. He said: 'And a puzzling thing in addition is that they call themselves by two names.'

Two names?"

'Yes. No one knows the distinction yet, no matter how much the Eekahs explain it to us, except that one is a more general name, and one a more specific. The basis of the difference escapes us.'

'I see. Which is "Eekah"?'

'That is the specific one. The general one is' - the Administrator stumbled slowly over the harsh syllables - 'Chim-pan-*zee.* There, that's it. There are a group called Eekahs and there are other groups with other names. But they are all called Chim ... what I said before.'

The Administrator sought through his mind for other juicy items of miscellany with which he was acquainted, but Raph interrupted him.

'May I see Lemin tomorrow?'

'Of course.'

'Then I shall do so. Thank you for your courtesy, Administrator.'

Lernin was a slight individual. It is doubtful if he weighed more than two hundred and fifty. There was also an imperfection in his walk, a slight lameness. But neither of these facts made much of an impression on Raph once the conversation had begun, for Lernin was a thinker who could impose his vigor upon others.

It was Raph whose eagerness dominated the first half of the conversation, and Lernin's comments were as luminous and as brief as lightning flashes. And then, there was a sudden whirl of the center of gravity, and Lernin took over.

'You will excuse me, learned friend,' Lernin said with a characteristic stiffness that he could make so amiable, 'if I find your problem unimportant. No, no' - he lifted a long-fingered hand - 'not, in the uncomplicated talk of the times, merely unimportant to myself because my interest lies elsewhere, but unimportant to the Grouping of all the Groupings - to every single Gurrow from end to end of the world.'

The concept was staggering. For a moment, Raph was offended; offended deep in his sense of individuality. It showed in his face.

Lernin added quickly: 'It may sound impolite, crude, uncivilized. But I must explain. I must explain because you are primarily a social scientist and will understand - perhaps better than we ourselves.'

'My life-interest,' said Raph angrily, 'is important to myself. I cannot assume those of others in preference.'

'What I talk about should be the life-interest of all - if only because it may be the means of saving the lives of all of us.'

Raph was beginning to suspect all sorts of things from a queer form of joking to the unbalance of mind that sometimes came with age. Yet Lemin was not old. 102

Lernin said, with an Impressive fervor: 'The Eekahs of the other world are a danger to us, for they are iiot friendly to us.'

And Raph replied naturally: 'How do you know?'

'No one other than myself, my friend, has lived more closely with these Eekahs who have arrived here, and I find them people with minds of emotional content strange to us. I have collected queer facts which we find difficult to interpret, but which point, at any rate, in disquieting directions.

'I'll list a few: Eekahs in organized groups kill one another periodically for obscure reasons. Eekahs find it impossible to live in manner other than those of ants - that is, in huge conglomerate societies - yet find it impossible to allow for the presence of one another. Or, to use the terminology of the social scientists, they are gregarious without being social, just as we Gurrows are social without being gregarious. They have elaborate codes of behavior, which, we are told, are taught to the young, but which are disobeyed in universal practice, for reasons obscure to us. Et cetera. Et cetera. Et cetera.'

'I am an archaeologist,' said Raph, stiffly. 'These Eekahs are of interest to me biologically only. If the curvature of the thigh bone is known to me, I care little for the curvature of their cultural processes. If I can follow the shape of the skull, it is immaterial to me that the shape of their ethics is mysterious.'

'You don't think that their insanities may affect us here?'

'We are six thousand miles apart, or more, along either ocean,' said Raph. 'We have our world. They have theirs. There is no connection between us.'

'No connection,' mused Lernin, 'so others have said. No connection at all. Yet Eekahs have reached us, and others may follow. We are told that the other world is dominated by a few, who are in turn dominated by their queer need for security which they confuse with an Eekah word called "power," which, apparently, means the prevailing of one's own will over the sum of the will of the community. What if this "power" should extend to us?'

Raph bent his mind to the task. The matter was utterly ridiculous. It seemed impossible to picture the strange concepts.

Lernin said: 'These Eekahs say that their world and ours in the long past were closer together. They say that there is a well-known scientific hypothesis in their world of a continental drift. That may interest you, since otherwise you might find it difficult to reconcile the existence of fossils of Primate Primeval closely related to living Eekahs six thousand miles away.'

And the mists cleared from the archaeologist's brain as he glanced up with a live interest untroubled by insanities: 'Ah, you should have said this sooner.'

'I say it now as an example of what you may achieve for yourself by joining us and helping us. There is another thing. These Eekahs are physical scientists, like ourselves here in East Harbor, but with a difference dictated by their own cultural pattern. Since they live in hives, they think in hives, and their science is the result of an ant-society. Individually, they are slow and unimaginative; collectively, each supplies a crumb different from that supplied by his fellow - so that a vast structure is erected quickly. Here the individual is infinitely brighter, but he works alone. You, for instance, know nothing of chemistry, I imagine.'

'A few of the fundamentals, but nothing else,' admitted Raph. 'I leave that, naturally, to the chemist.'

'Yes, naturally. But I *am* a chemist. Yet these Eekahs, though my mental inferiors, and no chemists in their own world, know more chemistry than I. For instance, did you know that there exist elements that spontaneously disintegrate?'

'Impossible,' exploded Raph. 'Elements are eternal, changeless—'

Lernin laughed: 'So you have been taught. So I have been taught. So I taught others. Yet the Eekahs are right, for in my laboratories I have checked them, and in every detail they are right. Uranium gives

rise to a spontaneous radiation. You've heard of uranium, of course? And furthermore, I have detected radiations of energy beyond that produced by uranium which must be due to traces of elements unknown to us but described by the Eekahs. And these missing elements fit well into the so-called Periodic Tables some chemists have tried to foist upon the science. Though I do wrong to use the word "foist" now,'

'Well,' said Raph, 'why do you tell me this? Does this, too, help me in my problem?'

'Perhaps,' said Lernin, ironically, 'you will yet find it a royal bribe. You see, the energy production of uranium is absolutely constant. No known outward change in environment can affect it - and as a result of the loss in energy, uranium slowly turns to lead at an *absolutely constant rate.* A group of our men is even now using this fact as a basis for a method of determining the age of the earth. You see, to determine the age of a stratum of rock in „ the earth, then, it is but necessary to discover a region in it containing a trace of uranium - a widely spread element - and to determine about it the quantity of lead - and I might here add that the lead produced from uranium differs from ordinary lead and can be easily characterized -and it is then simple to determine the length of time in which that stratum has been solid. And of course, if a fossil is found in that stratum, it is of the same age, am I not correct?'

'Stars above,' and Raph rose to his feet in a tremble, 'you do not deceive me? It is really possible to do this?'

'It is possible. It is even easy. I tell you that our great defense, even at this late date, is co-operation in science. We are a group now of many, my friend, from many Groupings, and we want you among us. If you join us, it would be a simple matter to extend our earthage project to such regions as you may indicate - regions rich in fossils. What do you say?'

'I will help you.'

It is doubtful if the Gurrow Groupings had ever before seen a community venture of such breadth as now took place. East Harbor Grouping, as has been remarked, was a shipping center, and certainly a trans-Atlantic vessel was not beyond the capacity of a Grouping that traded along the full lengths of both coasts of the Americas. What *was* unusual was the vast-ness of the co-operation of Gurrows from many Groupings, Gurrows of many interests.

Not that they were all happy.

Raph, for instance, on the particular morning that now concerns us, six months from the date of his first arrival in East Harbor, was searching anxiously for Lernin.

Lernin, for his part, was searching for nothing but greater speed.

They met on the docks, where Lernin, biting the end off a cigar and leading the way to a region where smoking was permitted, said: 'And you, my friend, seem concerned. Not, certainly, about the progress of our ocean liner?'

'I am concerned,' said Raph, gravely, 'about the reports I have received of the expedition testing the age of the rocks.'

'Oh — And you are unhappy about it?'

'Unhappy!' exploded Raph. 'Have you seen them?'

'I have received a copy. I have looked at it. I have even read parts of it. But I have had little time and most of it bounced off. Will you please enlighten me?"

'Certainly. In the last several months, three of the regions I have indicated as being fossiliferous have been tested. The first region was in the area of East Harbor Grouping itself. Another was in the

Pacific Bay Grouping, and a third in the Central Lakes Grouping. I purposely asked that those be done first because they are the richest areas and because they are widely separated. Do you know, for instance, what age they tell me the rocks upon which we stand are?'

Two billion years, I think, is the oldest figure I noticed.'

'And that's the figure for the oldest rocks - the basic igneous stratum of basalt. The upper strata, however — the recent sedimentary layers containing dozens of fossils of Primate Primeval - how old do you think *these* are supposed to be? Five -hundred - trillion - years! How is that? Do you understand?'

Trillion?' Lernin squinted upwards and shook his head.

That's strange.'

'I'll add to it. The Pacific Coast Grouping is one hundred trillion years old - so I am told - and Central Lakes almost eighty trillion years old.'

Lernin said: 'And the other measurements? The ones that did not involve your strata?'

'That is the most peculiar thing of all. Most of the chosen investigations were carried on in strata that were not particularly fossiliferous. They had their own criteria of choice based on geological reasoning - and they got consistent results - one million to two billion years depending upon the depth and geological history of the particular region tested. Only *my* areas give these strange and impossible vagaries.'

And Lernin said, 'But what do the geologists say about all this? Can there be some error?'

'Undoubtedly. But they have fifty decent, reasonable measurements. For themselves, they have proved the method and are happy. There are three anomalies, to be sure, but they view them with equanimity as involving some unknown factors. I don't see it that way. These three measurements mean everything.' Raph interrupted himself fiercely: 'How sure are you that radioactivity is an absolute constant?'

'Sure? Can one ever be sure? Nothing we know of so far affects it, and such is likewise the definite testimony of our Eekahs. Besides, my friend, if you are implying that radioactivity was more extensive in the past than in the present, why only in your fossil regions? Why not everywhere?'

'Why, indeed? It's another aspect of a problem which is growing more important daily. Consider. We have regions which show a past of abnormal radioactivity. We have regions which show abnormal fossil frequencies. Why should these regions coincide, Lernin?'

'One obvious answer suggests itself, my friend. If your Primate Primeval existed at a time when certain regions were highly radioactive, certain individuals would wander into them and die. Radioactive radiation is deadly in excess, of course. Radioactivity and fossils, there you are.'

'Why not other creatures,' demanded Raph. 'Only Primate Primeval occurs in excess, and he was intelligent. He would not be trapped by dangerous radiation.'

'Perhaps he was not intelligent. That is, after all, only your theory and not a proven fact.'

'Certainly, then, he was more intelligent than his small-brained contemporaries.'

'Perhaps not even that. You romanticize too much.'

'Perhaps I do.' Raph spoke in half a whisper. 'It seems to me that I can conjure up visions of a great civilization of a million years back - or more. A great power; a great intelligence - that has vanished completely, except for the tiny whispers of ossified bones which retain that huge cavity in which a

brain once existed, and a bony five-fingered hand curving into slender signs of manipulative skill - with an opposing thumb. They *must* have been intelligent.'

Then, what killed them?' Lernin shrugged: 'Several million species of living things have survived.'

Raph looked up, half in anger: 'I cannot accompany your group, Lernin, on a Voluntary basis. To go to the other world would be useful, yes, if I could engage in my own studies. For your purposes, it can be only a Community Job to me. I cannot give my heart to it.'

But Lernin's jaw was set: 'That arrangement would not be fair. There are many of us, my friend, who are sacrificing our own interests. If we all placed them first and investigated the other world in terms of our own particular provincialisms only, our great purpose would be destroyed. My friend, there is not one of our men that we can spare. We must all work as if our lives depended on our instant solution of the Eekah problem, which, believe me, it does.'

Raph's jaws twisted in distaste. 'On your side, you have a vague apprehension of these weak, stupid little creatures. On my side I have a definite problem of great intellectual attraction to myself. And between the two I can see no connection -no possible connection at all.'

'Nor can I. But listen to me a moment. A small group of our most trusted men returned last week from a visit to the other world. It was not official, as ours will be. It made no contacts. It was a frank piece of espionage, which I am telling you about now. I ask your discretion on the matter.'

'Naturally.'

'Our men possessed themselves of Eekah event-sheets.'

'Pardon me?'

'It is a created name to describe the objects. Printed records are issued daily in the various centers of Eekah population of events and occurrences of the day, and what passes for literary efforts as well.'

Raph was momentarily interested: 'It strikes me as an excellent idea.'

'Yes, in its essence. The Eekah notion of interesting events, however, appears to consist entirely of antisocial events. However, leave that be. My point is that the existence of the Americas is well-known there these days - and it is universally spoken of as a "new land of opportunity." The various divisions of Eekahs eye it with a universal desire. The Eekahs are many, they are crowded, their economy is irrational. They want new land, and that is what this is to them - new and empty land.'

'Not empty,' pointed out Raph, mildly.

'Empty to them,' insisted Lernin terribly. 'That is the vast danger. Lands occupied by Gurrows are to them empty and they mean to take it, all the more so since they have often enough striven to take the lands of one another.'

Raph shrugged: 'Even so, they —'

'Yes. They are weak and stupid. You said that, and so they are. But only singly. They will unite for a purpose. To be sure, they will fall apart when the purpose is done - but momentarily they will join and become strong, which we perhaps cannot do, witness yourself. And their weapons of war have been keened in the fire of conflict. Their flying machines, for instance, are superb war weapons.'

'But we have duplicated it —'

'In quantity? We have also duplicated their chemical explosives, but only in the laboratory, and their firing tubes and armored vehicles, but only in experimental plants. And yet there is more - something developed within the last five years, for our own Eekahs know nothing about it.'

'And what is that?'

'We don't know. Their event-sheets speak of it - the names applied to it mean nothing to us - but the context implies the terror of it, even on the part of these kill-mad Eekahs. There seems no evidence that it has been used, or that all the Eekah groups have it - but it is used as a supreme threat. It will perhaps be clearer to you when all the evidence is presented once our voyage is under way.'

'But what is it? You talk of it as if it were a bogey.'

'Why, *they* talk of it as if it were a bogey. And what *could* be a bogey to an Eekah? That is the most frightening aspect of it. So far, we know only that it involves the bombardment of an element they call plutonium - of which we have never heard and of which our own Eekahs have never heard either - by objects called neutrons, which our Eekahs say are subatomic particles without charge, which seems to us completely ridiculous.'

'And that is all?'

'All. Will you suspend judgment till we show you the sheets?'

Raph nodded reluctantly: 'Very well.'

Raph's leaden thoughts revolved in their worn groove as he stood there alone.

Eekahs and Primate Primeval. A living creature of erratic habits and a dead creature that must have aspired to heights. A sordid present of explosives and neutron bombardments and a glorious, mysterious past —

No connection! No connection!

It's a hard role to keep up—that of an average ten-year-old boy, when you're really a genius!

In Hiding

Wilmar H Shiras

Peter Welles, psychiatrist, eyed the boy thoughtfully. Why had Timothy Paul's teacher sent him for examination?

"I don't know, myself, that there's really anything wrong with Tim," Miss Page had told Dr. Welles. "He seems perfectly normal. He's rather quiet as a rule, doesn't volunteer answers in class or anything of that sort. He gets along well enough with other boys and seems reasonably popular, al though he has no special friends. His grades are satisfactory he gets B faithfully in all his work. But when you've been teaching as long as I have. Peter, you get a feeling about certain ones. There is a tension about him—a look in his eyes sometimes and he is very absent minded."

"What would your guess be?" Welles had asked. Sometimes these hunches were very valuable. Miss Page had taught school for thirty-odd years; she had been Peter's teacher in the past, and he thought highly of her opinion.

"I ought not to say," she answered. "There's nothing to go on yet. But he might be starting something, and if it could be headed off"

"Physicians are often called before the symptoms are sufficiently marked for the doctor to be able to see them," said Welles. "A patient, or the mother of a child, or any practiced observer, can often see that something is going to be wrong. But it's hard for the doctor in such cases. Tell me what you think I should look for."

"You won't pay too much attention to me? It's just what occurred to me. Peter; I know I'm not a trained psychiatrist. But it could be delusions of grandeur. Or it could be a withdrawing from the society of others. I always have to speak to him twice to get his attention in class and he has no real chums."

Welles had agreed to see what he could find, and promised not to be too much influenced by what Miss Page herself called "an old woman's notions."

Timothy, when he presented himself for examination, seemed like an ordinary boy. He was perhaps a little small for his age, he had big dark eyes and close-cropped dark curls, thin sensitive fingers and yes, a decided air of tension. But many boys were nervous on their first visit to the psychiatrist. Peter often wished that he was able to concentrate on one or two schools, and spend a day a week or so getting acquainted with all the youngsters. In response to Welles' preliminary questioning, Tim replied in a clear, low voice, politely and without wasting words. He was thirteen years old, and lived with his grandparents. His mother and father had died when he was a baby, and he did not remember them. He said that he was happy at home, and that he liked school "pretty well," that he liked to play with other boys. He named several boys when asked who his friends were.

"What lessons do you like at school?"

Tim hesitated, then said: "English, and arithmetic . . . and history . . . and geography," he finished thoughtfully. Then he looked up, and there was something odd in the glance.

"What do you like to do for fun?"

"Read, and play games."

"What games?"

"Ball games . . . and marbles . . . and things like that. I like to play with other boys," he added, after a barely perceptible pause, "anything they play."

"Do they play at your house?"

"No; we play on the school grounds. My grandmother doesn't like noise."

Was that the reason? When a quiet boy offers explanations, they may not be the right ones.

"What do you like to read?"

But about his reading Timothy was vague. He liked, he said, to read "boys' books," but could not name any. Welles gave the boy the usual intelligence tests. Tim seemed willing, but his replies were slow in coming. Perhaps, Welles thought, I'm imagining this, but he is too careful, too cautious. Without taking time to figure exactly, Welles knew what Tim's I.Q. would be about 120.

"What do you do outside of school?" asked the psychiatrist.

"I play with the other boys. After supper, I study my lessons."

"What did you do yesterday?"

"We played ball on the school playground."

Welles waited a while to see whether Tim would say anything of his own accord. The seconds

stretched into minutes.

"Is that all?" said the boy finally. "May I go now?"

"No; there's one more test I'd like to give you today. A game, really. How's your imagination?"

"I don't know."

"Cracks on the ceiling—like those over there—do they look like anything to you? Faces, animals, or anything?" Tim looked.

"Sometimes. And clouds, too. Bob saw a cloud last week that was like a hippo." Again the last sentence sounded like something tacked on at the last moment, a careful addition made for a reason.

Welles got out the Rorschach cards. But at the sight of them, his patient's tension increased, his wariness became unmistakably evident. The first time they went through the cards, the boy could scarcely be persuaded to say anything but, "I don't know."

"You can do better than this," said Welles. "We're going through them again. If you don't see anything in these pictures, I'll have to mark you a failure," he explained.

"That won't do. You did all right on the other things. And maybe next time we'll do a game you'll like better."

"I don't feel like playing this game now. Can't we do it again next time?"

"May as well get it done now. It's not only a game, you know, Tim; it's a test. Try harder, and be a good sport." So Tim, this time, told what he saw in the ink blots. They went through the cards slowly, and the test showed Tim's fear, and that there was something he was hiding; it showed his caution, a lack of trust, and an unnaturally high emotional self-control.

Miss Page had been right; the boy needed help.

"Now," said Welles cheerfully, "that's all over. Well just run through them again quickly and I'll tell you what other people have seen in them."

A flash of genuine interest appeared on the boy's face for a moment.

Welles went through the cards slowly, seeing that Tim was attentive to every word. When he first said, "And some see what you saw here," the boy's relief was evident. Tim began to relax, and even to volunteer some remarks. When they had finished he ventured to ask a question.

"Dr. Welles, could you tell me the name of this test?"

"It's sometimes called the Rorschach test, after the man who worked it out."

"Would you mind spelling that?"

Welles spelled it, and added: "Sometimes it's called the ink-blot test."

Tim gave a start of surprise, and then relaxed again with a visible effort.

"What's the matter? You jumped."

"Nothing."

"Oh, come on! Let's have it," and Welles waited.

"Only that I thought about the ink-pool in the Kipling stories," said Tim, after a minute's reflection. "This is different."

"Yes, very different," laughed Welles. "I've never tried that. Would you like to?"

"Oh, no, sir," cried Tim earnestly.

"Youre a little jumpy today," said Welles. "We've time for some more talk, if you are not too tired."

"No, I'm not very tired," said the boy warily. Welles went to a drawer and chose a hypodermic needle. It wasn't usual, but perhaps I'll just give you a little shot to relax your nerves, shall I? Then we'd get on better." When he turned around, the stark terror on the child's face stopped Welles in his tracks.

"Oh, no! Don't! Please, please, don't!"

Welles replaced the needle and shut the drawer before he said a word.

"I won't," he said, quietly. "I didn't know you didn't like shots. I won't give you any, Tim."

The boy, fighting for self-control, gulped and said nothing.

"It's all right," said Welles, lighting a cigarette and pretending to watch the smoke rise. Anything rather than appear to be watching the badly shaken small boy shivering in the chair opposite him. "Sorry. You didn't tell me about the things you don't like, the things you're afraid of." The words hung in the silence.

"Yes," said Timothy slowly. "I'm afraid of shots. I hate needles. It's just one of those things." He tried to smile.

"We'll do without them, then. You've passed all the tests, Tim, and I'd like to walk home with you and tell your grandmother about it. Is that all right with you?"

"Yes, sir."

"We'll stop for something to eat," Welles went on, opening the door for his patient. "Ice cream, or a hot dog." They went out together.

Timothy Paul's grandparents, Mr. and Mrs. Herbert Davis, lived in a large old-fashioned house that spelled money and position. The grounds were large, fenced, and bordered with shrubbery. Inside the house there was little that was new, everything was well-kept. Timothy led the psychiatrist to Mr. Davis's library, and then went in search of his grandmother.

When Welles saw Mrs. Davis, he thought he had some of the explanation. Some grandmothers are easygoing, jolly, comparatively young. This grandmother was, as it soon became apparent, quite different.

"Yes, Timothy is a pretty good boy," she said, smiling on her grandson. "We have always been strict with him. Dr. Welles, but I believe it pays. Even when he was a mere baby, we tried to teach him right ways. For example, when he was barely three I read him some little stories. And a few days later he was trying to tell us, if you will believe it, that he could read I Perhaps he was too young to know the nature of a lie, but I felt it my duty to make him understand. When he insisted, I spanked him. The child had a remarkable memory, and perhaps he thought that was all there was to reading. Well! I don't mean to brag of my brutality," said Mrs. Davis, with a charming smile. "I assure you, Dr. Welles, it was a painful experience for me. We've had very little occasion for punishments. Timothy is a good boy."

Welles murmured that he was sure of it.

"Timothy, you may deliver your papers now," said Mrs. Davis. "I am sure Dr. Welles will excuse you." And she settled herself for a good long talk about her grandson. Timothy, it seemed, was the apple of her eye. He was a quiet boy, an obedient boy, and a bright boy.

"We have our rules, of course. I have never allowed Timothy to forget that children should be seen and not heard, as the good old-fashioned saying is. When he first learned to turn somersaults, when he

was three or four years old, he kept coming to me and saying, 'Grandmother, see me!' I simply had to be firm with him. 'Timothy,' I said, let us have no more of this! It is simply showing off. If it amuses you to turn somersaults, well and good. But it doesn't amuse me to watch you endlessly doing it. Play if you like, but do not demand admiration.'"

"Did you never play with him?"

"Certainly I played with him. And it was a pleasure to me also. We, Mr. Davis and I, taught him a great many games, and many kinds of handicraft. We read stories to him and taught him rhymes and songs. I took a special course in kindergarten craft, to amuse the child and I must admit that it amused me also!" added Tim's grandmother, smiling reminiscently. "We made houses of toothpicks, with balls of clay at the corners. His grandfather took him for walks and drives. We no longer have a car, since my husband's sight has begun to fail him slightly, so now the garage is Timothy's workshop. We had windows cut in it, and a door, and nailed the large doors shut."

It soon became clear that Tim's life was not all strictures by any means. He had a workshop of his own, and upstairs beside his bedroom was his own library and study.

"He keeps his books and treasures there," said his grandmother, "his own little radio, and his schoolbooks, and his typewriter. When he was only seven years old, he asked us for a typewriter. But he is a careful child, Dr. Welles, not at all destructive, and I had read that in many schools they make use of typewriters in teaching young children to read and write and to spell. The words look the same as in printed books, you see; and less muscular effort is involved. So his grandfather got him a very nice noiseless typewriter, and he loved it dearly. I often hear it purring away as I pass through the hall. Timothy keeps his own rooms in good order, and his shop also. It is his own wish. You know how boys are—they do not wish others to meddle with their belongings. 'Very well, Timothy,' I told him, 'if a glance shows me that you can do it yourself properly, nobody will go into your rooms; but they must be kept neat.' And he has done so for several years. A very neat boy, Timothy."

"Timothy didn't mention his paper route," remarked Welles. "He said only that he plays with other boys after school."

"Oh, but he does," said Mrs. Davis. "He plays until five o'clock, and then he delivers his papers. If he is late, his grandfather walks down and calls him. The school is not very far from here, and Mr. Davis frequently walks down and watches the boys at their play. The paper route is Timothy's way of earning money to feed his cats. Do you care for cats, Dr. Welles?"

"Yes, I like cats very much," said the psychiatrist. "Many boys like dogs better."

"Timothy had a dog when he was a baby—a collie." Her eyes grew moist. "We all loved Ruff dearly. But I am no longer young, and the care and training of a dog is difficult. Timothy is at school or at the Boy Scout camp or something of the sort a great part of the time, and I thought it best that he should not have another dog. But you wanted to know about our cats, Dr. Welles. I raise Siamese cats."

"Interesting pets," said Welles cordially. "My aunt raised them at one time."

"Timothy is very fond of them. But three years ago he asked me if he could have a pair of black Persians. At first I thought not; but we like to please the child, and he promised to build their cages himself. He had taken a course in carpentry at vacation school. So he was allowed to have a pair of beautiful black Persians. But the very first litter turned out to be short-haired, and Timothy confessed that he had mated his queen to my Siamese torn, to see what would happen. Worse yet, he had mated his torn to one of my Siamese queens. I really was tempted to punish him. But, after all, I could see that he was curious as to the outcome of such crossbreeding. Of course I said the kittens must be destroyed. The second litter was exactly like the first—all black, with short hair. But you know what children are.

Timothy begged me to let them live, and they were his first kittens. Three in one litter, two in the other. He might keep them, I said, if he would take full care of them and be responsible for all the expense. He mowed lawns and ran errands and made little footstools and bookcases to sell, and did all sorts of things, and probably used his allowance, too. But he kept the kittens and has a whole row of cages in the yard beside his workshop."

"And their offspring?" inquired Welles, who could not see what all this had to do with the main question, but was willing to listen to anything that might lead to information.

"Some of the kittens appear to be pure Persian, and others pure Siamese. These he insisted on keeping, although, as I have explained to him, it would be dishonest to sell them, since they are not purebred. A good many of the kittens are black short-haired and these we destroy. But enough of cats, Dr. Welles. And I am afraid I am talking too much about my grandson."

"I can understand that you are very proud of him," said Welles.

"I must confess that we are. And he is a bright boy. When he and his grandfather talk together, and with me also, he asks very intelligent questions. We do not encourage him to voice his opinions—I detest the smart-Aleck type of small boy—and yet I believe they would be quite good opinions for a child of his age."

"Has his health always been good?" asked Welles.

"On the whole, very good. I have taught him the value of exercise, play, wholesome food and suitable rest. He has had a few of the usual childish ailments, not seriously. And he never has colds. But, of course, he takes his cold shots twice a year when we do."

"Does he mind the shots?" asked Welles, as casually as he could.

"Not at all. I always say that he, though so young, sets an example I find hard to follow. I still flinch, and really rather dread the ordeal."

Welles looked toward the door at a sudden, slight sound. Timothy stood there, and he had heard. Again, fear was stamped on his face and terror looked out of his eyes.

"Timothy," said his grandmother, "don't stare."

"Sorry, sir," the boy managed to say.

"Are your papers all delivered? I did not realize we had been talking for an hour, Dr. Welles. Would you like to see Timothy's cats?" Mrs. Davis inquired graciously. "Timothy, take Dr. Welles to see your pets. We have had quite a talk about them."

Welles got Tim out of the room as fast as he could. The boy led the way around the house and into the side yard where the former garage stood.

There the man stopped.

"Tim," he said, "you don't have to show me the cats if you don't want to."

"Oh, that's all right."

"Is that part of what you are hiding? If it is, I don't want to see it until you are ready to show me."

Tim looked up at him then.

'Thanks," he said. "I don't mind about the cats. Not if you like cats really."

"I really do. But, Tim, this I would like to know: You're not afraid of the needle. Could you tell me why you were afraid . . . why you said you were afraid . . . of my shot? The one I promised not to give

you after all?" Their eyes met.

"You won't tell?" asked Tim.

"I won't tell."

"Because it was pentothal. Wasn't it?"

Welles gave himself a slight pinch. Yes, he was awake. Yes, this was a little boy asking him about pentothal. A boy who—yes, certainly, a boy who knew about it.

"Yes, it was," said Welles. "A very small dose. You know what it is?"

"Yes, sir. I . . . I read about it somewhere. In the papers."

"Never mind that. You have a secret—something you want to hide. That's what you are afraid about, isn't it?" The boy nodded dumbly.

"If it's anything wrong, or that might be wrong, perhaps I could help you. You'll want to know me better, first. You'll want to be sure you can trust me. But I'll be glad to help, any time you say the word, Tim. Or I might stumble on to things the way I did just now. One thing though1 never tell secrets."

"Never?"

"Never. Doctors and priests don't betray secrets. Doctors seldom, priests never. I guess I am more like a priest, because of the kind of doctoring I do."

He looked down at the boy's bowed head.

"Helping fellows who are scared sick," said the psychiatrist very gently. "Helping fellows in trouble, getting things straight again, fixing things up, unsnarling tangles. When I can, that's what I do. And I don't tell anything to anybody. It's just between that one fellow and me." But, he added to himself, I'll have to find out. I'll have to find out what ails this child. Miss Page is right—he needs me. They went to see the cats.

There were the Siamese in their cages, and the Persians in their cages, and there, in several small cages, the shorthaired black cats and their hybrid offspring. "We take them into the house, or let them into this big cage, for exercise," explained Tim. "I take mine into my shop sometimes. These are all mine. Grandmother keeps hers on the sun porch."

"You'd never know these were not all pure-bred," observed Welles. "Which did you say were the full Persians? Any of their kittens here?"

"No; I sold them."

"I'd like to buy one. But these look just the same—it wouldn't make any difference to me. I want a pet, and wouldn't use it for breeding stock. Would you sell me one of these?"

Timothy shook his head.

"I'm sorry. I never sell any but the pure-breds." It was then that Welles began to see what problem he faced. Very dimly he saw it, with joy, relief, hope and wild enthusiasm.

"Why not?" urged Welles. "I can wait for a pure-bred, if you'd rather, but why not one of these? They look just the same. Perhaps they'd be more interesting." Tim looked at Welles for a long, long minute.

"I'll show you," he said. "Promise to wait here? No, III let you come into the workroom. Wait a minute, please." The boy drew a key from under his blouse, where it had hung suspended from a chain, and unlocked the door of his shop. He went inside, closed the door, and Welles could hear him moving

about for a few moments. Then he came to the door and beckoned.

"Don't tell grandmother," said Tim. "I haven't told her yet. If it lives, I'll tell her next week."

In the corner of the shop under a table there was a box, and in the box there was a Siamese cat. When she saw a stranger she tried to hide her kittens; but Tim lifted her gently, and then Welles saw. Two of the kittens looked like little white rats with stringy tails and smudgy paws, ears and noses. But the third—yes, it was going to be a different sight. It was going to be a beautiful cat if it lived. It had long, silky white hair like the finest Persian, and the Siamese markings were showing up plainly.

Welles caught his breath.

"Congratulations, old man! Haven't you told anyone yet?"

"She's not ready to show. She's not a week old."

"But you're going to show her?"

"Oh, yes, grandmother will be thrilled. She'll love her. Maybe there'll be more."

"You knew this would happen. You made it happen. You planned it all from the start," accused Welles.

"Yes," admitted the boy.

"How did you know?" The boy turned away.

"I read it somewhere," said Tim.

The cat jumped back into the box and began to nurse her babies. Welles felt as if he could endure no more. Without a glance at anything else in the room--and everything else was hidden under tarpaulins and newspapers--he went to the door.

"Thanks for showing me, Tim," he said. "And when you have any to sell, remember me. I'll wait. I want one like that."

The boy followed him out and locked the door carefully.

"But Tim," said the psychiatrist, "that's not what you were afraid I'd find out. I wouldn't need a drug to get you to tell me this, would I?"

Tim replied carefully, "I didn't want to tell this until I was ready. Grandmother really ought to know first. But you made me tell you."

"Tim," said Peter Welles earnestly, "I'll see you again. Whatever you are afraid of, don't be afraid of me. I often guess secrets. I'm on the way to guessing yours already. But nobody else need ever know."

He walked rapidly home, whistling to himself from time to time. Perhaps he, Peter Welles, was the luckiest man in the world.

He had scarcely begun to talk to Timothy on the boy's next appearance at the office, when the phone in the hall rang. On his return, when he opened the door he saw a book in Tim's hands. The boy made a move as if to hide it, and thought better of it.

Welles took the book and looked at it.

"Want to know more about Rorschach, eh?" he asked.

"I saw it on the shelf. I--"

"Oh, that's all right," said Welles, who had purposely left the book near the chair Tim would occupy. "But what's the matter with the library?"

"They've got some books about it, but they're on the closed shelves. I couldn't get them." Tim spoke without thinking first, and then caught his breath.

But Welles replied calmly: "I'll get it out for you. Ill have it next time you come. Take this one along today when you go. Tim, I mean it--you can trust me."

"I can't tell you anything," said the boy. "You've found out some things. I wish . . . oh, I don't know what I wish! But I'd rather be let alone. I don't need help. Maybe I never will. If I do, can't I come to you then?" Welles pulled out his chair and sat down slowly.

"Perhaps that would be the best way, Tim. But why wait for the ax to fall? I might be able to help you ward it off what you're afraid of. You can kid people along about the cats; tell them you were fooling around to see what would happen. But you can't fool all of the people all of the time, they tell me. Maybe with me to help, you could. Or with me to back you up, the blowup would be easier. Easier on your grandparents, too."

"I haven't done anything wrong!"

"I'm beginning to be sure of that. But things you try to keep hidden may come to light. The kitten--you could hide it, but you don't want to. You've got to risk something to show it."

"I'll tell them I read it somewhere."

"That wasn't true, then. I thought not. You figured it out." There was silence.

Then Timothy Paul said: "Yes, I figured it out. But that's my secret."

"It's safe with me."

But the boy did not trust him yet. Welles soon learned that he had been tested. Tim took the book home, and returned it, took the library books which Welles got for him, and in due course returned them also. But he talked little and was still wary. Welles could talk all he liked, but he got little or nothing out of Tim. Tim had told all he was going to tell. He would talk about nothing except what any boy would talk about.

After two months of this, during which Welles saw Tim officially once a week and unofficially several times--showing up at the school playground to watch games, or meeting Tim on the paper route and treating him to a soda after it was finished. Welles had learned very little more. He tried again. He had probed no more during the two months, respected the boy's silence, trying to give him time to get to know and trust him.

But one day he asked: "What are you going to do when you grow up, Tim? Breed cats?"

Tim laughed a denial.

"I don't know what, yet. Sometimes I think one thing, sometimes another."

This was a typical boy answer. Welles disregarded it.

"What would you like to do best of all?" he asked. Tim leaned forward eagerly. "What you do!" he cried.

"You've been reading up on it, I suppose," said Welles, as casually as he could, "Then you know, perhaps, that before anyone can do what I do, he must go through it himself, like a patient. He must also study medicine and be a full-fledged doctor, of course. You can't do that yet. But you can have the works now, like a patient."

"Why? For the experience?"

"Yes. And for the cure. You'll have to face that fear and lick it. You'll have to straighten out a lot of other things, or at least face them."

"My fear will be gone when I'm grown up," said Timothy. "I think it will. I hope it will."

"Can you be sure?"

"No," admitted the boy. "I don't know exactly why I'm afraid. I just know I must hide things. Is that bad, too?"

"Dangerous, perhaps." Timothy thought a while in silence. Welles smoked three cigarettes and yearned to pace the floor, but dared not move.

"What would it be like?" asked Tim finally.

"You'd tell me about yourself. What you remember. Your childhood--the way your grandmother runs on when she talks about you."

"She sent me out of the room. I'm not supposed to think I'm bright," said Tim, with one of his rare grins.

"And you're not supposed to know how well she reared you?"

"She did fine," said Tim. "She taught me all the wisest things I ever knew."

"Such as what?"

"Such as shutting up. Not telling all you know. Not showing off."

"I see what you mean," said Welles. "Have you heard the story of St. Thomas Aquinas?"

"No."

"When he was a student in Paris, he never spoke out in class, and the others thought him stupid. One of them kindly offered to help him, and went over all the work very patiently to make him understand it. And then one day they came to a place where the other student got all mixed up and had to admit he didn't understand. Then Thomas suggested a solution and it was the right one. He knew more than any of the others all the time; but they called him the Dumb Ox."

Tim nodded gravely.

"And when he grew up?" asked the boy.

"He was the greatest thinker of all time," said Welles.

"A fourteenth-century super-brain. He did more original work than any other ten great men; and he died young." After that, it was easier.

"How do I begin?" asked Timothy.

"You'd better begin at the beginning. Tell me all you can remember about your early childhood, before you went to school."

Tim gave this his consideration.

"I'll have to go forward and backward a lot," he said.

"I couldn't put it all in order."

"That's all right. Just tell me today all you can remember about that time of your life. By next week you'll have remembered more. As we go on to later periods of your life, you may remember things that belonged to an earlier time; tell them then. We'll make some sort of order out of it."

Wellcs listened to the boy's revelations with growing excitement. He found it difficult to keep outwardly calm.

"When did you begin to read?" Welles asked.

"I don't know when it was. My grandmother read me some stories, and somehow I got the idea about the words. But when I tried to tell her I could read, she spanked me. She kept saying I couldn't, and I kept saying I could, until she spanked me. For a while I had a dreadful time, because I didn't know any word she hadn't read to me1 guess I sat beside her and watched, or else I remembered and then went over it by myself right after. I must have learned as soon as I got the idea that each group of letters on the page was a word."

'The word-unit method," Welles commented. "Most self-taught readers learned like that."

"Yes. I have read about it since. And Macaulay could read when he was three, but only upside-down, because of standing opposite when his father read the Bible to the family."

"There are many cases of children who learned to read as you did, and surprised their parents. Well? How did you get on?"

"One day I noticed that two words looked almost alike and sounded almost alike. They were 'can' and 'man.' I remember staring at them and then it was like something beautiful boiling up in me. I began to look carefully at the words, but in a crazy excitement. I was a long while at it, because when I put down the book and tried to stand up I was stiff all over. But I had the idea, and after that it wasn't hard to figure out almost any words. The really hard words are the common ones that you get all the time in easy books. Other words are pronounced the way they are spelled."

"And nobody knew you could read?"

"No. Grandmother told me not to say I could, so I didn't. She read to me often, and that helped. We had a great many books, of course. I liked those with pictures. Once or twice they caught me with a book that had no pictures, and then they'd take it away and say, I'll find a book for a little boy.' "

"Do you remember what books you liked then?"

"Books about animals, I remember. And geographies. It was funny about animals--"

Once you got Timothy started, thought Welles, it wasn't hard to get him to go on talking,

"One day I was at the Zoo," said Tim, "and by the cages alone. Grandmother was resting on a bench and she let me walk along by myself. People were talking about the animals and I began to tell them all I knew. It must have been funny in a way, because I had read a lot of words I couldn't pronounce correctly, words I had never heard spoken. They listened and asked me questions and I thought I was just like grandfather, teaching them the way he sometimes taught me. And then they called another man to come, and said, 'Listen to this kid; he's a scream!' and I saw they were all laughing at me."

Timothy's face was redder than usual, but he tried to smile as he added, "I can see now how it must have sounded funny. And unexpected, too; that's a big point in humor. But my little feelings were so dreadfully hurt that I ran back to my grandmother crying, and she couldn't find out why. But it served me right for disobeying her. She always told me not to tell people things; she said a child had nothing to teach its elders."

"Not in that way, perhaps--at that age."

"But, honestly, some grown people don't know very much," said Tim. "When we went on the train last year, a woman came up and sat beside me and started to tell me things a little boy should know about California. I told her I'd lived here all my life, but I guess she didn't even know we are taught

things in school, and she tried to tell me things, and almost everything was wrong."

"Such as what?" asked Welles, who had also suffered from tourists.

"We . . . she said so many things . . . but I thought this was the funniest: She said all the Missions were so old and interesting, and I said yes, and she said, 'You know, they were all built long before Columbus discovered America,' and I thought she meant it for a joke, so I laughed. She looked very serious and said, 'Yes, those people all come up here from Mexico.' I suppose she thought they were Aztec temples."

Welles, shaking with laughter, could not but agree that many adults were sadly lacking in the rudiments of knowledge.

"After that Zoo experience, and a few others like it, I began to get wise to myself," continued Tim. "People who knew things didn't want to hear me repeating them, and people who didn't know, wouldn't be taught by a four-year-old baby. I guess I was four when I began to write."

"How?"

"Oh, I just thought if I couldn't say anything to anybody at any time, I'd burst. So I began to put it down in printing, like in books. Then I found out about writing, and we had some old-fashioned schoolbooks that taught how to write. I'm left-handed. When I went to school, I had to use my right hand. But by then I had learned how to pretend that I didn't know things. I watched the others and did as they did. My grandmother told me to do that."

"I wonder why she said that," marveled Welles.

"She knew I wasn't used to other children, she said, and it was the first time she had left me to anyone else's care. So, she told me to do what the others did and what my teacher said," explained Tim simply, "and I followed her advice literally. I pretended I didn't know anything, until the others began to know it, too. Lucky I was so shy. But there were things to learn, all right. Do you know, when I was first sent to school, I was disappointed because the teacher dressed like other women. The only picture of teachers I had noticed were those in an old Mother Goose book, and I thought that all teachers wore hoop skirts. But as soon as I saw her, after the little shock of surprise, I knew it was silly, and I never told."

The psychiatrist and the boy laughed together.

"We played games. I had to learn to play with children, and not be surprised when they slapped or pushed me. I just couldn't figure out why they'd do that, or what good it did them. But if it was to surprise me. I'd say 'Boo' and surprise them some time later; and if they were mad because I had taken a ball or something they wanted. I'd play with them."

"Anybody ever try to beat you up?"

"Oh, yes. But I had a book about boxing, with pictures. You can't learn much from pictures, but I got some practice too, and that helped. I didn't want to win, anyway. That's what I like about games of strength or skill1m fairly matched, and I don't have to be always watching in case I might show off or try to boss somebody around."

"You must have tried bossing sometimes."

"In books, they all cluster around the boy who can teach new games and think up new things to play. But I found out that doesn't work. They just want to do the same thing all the time--like hide and seek. It's no fun if the first one to be caught is 'it' next time. The rest just walk in any old way and don't try to hide or even to run, because it doesn't matter whether they are caught. But you can't get the boys to see that, and play right, so the last one caught is 'it'." Timothy looked at his watch.

"Time to go," he said. "I've enjoyed talking to you. Dr. Welles. I hope I haven't bored you too much." Welles recognized the echo and smiled appreciatively at the small boy.

"You didn't tell me about the writing. Did you start to keep a diary?"

"No. It was a newspaper. One page a day, no more and no less. I still keep it," confided Tim. "But I get more on the page now. I type it."

"And you write with either hand now?"

"My left hand is my own secret writing. For school and things like that I use my right hand."

When Timothy had left, Welles congratulated himself. But for the next month he got no more. Tim would not reveal a single significant fact. He talked about ball-playing, he described his grandmother's astonished delight over the beautiful kitten, he told of its growth and the tricks it played. He gravely related such enthralling facts as that he liked to ride on trains, that his favorite wild animal was the lion, and that he greatly desired to see snow falling. But not a word of what Welles wanted to hear. The psychiatrist, knowing that he was again being tested, waited patiently. Then one afternoon when Welles, fortunately unoccupied with a patient, was smoking a pipe on his front porch, Timothy Paul strode into the yard.

"Yesterday Miss Page asked me if I was seeing you and I said yes. She said she hoped my grandparents didn't find it too expensive, because you had told her I was all right and didn't need to have her worrying about me. And then I said to grandma, was it expensive for you to talk to me, and she said, 'Oh no, dear; the school pays for that. It was your teacher's idea that you have a few talks with Dr. Welles.'"

"I'm glad you came to me, Tim, and I'm sure you didn't give me away to either of them. Nobody's paying me. The school pays for my services if a child is in a bad way and his parents are poor. It's a new service, since 1956. Many maladjusted children can be helped--much more cheaply to the state than the cost of having them go crazy or become criminals or something. You understand all that. But sit down, Tim. I can't charge the state for you, and I can't charge your grandparents. You're adjusted marvelously well in every way, as far as I can see; and when I see the rest, I'll be even more sure of it."

"Well gosh! I wouldn't have come" Tim was stammering in confusion. "You ought to be paid. I take up so much of your time. Maybe I'd better not come any more."

"I think you'd better. Don't you?"

"Why are you doing it for nothing. Dr. Welles?"

"I think you know why." The boy sat down in the glider and pushed himself meditatively back and forth. The glider squeaked.

"You're interested. You're curious," he said.

"That's not all, Tim." Squeak-squeak. Squeak-squeak.

"I know," said Timothy. "I believe it. Look, is it all right if I call you Peter? Since we're friends."

At their next meeting, Timothy went into details about his newspaper. He had kept all the copies, from the first smudged, awkwardly printed pencil issues to the very latest neatly typed ones. But he would not show Welles any of them.

"I just put down every day the things I most wanted to say, the news or information or opinion I had to swallow unsaid. So it's a wild medley. The earlier copies are awfully funny. Sometimes I guess what they were all about, what made me write them. Sometimes I remember. I put down the books I read too, and mark them like school grades, on two points--how I liked the book, and whether it was good.

And whether I had read it before, too."

"How many books do you read? What's your reading speed?"

It proved that Timothys reading speed on new books of adult level varied from eight hundred to nine hundred fifty words a minute. The average murder mystery--he loved them--took him a little less than an hour. A year's homework in history, Tim performed easily by reading his textbook through three or four times during the year. He apologized for that, but explained that he had to know what was in the book so as not to reveal in examinations too much that he had learned from other sources. Evenings, when his grandparents believed him to be doing homework he spent his time reading other books, or writing his newspaper, "or something." As Welles had already guessed, Tim had read everything in his grandfather's library, everything of interest in the public library that was not on the closed shelves, and everything he could order from the state library.

"What do the librarians say?"

"They think the books are for my grandfather. I tell them that, if they ask what a little boy wants with such a big book, Peter, telling so many lies is what gets me down. I have to do it, don't I?"

"As far as I can see, you do," agreed Welles, "But here's material for a while in my library. There'll have to be a closed shelf here, too, though, Tim."

"Could you tell me why? I know about the library books. Some of them might scare people, and some are--"

"Some of my books might scare you too, Tim. I'll tell you a little about abnormal psychology if you like, one of these days, and then I think you'll see that until you're actually trained to deal with such cases, you'd be better off not knowing too much about them."

"I don't want to be morbid," agreed Tim. "All right. I'll read only what you give me. And from now on I'll tell you things. There was more than the newspaper, you know."

"I thought as much. Do you want to go on with your tale?"

"It started when I first wrote a letter to a newspaper--of course, under a pen name. They printed it. For a while I had a high old time of it--a letter almost every day, using all sorts of pen names. Then I branched out to magazines, letters to the editor again. And stories1 tried stories." He looked a little doubtfully at Welles, who said only:

"How old were you when you sold the first story?"

"Eight," said Timothy. "And when the check came, with my name on it, 'T. Paul,' I didn't know what in the world to do."

"That's a thought. What did you do?"

"There was a sign in the window of the bank. I always read signs, and that one came back to my mind. 'Banking By Mail.' You can see I was pretty desperate. So I got the name of a bank across the Bay and I wrote them--on my typewriter--and said I wanted to start an account, and here was a check to start it with. Oh, I was scared stiff, and had to keep saying to myself that, after all, nobody could do much to me. It was my own money. But you don't know what it's like to be only a small boy! They sent the check back to me and I died ten deaths when I saw it. But the letter explained. I hadn't endorsed it. They sent me a blank to fill out about myself. I didn't know how many lies I dared to tell. But it was my money and I had to get it. If I could get it into the bank, then some day I could get it out. I gave my business as 'author' and I gave my age as twenty-four. I thought that was awfully old."

"I'd like to see the story. Do you have a copy of the magazine around?"

"Yes," said Tim. "But nobody noticed it-I mean, 'T. Paul' could be anybody. And when I saw magazines for writers on the newsstands and bought them, I got on to the way to use a pen name on the story and my own name and address up in the comer. Before that I used a pen name and sometimes never got the things back or heard about them. Sometimes I did, though."

"What then?"

"Oh, then I'd endorse the check payable to me and sign the pen name, and then sign my own name under it. Was I scared to do that! But it was my money."

"Only stories?"

"Articles, too. And things. That's enough of that for today. Only I just wanted to say--a while ago, T. Paul told the bank he wanted to switch some of the money over to a checking account. To buy books by mail, and such. So, I could pay you. Dr. Welles," with sudden formality.

"No, Tim," said Peter Welles firmly. "The pleasure is all mine. What I want is to see the story that was published when you were eight. And some of the other things that made T. Paul rich enough to keep a consulting psychiatrist on the payroll. And, for the love of Pete, will you tell me how all this goes on without your grandparents' knowing a thing about it?"

"Grandmother thinks I send in box tops and fill out coupons," said Tim. "She doesn't bring in the mail. She says her little boy gets such a big bang out of that little chore. Anyway that's what she said when I was eight. I played mailman. And there were box tops1 showed them to her, until she said, about the third time, that really she wasn't greatly interested in such matters. By now she has the habit of waiting for me to bring in the mail."

Peter Welles thought that was quite a day of revelation. He spent a quiet evening at home, holding his head and groaning, trying to take it all in.

And that IQ 120, nonsense! The boy had been holding out on him. Tim's reading had obviously included enough about IQ tests, enough puzzles and oddments in magazines and such, to enable him to stall successfully. What could he do if he would co-operate?

Welles made up his mind to find out.

He didn't find out. Timothy Paul went swiftly through the whole range of Superior Adult tests without a failure of any sort. There were no tests yet devised that could measure his intelligence. While he was still writing his age with one figure, Timothy Paul had faced alone, and solved alone, problems that would have baffled the average adult. He had adjusted to the hardest task of all--that of appearing to be a fairly normal, B-average small boy.

And it must be that there was more to find out about him. What did he write? And what did he do besides read and write, learn carpentry and breed cats and magnificently fool his whole world?

When Peter Welles had read some of Tim's writings, he was surprised to find that the stories the boy had written were vividly human, the product of close observation of human nature. The articles, on the other hand, were closely reasoned and showed thorough study and research. Apparently Tim read every word of several newspapers and a score or more of periodicals.

"Oh, sure," said Tim, when questioned. "I read everything. I go back once in a while and review old ones, too."

"If you can write like this," demanded Welles, indicating a magazine in which a staid and scholarly article had appeared, "and this"--this was a man-to-man political article giving the arguments for and against a change in the whole Congressional system--then why do you always talk to me in the language of an ordinary stupid schoolboy?"

"Because I’m only a boy," replied Timothy. "What would happen if I went around talking like that?"

"You might risk it with me. You've showed me these things."

"I'd never dare to risk talking like that. I might forget and do it again before others. Besides, I can't pronounce half the words."

"What!"

"I never look up a pronunciation," explained Timothy. "In case I do slip and use a word beyond the average, I can anyway hope I didn't say it right."

Welles shouted with laughter, but was sober again as he realized the implications back of that thoughtfulness.

"You're just like an explorer living among savages," said the psychiatrist. "You have studied the savages carefully and tried to imitate them so they won't know there are differences."

"Something like that," acknowledged Tim.

"That's why your stories are so human," said Welles. "That one about the awful little girl"

They both chuckled.

"Yes, that was my first story," said Tim. "I was almost eight, and there was a boy in my class who had a brother, and the boy next door was the other one, the one who was picked on."

"How much of the story was true?"

"The first part. I used to see, when I went over there, how that girl picked on Bill's brother's friend, Steve. She wanted to play with Steve all the time herself and whenever he had boys over, she'd do something awful. And Steve's folks were like I said--they wouldn't let Steve do anything to a girl. When she threw all the watermelon rinds over the fence into his yard, he just had to pick them all up and say nothing back; and she'd laugh at him over the fence. She got him blamed for things he never did, and when he had work to do in the yard she'd hang out of her window and scream at him and make fun. I thought first, what made her act like that, and then I made up a way for him to get even with her, and wrote it out the way it might have happened."

"Didn't you pass the idea on to Steve and let him try it?"

"Gosh, no! I was only a little boy. Kids seven don't give ideas to kids ten. That's the first thing I had to learn--to be always the one that kept quiet, especially if there was any older boy or girl around, even only a year or two older. I had to learn to look blank and let my mouth hang open and say, 1 don't get it,' to almost everything."

"And Miss Page thought it was odd that you had no close friends of your own age," said Welles. "You must be the loneliest boy that e’er walked this earth, Tim. You've lived in hiding like a criminal. But tell me, what are you afraid of?"

"I'm afraid of being found out, of course. The only way I can live in this world is in disguise--until I'm grown up, at any rate. At first it was just my grandparents' scolding me and telling me not to show off, and the way people laughed if I tried to talk to them. Then I saw how people hate anyone who is better or brighter or luckier. Some people sort of trade off; if you're bad at one thing you're good at another, but they'll forgive you for being good at some things, if you're not good at others so they can balance it off. They can beat you at something. You have to strike a balance. A child has no chance at all. No grownup can stand it to have a child know anything he doesn't. Oh, a little thing if it amuses them. But not much of anything. There's an old story about a man who found himself in a country

where everyone else was blind. I'm like that--but they shan't put out my eyes. I'll never let them know I can see anything."

"Do you see things that no grown person can see?" Tim waved his hand towards the magazines.

"Only like that, I meant. I hear people talking in street cars and stores, and while they work, and around. I read about the way they act in the news. I'm like them, just like them, only I seem about a hundred years older--more matured."

"Do you mean that none of them have much sense?"

"I don't mean that exactly. I mean that so few of them have any, or show it if they do have. They don't even seem to want to. They're good people in their way, but what could they make of me? Even when I was seven, I could understand their motives, but they couldn't understand their own motives. And they're so lazy--they don't seem to want to know or to understand. When I first went to the library for books, the books I learned from were seldom touched by any of the grown people. But they were meant for ordinary grown people. But the grown people didn't want to know things--they only wanted to fool around. I feel about most people the way my grandmother feels about babies and puppies. Only she doesn't have to pretend to be a puppy all the time," Tim added, with a little bitterness.

"You have a friend now, in me."

"Yes, Peter," said Tim, brightening up. "And I have pen friends, too. People like what I write, because they can't see I'm only a little boy. When I grow up--"

Tim did not finish that sentence. Welles understood, now, some of the fears that Tim had not dared to put into words at all. When he grew up, would he be as far beyond all other grownups as he had, all his life, been above his contemporaries? The adult friends whom he now met on fairly equal terms--would they then, too, seem like babies or puppies?

Peter did not dare to voice the thought, either. Still less did he venture to hint at another thought. Tim, so far, had no great interest in girls; they existed for him as part of the human race, but there would come a time when Tim would be a grown man and would wish to marry. And where among the puppies could he find a mate?

"When you're grown up, we'll still be friends," said Peter.

"And who are the others?" It turned out that Tim had pen friends all over the world. He played chess by correspondence--a game he never dared to play in person, except when he forced himself to move the pieces about idly and let his opponent win at least half the time. He had, also, many friends who had read something he had written, and had written to him about it, thus starting a correspondence-friendship. After the first two or three of these, he had started some on his own account, always with people who lived at a great distance. To most of these he gave a name which, although not false, looked it. That was Paul T. Lawrence. Lawrence was his middle name; and with a comma after the Paul, it was actually his own name. He had a post office box under that name, for which T. Paul of the large bank account was his reference.

"Pen friends abroad? Do you know languages?" Yes, Tim did. He had studied by correspondence, also; many universities gave extension courses in that manner, and lent the student records to play so that he could learn the correct pronunciation. Tim had taken several such courses, and learned other languages from books. He kept all these languages in practice by means of the letters to other lands and the replies which came to him.

"I'd buy a dictionary, and then I'd write to the mayor of some town, or to a foreign newspaper, and ask them to advertise for some pen friends to help me learn the language. We'd exchange souvenirs and

things."

Nor was Welles in the least surprised to find that Timothy had also taken other courses by correspondence. He had completed, within three years, more than half the subjects offered by four separate universities, and several other courses, the most recent being Architecture. The boy, not yet fourteen, had competed a full course in that subject, and had he been able to disguise himself as a full-grown man, could have gone out at once and built almost anything you'd like to name, for he also knew much of the trades involved.

"It always said how long an average student took, and I'd take that long," said Tim, "so, of course, I had to be working several schools at the same time."

"And carpentry at the playground summer school?"

"Oh, yes. But there I couldn't do too much, because people could see me. But I learned how, and it made a good cover-up, so I could make cages for the cats, and all that sort of thing. And many boys are good with their hands. I like to work with my hands. I built my own radio, too--it gets all the foreign stations, and that helps me with my languages."

"How did you figure it out about the cats?" said Welles.

"Oh, there had to be recessives, that's all. The Siamese coloring was a recessive, and it had to be mated with another recessive. Black was one possibility, and white was another, but I started with black because I liked it better. I might try white too, but I have so much else on my mind" He broke off suddenly and would say no more.

Their next meeting was by prearrangement at Tim's workshop. Welles met the boy after school and they walked to Tim's home together; there the boy unlocked his door and snapped on the lights.

Welles looked around with interest. There was a bench, a tool chest. Cabinets, padlocked. A radio, clearly not store purchased. A file cabinet, locked. Something on a table, covered with a cloth. A box in the corner--no, two boxes in two corners. In each of them was a mother cat with kittens. Both mothers were black Persians.

"This one must be all black Persian," Tim explained. "Her third litter and never a Siamese marking. But this one carries both recessives in her. Last time she had a Siamese shorthaired kitten. This morning1 had to go to school. Let's see." They bent over the box where the new-born kittens lay. One kitten was like the mother. The other two were Siamese-Persian; a male and a female.

"You've done it again, Tim!" shouted Welles. "Congratulations!"

They shook hands in jubilation.

"I'll write it in the record," said the boy blissfully. In a nickel book marked "Compositions" Tim's left hand added the entries. He had used the correct symbolsFi, Fs, Fs; Ss, Bl.

"The dominants in capitals," he explained, "B for black, and S for short hair; the recessives in small letters--s for Siamese, l for long hair. Wonderful to write ll or ss again, Peter! Twice more. And the other kitten is carrying the Siamese marking as a recessive."

He closed the book in triumph.

"Now," and he marched to the covered thing on the table,

"My latest big secret," Tim lifted the cloth carefully and displayed a beautifully built doll house. No, a model house--Welles corrected himself swiftly. A beautiful model, and--yes, built to scale.

"The roof comes off. See, it has a big storage room and a room for a play room or a maid or

something. Then I lift off the attic"

"Good heavens!" cried Peter Welles. "Any little girl would give her soul for this!"

"I used fancy wrapping papers for the wallpapers. I wove the rugs on a little hand loom," gloated Timothy. "The furniture's just like real, isn't it? Some I bought; that's plastic. Some I made of construction paper and things. The curtains were the hardest; but I couldn't ask grandmother to sew them-"

"Why not?" the amazed doctor managed to ask.

"She might recognize this afterwards," said Tim, and he lifted off the upstairs floor.

"Recognize it? You haven't showed it to her? Then when would she see it?"

"She might not," admitted Tim. "But I don't like to take some risks."

"That's a very livable floor plan you've used," said Welles, bending closer to examine the house in detail.

"Yes, I thought so. It's awful how many house plans leave no clear wall space for books or pictures. Some of them have doors placed so you have to detour around the dining room table every time you go from the living room to the kitchen, or so that a whole corner of a room is good for nothing, with doors at all angles. Now, I designed this house to--"

"You designed it, Tim!"

"Why, sure. Oh, I see--you thought I built it from blueprints I'd bought. My first model home, I did, but the architecture courses gave me so many ideas that I wanted to see how they would look. Now, the cellar and game room" Welles came to himself an hour later, and gasped when he looked at his watch.

"It's too late. My patient has gone home again by this time. I may as well stay--how about the paper route?"

"I gave that up. Grandmother offered to feed the cats as soon as I gave her the kitten. And I wanted the time for this. Here are the pictures of the house."

The color prints were very good.

"I'm sending them and an article to the magazines," said Tim. "This time I'm T. L. Paul. Sometimes I used to pretend all the different people I am were talking together--but now I talk to you instead. Peter."

"Will it bother the cats if I smoke? Thanks. Nothing I'm likely to set on fire, I hope? Put the house together and let me sit here and look at it. I want to look in through the windows. Put its lights on. There."

The young architect beamed, and snapped on the little lights.

"Nobody can see in here. I got Venetian blinds; and when I work in here, I even shut them sometimes."

"If I'm to know all about you, I'll have to go through the alphabet from A to Z," said Peter Welles. "This is Architecture. What else in the A's?"

"Astronomy. I showed you those articles. My calculations proved correct. Astrophysics1 got A in the course, but haven't done anything original so far. Art, no. I can't paint or draw very well, except mechanical drawing. I've done all the Merit Badge work in scouting, all through the alphabet."

"Darned if I can see you as a Boy Scout," protested Welles.

"I'm a very good Scout. I have almost as many badges as any other boy my age in the troop. And at camp I do as well as most city boys."

"Do you do a good turn every day?"

"Yes," said Timothy. "Started that when I first read about Scouting1 was a Scout at heart before I was old enough to be a Cub. You know. Peter, when you're very young, you take all that seriously about the good deed every day, and the good habits and ideals and all that. And then you get older and it begins to seem funny and childish and posed and artificial, and you smile in a superior way and make jokes. But there is a third step, too, when you take it all seriously again. People who make fun of the Scout Law are doing the boys a lot of harm; but those who believe in things like that don't know how to say so, without sounding priggish and platitudinous. I'm going to do an article on it before long."

"Is the Scout Law your religion==if I may put it that way?"

"No," said Timothy. "But 'a Scout is Reverent.' Once I tried to study the churches and find out what was the truth. I wrote letters to pastors of all denominations--all those in the phone book and the newspaper--when I was on a vacation in the East, I got the names, and then wrote after I got back. I couldn't write to people here in the city. I said I wanted to know which church was true, and expected them to write to me and tell me about theirs, and argue with me, you know. I could read library books, and all they had to do was recommend some, I told them, and then correspond with me a little about them."

"Did they?"

"Some of them answered," said Tim, "but nearly all of them told me to go to somebody near me. Several said they were very busy men. Some gave me the name of a few books, but none of them told me to write again, and . . . and I was only a little boy. Nine years old, so I couldn't talk to anybody. When I thought it over, I knew that I couldn't very well join any church so young, unless it was my grandparents' church. I keep on going thereit is a good church and it teaches a great deal of truth, I am sure. I'm reading all I can find, so when I am old enough I'll know what I must do. How old would you say I should be, Peter?"

"College age," replied Welles. "You are going to college? By then, any of the pastors would talk to you--except those that are too busy!"

"It's a moral problem, really. Have I the right to wait? But I have to wait. It's like telling lies. I have to tell some lies, but I hate to. If I have a moral obligation to join the church as soon as I find it, well, what then? I can't until I'm eighteen or twenty?"

"If you can't, you can't. I should think that settles it. You are legally a minor, under the control of your grandparents, and while you might claim the right to go where your conscience leads you, it would be impossible to justify and explain your choice without giving yourself away entirely just as you are obliged to go to school until you are at least eighteen, even though you know more than most Ph.D.'s. It's all part of the game, and He who made you must understand that."

"I'll never tell you any lies," said Tim. "I was getting so desperately lonely--my pen pals didn't know anything about me really. I told them only what was right for them to know. Little kids are satisfied to be with other people, but when you get a little older you have to make friends, really."

"Yes, that's a part of growing up. You have to reach out to others and share thoughts with them. You've kept to yourself too long as it is."

"It wasn't that I wanted to. But without a real friend, it was only pretense, and I never could let my playmates know anything about me. I studied them and wrote stories about them and it was all of them,

but it was only a tiny part of me."

"I'm proud to be your friend, Tim. Every man needs a friend. I'm proud that you trust me."

Tim patted the .cat a moment in silence and then looked up with a grin.

"How would you like to hear my favorite joke?" he asked.

"Very much," said the psychiatrist, bracing himself for almost any major shock.

"It's records. I recorded this from a radio program." Welles listened. He knew little of music, but the symphony which he heard pleased him. The announcer praised it highly in little speeches before and after each movement. Timothy giggled.

"Like it?"

"Very much. I don't see the joke."

"I wrote it."

"Tim, you're beyond me! But I still don't get the joke."

"The joke is that I did it by mathematics. I calculated what ought to sound like joy, grief, hope, triumph, and all the rest, and it was just after I had studied harmony; you know how mathematical that is."

Speechless, Welles nodded.

"I worked out the rhythms from different metabolisms the way you function when under the influences of these emotions; the way your metabolic rate varies, your heartbeats and respiration and things. I sent it to the director of that orchestra, and he didn't get the idea that it was a joke—of course I didn't explain how I produced the music. I get nice royalties from it, too."

"You'll be the death of me yet," said Welles in deep sincerity. "Don't tell me anything more today; I couldn't take it. I'm going home. Maybe by tomorrow I'll see the joke and come back to laugh. Tim, did you ever fail at anything?"

"There are two cabinets full of articles and stories that didn't sell. Some of them I feel bad about. There was the chess story. You know, in 'Through the Looking Glass,' it wasn't a very good game, and you couldn't see the relation of the moves to the story very well."

"I never could see it at all."

"I thought it would be fun to take a championship game and write a fantasy about it, as if it were a war between two little old countries, with knights and foot-soldiers, and fortified walls in charge of captains, and the bishops couldn't fight like warriors, and, of course, the queens were women- people don't kill them, not in hand-to-hand fighting and . . . well, you see? I wanted to make up the attacks and captures, and keep the people alive, a fairytale war you see, and make the strategy of the game and the strategy of the war coincide, and have everything fit. It took me ever so long to work it out and write it. To understand the game as a chess game and then to translate it into human actions and motives, and put speeches to it to fit different kinds of people. I'll show it to you. I loved it. But nobody would print it. Chess players don't like fantasy, and nobody else likes chess. You have to have a very special kind of mind to like both. But it was a disappointment. I hoped it would be published, because the few people who like that sort of thing would like it very much."

"1m sure I'll like it."

"Well, if you do like that sort of thing, it's what you've been waiting all your life in vain for. Nobody else has done it." Tim stopped, and blushed as red as a beet. "I see what grandmother means.

Once you get started bragging, there's no end to it. I'm sorry. Peter."

"Give me the story. I don't mind, Tim--brag all you like to me; I understand. You might blow up if you never expressed any of your legitimate pride and pleasure in such achievements. What I don't understand is how you have kept it all under for so long."

"I had to," said Tim.

The story was all its young author had claimed. Welles chuckled as he read it, that evening. He read it again, and checked all the moves and the strategy of them. It was really a fine piece of work. Then he thought of the symphony, and this time he was able to laugh. He sat up until after midnight, thinking about the boy. Then he took a sleeping pill and went to bed.

The next day he went to see Tim's grandmother. Mrs. Davis received him graciously.

"Your grandson is a very interesting boy," said Peter Welles carefully. "I'm asking a favor of you. I am making a study of various boys and girls in this district, their abilities and backgrounds and environment and character traits and things like that. No names will ever be mentioned, of course, but a statistical report will be kept, for ten years or longer, and some case histories might later be published. Could Timothy be included?"

"Timothy is such a good, normal little boy, I fail to see what would be the purpose of including him in such a survey."

"That is just the point. We are not interested in maladjusted persons in this study. We eliminate all psychotic boys and girls. We are interested in boys and girls who succeed in facing their youthful problems and making satisfactory adjustments to life. If we could study a selected group of such children, and follow their progress for the next ten years at least--and then publish a summary of the findings, with no names used--"

"In that case, I see no objection," said Mrs. Davis.

"If you'd tell me, then, something about Timothy's parents their history?"

Mrs. Davis settled herself for a good long talk.

"Timothy's mother, my only daughter, Emily," she began, "was a lovely girl. So talented. She played the violin charmingly. Timothy is like her, in the face, but has his father's dark hair and eyes. Edwin had very fine eyes."

"Edwin was Timothy's father?"

"Yes. The young people met while Emily was at college in the East. Edwin was studying atomics there."

"Your daughter was studying music?"

"No; Emily was taking the regular liberal arts course. I can tell you little about Edwin's work, but after their marriage he returned to it and . . . you understand, it is painful for me to recall this, but their deaths were such a blow to me. They were so young."

Welles held his pencil ready to write.

"Timothy has never been told. After all, he must grow up in this world, and how dreadfully the world has changed in the past thirty years. Dr. Welles! But you would not remember the day before 1945- You have heard, no doubt of the terrible explosion in the atomic plant, when they were trying to make a new type of bomb? At the time, none of the workers seemed to be injured. They believed the protection was adequate. But two years later they were all dead or dying."

Mrs. Davis shook her head, sadly. Welles held his breath, bent his head, scribbled.

"Tim was born just fourteen months after the explosion, fourteen months to the day. Everyone still thought that no harm had been done. But the radiation had some effect which was very slow1 do not understand such things- Edwin died, and then Emily came home to us with the boy. In a few months she, too, was gone.

"Oh, but we do not sorrow as those who have no hope. It is hard to have lost her. Dr. Welles, but Mr. Davis and I have reached the time of life when we can look forward to seeing her again. Our hope is to live until Timothy is old enough to fend for himself. We were so anxious about him; but you see he is perfectly normal in every way."

"Yes."

"The specialists made all sorts of tests. But nothing is wrong with Timothy."

The psychiatrist stayed a little longer, took a few more notes, and made his escape as soon as he could. Going straight to the school, he had a few words with Miss Page and then took Tim to his office, where he told him what he had learned.

"You mean I'm a mutation?"

"A mutant. Yes, very likely you are. I don't know. But I had to tell you at once."

"Must be a dominant, too," said Tim, "coming out this way in the first generation. You mean there may be more? I'm not the only one?" he added in great excitement. "Oh, Peter, even if I grow up past you I won't have to be lonely?" There. He had said it.

"It could be, Tim. There's nothing else in your family that could account for you."

"But I have never found anyone at all like me. I would have known. Another boy or girl my age like me, I would have known."

"You came West with your mother. Where did the others go, if they existed? The parents must have scattered everywhere, back to their homes all over the country, all over the world. We can trace them, though. And. Tim, haven't you thought it's just a little bit strange that with all your pen names and various contacts, people don't insist more on meeting you? Everything gets done by mail? It's almost as if the editors are used to people who hide. It's almost as if people are used to architects and astronomers and composers whom nobody ever sees, who are only names in care of other names at post office boxes. There's a chance, just a chance, mind you, that there are others. If there are, we'll find them,"

"I'll work out a code they will understand." said Tim his face screwed up in concentration. "In articles--I'll do it in several magazines and in letters I can enclose copies--some of my pen friends may be the ones"

"I'll hunt up the records they must be on file somewhere psychologists and psychiatrists know all kinds of tricks we can make some excuse to trace them all the birth records" Both of them were talking at once, but all the while Peter Welles was thinking sadly, perhaps he had lost Tim now. If they did find those others, those to whom Tim rightfully belonged, where would poor Peter be? Outside, among the puppies-

Timothy Paul looked up and saw Peter Welles's eyes on him. He smiled.

"You were my first friend. Peter, and you shall be forever," said Tim. "No matter what, no matter who."

"But we must look for the others," said Peter.

"I'll never forget who helped me," said Tim. / An ordinary boy of thirteen may say such a thing sincerely, and a week later have forgotten all about it. But Peter Welles was content. Tim would never forget. Tim would be his friend always. Even when Timothy Paul and those like him should unite in a maturity undreamed of, to control the world if they chose. Peter Welles would be Tim's friend not a puppy, but a beloved friend as a loyal dog loved by a good master, is never cast out.

The road to a happy ending often has many suprising turns!

HAPPY ENDING

Henry Kuttner

THIS IS THE WAY THE STORY ENDED: JAMES KELVIN concentrated very hard on the thought of the chemist with the red moustache who had promised him a million dollars. It was simply a matter of tuning in on the man's brain, establishing a rapport. He had done it before. Now it was more important than ever that he do it this one last time. He pressed the button on the gadget the robot had given him, and thought hard.

Far off, across limitless distances, he found the rapport.

He clamped on the mental tight beam.

He rode it. ...

The red-moustached man looked up, gaped, and grinned delightedly.

"So there you are!" he said. "I didn't hear you come in. Good grief, I've been trying to find you for two weeks."

"Tell me one thing quick," Kelvin said. "What's your name?"

"George Bailey. Incidentally, what's yours?"

But Kelvin didn't answer. He had suddenly remembered the other thing the robot had told him about that gadget which established rapport when he pressed the button. He pressed it now—and nothing happened. The gadget had gone dead. Its task, was finished, which obviously meant he had at last achieved health, fame and fortune. The robot had warned him, of course. The thing was set to do one specialized job. Once he got what he wanted, it would work no more.

So Kelvin got the million dollars.

And he lived happily ever after. ...

This is the middle of the story:

As he pushed aside the canvas curtain something—*a* carelessly hung rope—swung down at his face, knocking the horn-rimmed glasses askew. Simultaneously a vivid bluish light blazed into his unprotected eyes. He felt a curious, sharp sense of disorientation, a shifting motion that was almost instantly gone.

Things steadied before him. He let the curtain fall back into place, making legible again the painted

inscription: HOROSCOPES——LEARN YOUR FUTURE——and he stood staring at the remarkable horomancer.

It was a—oh, impossible!

The robot said in a flat, precise voice, "You are James Kelvin. You are a reporter. You are thirty years old, unmarried, and you came to Los Angeles from Chicago today on the advice of your physician. Is that correct?"

In his astonishment Kelvin called on the Deity. Then he settled his glasses more firmly and tried to remember an expose of charlatans he had once written. There was some obvious way they worked things like this, miraculous as it sounded.

The robot looked at *him* impassively out of its faceted eye.

"On reading your mind," it continued in the pedantic voice, "I find this is the year nineteen forty-nine. My plans will have to be revised. I had meant to arrive in the year nineteen seventy. I will ask you to assist me."

Kelvin put his hands in his pockets and grinned.

"With money, naturally," he said. "You had me going for a minute. How do you do it, anyhow? Mirrors? Or like Maelzel's chess player?"

"I am not a machine operated by a dwarf, nor am I an optical illusion," the robot assured him. "I am an artificially created living organism, originating at a period far in your future."

"And I'm not the sucker you take me for," Kelvin remarked pleasantly. "I came in here to—"

"You lost your baggage checks," the robot said. "While wondering what to do about it, you had a few drinks and took the Wilshire bus at exactly—exactly eight thirty-five post meridian."

"Lay off the mind-reading," Kelvin said. "And don't tell me you've been running this joint very long with a line like that. The cops would be after you. If you're a real robot, ha, ha."

"I have been running this joint," the robot said, "for approximately five minutes. My predecessor is unconscious behind that chest in the corner. Your arrival here was sheer coincidence." It paused very briefly, and Kelvin had the curious impression that it was watching to see if the story so far had gone over well.

The impression was curious because Kelvin had no feeling at all that there was a man in the large, jointed figure before him. If such as a thing as a robot were possible, he would have believed implicitly that he confronted a genuine specimen. Such things being impossible, he waited to see what the gimmick would be.

"My arrival here was also accidental," the robot informed him. "This being the case, my equipment will have to be altered slightly. I will require certain substitute mechanisms. For that, I gather as I read your mind, I will have to engage in your peculiar barter system of economics. In a word, coinage or gold or silver certificates will be necessary. Thus I am—temporarily —a horomancer."

"Sure, sure," Kelvin said. "Why not a simple mugging? If you're a robot, you could do a super-mugging job with a quick twist of the gears."

"It would attract attention. Above all, I require secrecy. As a matter of fact, I am—" the robot paused, searched Kelvin's brain for the right phrase, and said, "—on the lam. In my era, time-traveling is strictly forbidden, even by accident, unless government-sponsored."

There was a fallacy there somewhere, Kelvin thought, but he couldn't quite spot it. He blinked at

the robot intently. It looked pretty unconvincing.

"What proof do you need?" the creature asked. "I read your brain the minute you came in, didn't I? You must have felt the temporary amnesia as I drew out the knowledge and then replaced it."

"So that's what happened," Kelvin said. He took a cautious step backward. "Well, I think I'll be getting along."

"Wait," the robot commanded. "I see you have begun to distrust me. Apparently you now regret having suggested a mugging job. You fear I may act on the suggestion. Allow me to reassure you. It is true that I could take your money and assure secrecy by killing you, but I am not permitted to kill humans. The alternative is to engage in the barter system. I can offer you something valuable in return for a small amount of gold. Let me see." The faceted gaze swept around the tent, dwelt piercingly for a moment on Kelvin. "A horoscope," the robot said. "It is supposed to help you achieve health, fame and fortune. Astrology, however, is out of my line. I can merely offer a logical scientific method of attaining the same results."

"Uh-huh," Kelvin-said skeptically. "How much? And why haven't *you* used that method?"

"I have other ambitions," the robot said in a cryptic manner. "Take this." There was a brief clicking. A panel opened in the metallic chest. The robot extracted a small, flat case and handed it to Kelvin, who automatically closed his fingers on the cold metal.

"Be careful. Don't push that button until—"

But Kelvin had pushed it. ...

He was driving a figurative car that had got out of control. There was somebody else inside his head. There was a schizophrenic, double-tracked locomotive that was running wild and his hand on the throttle couldn't slow it down an instant. His mental steering-wheel had snapped.

Somebody else was thinking for him!

Not quite a human being. Not quite sane, probably, from Kelvin's standards. But awfully sane from his own. Sane enough to have mastered the most intricate principles of non-Euclidean geometry in the nursery.

The senses got synthesized in the brain into a sort of common language, a master-tongue. Part of it was auditory, part pictorial, and there were smells and tastes and tactile sensations that were sometimes familiar and sometimes spiced with the absolutely alien. And it was chaotic.

Something like this, perhaps. . . .

"—Big Lizards getting too numerous this season— tame threvvars have the same eyes not on Callisto though—vacation soon—preferably galactic—solar system claustrophobic—byanding tomorrow if square rootola and upsliding three—"

But that was merely the word-symbolism. Subjectively, it was far more detailed and very frightening. Luckily, reflex had lifted Kelvin's fingers from the button almost instantly, and he stood there motionless, shivering slightly.

He was afraid now.

The robot said, "You should not have begun the rapport until I instructed you. Now there will be danger. Wait." His eye changed color. Yes . . . there is . . . Tharn, yes. Beware of Tharn."

"I don't want any part of it," Kelvin said quickly. "Here, take this thing back."

"Then you will be unprotected against Tharn. Keep the device. It will, as I promised, insure your

health, fame and fortune, far more effectively than a—a horoscope."

"No, thanks. I don't know how you managed that trick—subsonics, maybe, but I don't—"

"Wait," the robot said. "When you pressed that button, you were in the mind of someone who exists very far in the future. It created a temporal rapport. You can bring about that rapport any time you press the button."

"Heaven forbid," Kelvin said, still sweating a little.

"Consider the opportunities. Suppose a troglodyte of the far past had access to your brain? He could achieve anything he wanted."

It had become important, somehow, to find a logical rebuttal to the robot's arguments. Like St. Anthony— or was it Luther?—arguing with the devil, Kelvin thought dizzily. His headache was worse, and he suspected he had drunk more than was good for him. But he merely said: "How could a troglodyte understand what's in my brain? He couldn't apply the knowledge without the same conditioning I've had."

"Have you ever had sudden and apparently illogical ideas? Compulsions? So that you seem forced to think of certain things, count up to certain numbers, work out particular problems? Well, the man in the future on whom my device is focused doesn't know he's *en rapport* with you, Kelvin. But he's vulnerable to compulsions. All you have to do is concentrate on a problem and then press the button. Your rapport will be compelled—illogically, from his viewpoint—to solve that problem. And you'll be reading his brain. You'll find out how it works. There are limitations; you'll learn those too. And the device will insure health, wealth and fame for you."

"It would insure anything, if it really worked that way. I could do anything. That's why I'm not buying!"

"I said there were limitations. As soon as you've successfully achieved health, fame and fortune, the device will become useless. I've taken care of that. But meanwhile you can use it to solve all your problems by tapping the brain of the more intelligent specimen in the future. The important point is to concentrate on your problems *before* you press the button. Otherwise you may get more than Tharn on your track."

"Tharn? What—"

"I think an—an android," the robot said, looking at nothing. "An artificial human . . . However, let us consider my own problem. I need a small amount of gold."

"So that's the kicker," Kelvin said, feeling oddly relieved. He said, "I haven't got any."

"Your watch."

Kelvin jerked his arm so that his wristwatch showed. "Oh, no. That watch cost plenty."

"All I need is the gold-plating," the robot said, shooting out a reddish gray from its eye. "Thank you." The watch was now dull gray metal.

"Hey!" Kelvin cried.

"If you use the rapport device, your health, fame and fortune will be assured," the robot said rapidly. "You will be as happy as any man of this era can be. It will solve all your problems—including Tharn. Wait a minute." The creature took a backward step and disappeared behind a hanging Oriental rug that had never been east of Peoria.

There was silence.

Kelvin looked from his altered watch to the flat, enigmatic object in his palm. It was about two inches by two inches, and no thicker than a woman's vanity-case, and there was a sunken push-button on its side.

He dropped it into his pocket and took a few steps forward. He looked behind the pseudo-Oriental rug, to find nothing except emptiness and a flapping slit cut in the canvas wall of the booth. The robot, it seemed, had taken a powder. Kelvin peered out through the slit. There was the light and sound of Ocean Park amusement pier, that was all. And the silvered, moving blackness of the Pacific Ocean, stretching to where small lights showed Malibu far up the invisible curve of the coastal cliffs.

So he came back inside the booth and looked around. A fat man in a swami's costume was unconscious behind the carved chest the robot had indicated. His breath, plus a process of deduction, told Kelvin that the man had been drinking.

Not knowing what else to do, Kelvin called on the Deity again. He found suddenly that he was thinking about someone or something called Tharn, who was an android.

Horomancy . . . time . . . rapport . . . *no!* Protective disbelief slid like plate armor around his mind. A practical robot couldn't be made. He knew that. He'd have heard—he was a reporter, wasn't he?

Sure he was.

Desiring noise and company, he went along to the shooting gallery and knocked down a few ducks. The flat case burned in his pocket. The dully burnished metal of his wristwatch burned in his memory. The remembrance of that drainage from his brain, and the immediate replacement, burned in his mind. Presently bar whiskey burned in his stomach.

He'd left Chicago because of sinusitis, recurrent and annoying. Ordinary sinusitis. Not schizophrenia or hallucinations or accusing voices coming from the walls. Not because he had been seeing bats or robots. That thing hadn't really been a robot. It all had a perfectly natural explanation. Oh, sure.

Health, fame and fortune. And if—

THARN!

The thought crashed with thunderbolt impact into his head.

And then another thought: I *am* going nuts!

A silent voice began to mutter insistently over and over. "Tharn—Tharn—Tharn—Tharn—"

And another voice, the voice of sanity and safety, answered it and drowned it out. Half aloud, Kelvin muttered: "I'm James Noel Kelvin. I'm a reporter—special features, legwork, rewrite. I'm thirty years old, unmarried, and I came to Los Angeles today and lost my baggage checks and—and I'm going to have another drink and find a hotel. Anyhow, the climate seems to be curing my sinusitis."

Tharn, the muffled drum-beat said almost below the threshold of realization. *Tharn, Tharn. Tharn.*

He ordered another drink and reached in his pocket for a coin. His hand touched the metal case. And simultaneously he felt a light pressure on his shoulder.

Instinctively he glanced around. It was a seven-fingered, spidery hand tightening—hairless, without nails —and white as smooth ivory.

The one, overwhelming necessity that sprang into Kelvin's mind was a simple longing to place as much space as possible between himself and the owner of that disgusting hand. It was a vital requirement, but one difficult of fulfillment, a problem that excluded everything else from Kelvin's

thoughts. He knew, vaguely, that he was gripping the flat case in his pocket as though that could save him, but all he was thinking about was: I've got to get away from here.

The monstrous, alien thoughts of someone in the future spun him insanely along their current. It could not have taken a moment while that skilled, competent, trained mind, wise in the lore of an unthinkable future, solved the random problem that had come so suddenly, with such curious compulsion.

Three methods of transportation were simultaneously clear to Kelvin. Two he discarded; motorplates were obviously inventions yet to come, and quirling— involving, as it did, a sensory coil-helmet—was beyond him. But the third method—

Already the memory was fading. And that hand was still tightening on his shoulder. He clutched at the vanishing ideas and desperately made his brain and his muscles move along the unlikely direction the future man had visualized.

And he was out in the open, a cold night wind blowing on him, still in a sitting position, but with nothing but empty air between his spine and the sidewalk.

He sat down suddenly.

Passers-by on the corner of Hollywood Boulevard and Cahuenga were not much surprised at the sight of a dark, lanky man sitting by the curb. Only one woman had noticed Kelvin's actual arrival, and she knew when she was well off. She went right on home.

Kelvin got up laughing with soft hysteria. "Teleportation," he said. "How did I work it? It's gone. . . . Hard to remember afterward, eh? I'll have to start carrying a notebook again."

And then— "But what about Tharn?"

He looked around, frightened. Reassurance came only after half an hour had passed without additional miracles. Kelvin walked along the Boulevard, keeping a sharp lookout. No Tharn, though.

Occasionally he slid a hand into his pocket and touched the cold metal of the case. Health, fame and fortune. Why, he could—

But he did not press the button. Too vivid was the memory of that shocking, alien disorientation he had felt. The mind, the experiences, the habit-patterns of the far future were uncomfortably strong.

He would use the little case again—oh, yes. But there was no hurry. First he'd have to work out a few angles.

His disbelief was completely gone.

Tharn showed up the next night and scared the daylights out of Kelvin again. Prior to that, the reporter had failed to find his baggage tickets, and was only consoled by the two hundred bucks in his wallet. He took a room—paying in advance—at a medium-good hotel, and began wondering how he might apply his pipeline to the future. Very sensibly, he decided to continue a normal life until something developed. At any rate, he'd have to make a few connections. He tried the *Times,* the *Examiner,* the *News,* and some others. But these things develop slowly, except in the movies. That night Kelvin was in his hotel room when his unwelcome guest appeared.

It was, of course, Tharn.

He wore a very large white turban, approximately twice the size of his head. He had a dapper black moustache, waxed downward at the tips like the moustache of a mandarin or a catfish. He stared urgently at Kelvin out of the bathroom mirror.

Kelvin had been wondering whether or not he needed a shave before going out to dinner. He was rubbing his chin thoughtfully at the moment Tharn put in an appearance, and there was a perceptible mental lag between occurrence and perception, so that to Kelvin it seemed that he himself had mysteriously sprouted a long moustache. He reached for his upper lip. It was smooth. But in the glass the black waxed hairs quivered as Tharn pushed his face up against the surface of the mirror.

It was so shockingly disorienting, somehow, that Kelvin was quite unable to think at all. He took a quick step backward. The edge of the bathtub caught him behind the knees and distracted him momentarily, fortunately for his sanity. When he looked again there was only his own appalled face reflected above the washbowl. But after a second or two the face seemed to develop a cloud of white turban, and mandarinlike whiskers began to form sketchily.

Kelvin clapped a hand to his eyes and spun away.

In about fifteen seconds he spread his fingers enough to peep through them at the glass. He kept his palm pressed desperately to his upper lip, in some wild hope of inhibiting the sudden sprouting of a moustache. What peeped back at him from the mirror looked like himself. At least it had no turban, and it wore hornrimmed glasses. He risked snatching his hand away from a quick look, and clapped it in place again just in time to prevent Tharn from taking shape in the glass.

Still shielding his face, he went unsteadily into the bedroom and took the flat case out of his coat pocket. But he didn't press the button that would close a mental synapse between two incongruous eras. He didn't want to do that again, he realized. More horrible, somehow, than what was happening now was the thought of reentering that *alien* brain.

He was standing before the bureau, and in the mirror one eye looked out at him between reflected fingers. It was a wild eye behind the gleaming spectacle-lens, but it seemed to be his own. Tentatively he took his hand away. . . .

This mirror showed more of Tharn. Kelvin wished it hadn't. Tharn was wearing white knee-boots of some glittering plastic. Between them and the turban he wore nothing whatever except a minimum of loincloth, also glittering plastic. Tharn was very thin, but he looked active. He looked quite active enough to spring right into the hotel room. His skin was whiter than his turban, and his hands had seven fingers each, all right.

Kelvin abruptly turned away, but Tharn was resourceful. The dark window made enough of a reflecting surface to show a lean, loinclothed figure. The feet showed bare and they were less normal than Tharn's hands. And the polished brass of a lamp base gave back the picture of a small, distorted face not Kelvin's own.

Kelvin found a corner without reflecting surfaces and pushed into it, his hands shielding his face. He was still holding the flat case.

Oh, fine, he thought bitterly. Everything's got a string on it. What good will this rapport gadget do me if Tharn's going to show up every day? Maybe I'm only crazy. I hope so.

Something would have to be done unless Kelvin was prepared to go through life with his face buried in his hands. The worst of it was that Tharn had a haunting look of familiarity. Kelvin discarded a dozen possibilities, from reincarnation to the *dejd vu* phenomenon, but—

He peeped through his hands, in time to see Tharn raising a cylindrical gadget of some sort and leveling it like a gun. That gesture formed Kelvin's decision. He'd *have* to do something, and fast. So, concentrating on the problem—*I want out!*—he pressed the button in the surface of the flat case.

And instantly the teleportation method he had forgotten was perfectly clear to him. Other matters,

however, were obscure. The smells—someone was thinking—were adding up to a—there was no word for that, only a shocking visio-auditory ideation that was simply dizzying. Someone named Three Million and Ninety Pink had written a new natch. And there was the physical sensation of licking a twenty-four-dollar stamp and sticking it on a postcard.

But, most important, the man in the future had had

—or would have—a compulsion to think about the teleportation method, and as Kelvin snapped back into his own mind and time, he instantly used that method.

He was falling.

Icy water attacked him hard. Miraculously he kept his grip on the flat case. He had a whirling vision of stars in a night sky, and the phosphorescent sheen of silvery light on a dark sea. Then brine stung his nostrils.

Kelvin had never learned how to swim.

As he went down for the last time, bubbling a scream, he literally clutched at the proverbial straw he was holding. His finger pushed the button down again. There was no need to concentrate on the problem; he couldn't think of anything else.

Mental chaos, fantastic images—and the answer.

It took concentration, and there wasn't much time left. Bubbles streamed up past his face. He felt them, but he couldn't see them. All around, pressing in avidly, was the horrible coldness of the salt water. . .

But he did know the method now, and he knew how it worked. He thought along the lines the future mind had indicated. Something happened. Radiation—that was the nearest familiar term—poured out of his brain and did peculiar things to his lung-tissues. His blood cells adapted themselves. . .

He was breathing water, and it was no longer strangling him.

But Kelvin had also learned that his emergency adaptation could not be maintained for very long. Teleportation was the answer to that. And surely he could remember the method now. He had actually used it to escape from Tharn only a few minutes ago.

Yet he could not remember. The memory was expunged cleanly from his mind. So there was nothing else to do but press the button again, and Kelvin did that, most reluctantly.

Dripping wet, he was standing on an unfamiliar street. It was no street he knew, but apparently it was in his own time and on his own planet. Luckily, teleportation seemed to have limitations. The wind was cold. Kelvin stood in a puddle that grew rapidly around his feet. He stared around.

He picked out a sign up the street that offered Turkish Baths, and headed moistly hi that direction. His thoughts were mostly profane. . .

He was in New Orleans, of all places. Presently he was drunk in New Orleans. His thoughts kept going around in circles, and Scotch was a fine palliative, an excellent brake. He needed to get control again. He had an almost miraculous power, and he wanted to be able to use it effectively before the unexpected happened again. Tharn ...

He sat in a hotel room and swigged Scotch. Gotta be logical!

He sneezed.

The trouble was, of course, that there were so few points of contact between his own mind and that of the future-man. Moreover, he'd got the rapport only in tunes of crisis. Like having access to the

Alexandrian Library, five seconds a day. In five seconds you couldn't even start translating. . . .

Health, fame and fortune. He sneezed again. The robot had been a liar. His health seemed to be going fast. What about that robot? How had he got involved anyway? He said he'd fallen into this era from the future, but robots are notorious liars. Gotta be logical.

Apparently the future was peopled by creatures not unlike the cast of a Frankenstein picture. Androids, robots, so-called men whose minds were shockingly different . . . *Sneeze.* Another drink.

The robot had said that the case would lose its power after Kelvin had achieved health, fame and fortune. Which was a distressing thought. Suppose he attained those enviable goals, found the little push-button useless, and *then* Tharn showed up? Oh, no. That called for another shot.

Sobriety was the wrong condition in which to approach a matter that in itself was as wild as delirium tremens, even though, Kelvin knew, the science he had stumbled on was all theoretically quite possible. But not in this day and age. *Sneeze.*

The trick would be to pose the right problem and use the case at some time when you weren't drowning or being menaced by the bewhiskered android with his seven-fingered hands and his ominous rodlike weapon. Find the problem.

But that future-mind was hideous.

And suddenly, with drunken clarity, Kelvin realized that he was profoundly drawn to that dim, shadowy world of the future.

He could not see its complete pattern, but he sensed it somehow. He knew that it was *right, a* far better world and tune than his. If he could *be* that unknown man who dwelt there, all would go well.

Man must needs love the highest, he thought wryly. Oh, well. He shook the bottle. How much had he absorbed? He felt fine.

Gotta be logical.

Outside the window street-lights blinked off and on. Neons traced goblin languages against the night. It seemed rather alien, too, but so did Kelvin's own body. He started to laugh, but a sneeze choked that off.

All I want, he thought, is health, fame and fortune. Then I'll settle down and live happily ever after, without a care or worry. I won't need this enchanted case after that. Happy ending.

On impulse he took out the box and examined it. He tried to pry it open and failed. His finger hovered over the button.

How can I—he thought, and his finger moved half an inch. . . .

It wasn't so alien now that he was drunk. The future man's name was Quarra Vee. Odd he had never realized that before, but how often does a man think of his own name? Quarra Vee was playing some sort of game vaguely reminiscent of chess, but his opponent was on a planet of Sirius, some distance away. The chessmen were all unfamiliar. Complicated, dizzying space-time gambits flashed through Quarra Vee's mind as Kelvin listened in. Then Kelvin's problem thrust through, the compulsion hit Quarra Vee, and—

It was all mixed up. There were two problems, really. How to cure a cold—coryza. And how to become healthy, rich and famous in a practically prehistoric era—for Quarra Vee.

A small problem, however, to Quarra Vee. He solved it and went back to his game with the Sirian. Kelvin was back in the hotel room in New Orleans. He was very drunk or he wouldn't have risked it.

The method involved using his brain to tune in on another brain in this present twentieth century that had exactly the wavelength he required. All sorts of factors would build up to the sum total of that wavelength— experience, opportunity, position, knowledge, imagination, honesty—but he found it at last, after hesitation among three totals that were all nearly right. Still, one was Tighter, to three decimal points. Still drunk as a lord, Kelvin clamped on a mental tight beam, turned on the teleportation, and rode the beam across America to a well-equipped laboratory, where a man sat reading.

The man was bald and had a bristling red moustache. He looked up sharply at some sound Kelvin made.

"Hey!" he said. "How did you get in here?"

"Ask Quarra Vee," Kelvin said.

"Who? *What?"* The man put down his book. Kelvin called on his memory. It seemed to be slipping. He used the rapport case for an instant, and refreshed his mind. Not so unpleasant this time, either. He was beginning to understand Quarra Vee's world a little. He liked it. However, he supposed he'd forget that too.

"An improvement on Woodward's protein analogues," he told the red-moustached man. "Simple synthesis will do it."

"Who the devil are you?"

"Call me Jim," Kelvin said simply. "And shut up and listen." He began to explain, as to a small, stupid child. (The man before him was one of America's foremost chemists.) "Proteins are made of amino acids. There are about thirty-three amino acids—"

"There aren't."

"There are. Shut up. Their molecules can be arranged in lots of ways. So we get an almost infinite variety of proteins. And all living things are forms of protein. The absolute synthesis involves a chain of amino acids long enough to recognize clearly as a protein molecule. That's been the trouble."

The man with the red moustache seemed quite interested. "Fischer assembled a chain of eighteen," he said, blinking. "Abderhalden got up to nineteen, and Woodward, of course, has made chains ten thousand units long. But as for testing—"

"The complete protein molecule consists of complete sets of sequences. But if you test only one or two sections of an analogue you can't be sure of the others. Wait a minute." Kelvin used the rapport case again. "Now I know. Well, you can make almost anything out of synthesized protein. Silk, wool, hair—but the main thing, of course," he said, sneezing, "is a cure for coryza."

"Now look—" said the red-moustached man.

"Some of the viruses are chains of amino acids, aren't they? Well, modify their structure. Make 'em harmless. Bacteria, too. And synthesize antibiotics."

"I wish I could. However, Mr.—"

"Just call me Jim."

"Yes. However, all this is old stuff."

"Grab your pencil," Kelvin said. "From now on it'll be solid, with riffs. The method of synthesizing and testing is as follows—"

He explained, very thoroughly and clearly. He had to use the rapport case only twice. And when he had finished, the man with the red moustache laid down his pencil and stared.

"This is incredible," he said. "If it works—"

"I want health, fame and fortune," Kelvin said stubbornly. "It'll work."

"Yes, but—my good man—"

However, Kelvin insisted. Luckily for himself, the mental testing of the red-moustached man had included briefing for honesty and opportunity, and it ended with the chemist agreeing to sign partnership papers with Kelvin. The commercial possibilities of the process were unbounded. Du Pont or GM would be glad to buy it.

"I want lots of money. A fortune."

"You'll make a million dollars," the red-moustached man said patiently.

"Then I want a receipt. Have to have this in black and white. Unless you want to give me my million now."

Frowning, the chemist shook his head. "I can't do that. I'll have to run tests, open negotiations—but don't worry about that. Your discovery is certainly worth a million. You'll be famous, too."

"And healthy?"

"There won't be any more disease, after a while," the chemist said quietly. "That's the real miracle."

"Write it down," Kelvin clamored.

"All right. We can have partnership papers drawn up tomorrow. This will do temporarily. Understand, the actual credit belongs to you."

"It's got to be in ink. A pencil won't do."

"Just a minute, then," the red-moustached man said, and went away in search of ink. Kelvin looked around the laboratory, beaming happily.

Tharn materialized three feet away. Tharn was holding the rod-weapon. He lifted it.

Kelvin instantly used the rapport case. Then he thumbed his nose at Tharn and teleported himself far away.

He was immediately in a cornfield, somewhere, but undistilled corn was not what Kelvin wanted. He tried again. This time he reached Seattle.

That was the beginning of Kelvin's monumental two-week combination binge and chase. His thoughts weren't pleasant.

He had a frightful hangover, ten cents in his pocket, and an overdue hotel bill. A fortnight of keeping one jump ahead of Tharn, via teleportation, had frazzled his nerves so unendurably that only liquor had kept him going. Now even that stimulus was failing. The drink died in him and left what felt like a corpse.

Kelvin groaned and blinked miserably. He took off his glasses and cleaned them, but that didn't help.

What a fool.

He didn't even know the name of the chemist!

There was health, wealth and fame waiting for him just around the corner, but what corner? Someday he'd find out, probably, when the news of the new protein synthesis was publicized, but when would that be? In the meantime, what about Tharn?

Moreover, the chemist couldn't locate him, either. The man knew Kelvin only as Jim. Which had somehow seemed a good idea at the time, but not now.

Kelvin took out the rapport case and stared at it with red eyes. Quarra Vee, eh? He rather liked Quarra Vee now. Trouble was, a half hour after his rapport, at most, he could forget all the details.

This time he used the push-button almost as Tharn snapped into bodily existence a few feet away.

The teleportation angle again. He was sitting in the middle of a desert. Cactus and Joshua trees were all the scenery. There was a purple range of mountains far away.

No Tharn, though.

Kelvin began to be thirsty. Suppose the case stopped working now? Oh, this couldn't go on. A decision hanging fire for a week finally crystallized into a conclusion so obvious he felt like kicking himself. Perfectly obvious!

Why hadn't he thought of it at the very beginning?

He concentrated on the problem: How can I get rid of Tharn? He pushed the button. . .

And a moment later, he knew the answer. It would be simple, really.

The pressing urgency was gone suddenly. That seemed to release a fresh flow of thought. Everything became quite clear.

He waited for Tharn.

He did not have to wait long. There was a tremor in the shimmering air, and the turbaned, pallid figure sprang into tangible reality.

The rod-weapon was poised.

Taking no chances, Kelvin posed his problem again, pressed the button, and instantly reassured himself as to the method. He simply thought in a very special and peculiar way—the way Quarra Vee had indicated.

Tharn was flung back a few feet. The moustached mouth gaped open as he uttered a cry.

"Don't!" the android cried. "I've been trying to—"

Kelvin focused harder on his thought. Mental energy, he felt, was pouring out toward the android.

Tharn croaked. "Trying—you didn't—give me— chance—"

And then Tharn was lying motionless on the hot sand, staring blindly up. The seven-fingered hands twitched once and were still. The artificial life that had animated the android was gone. It would not return.

Kelvin turned his back and drew a long, shuddering breath. He was safe. He closed his mind to all thoughts but one, all problems but one.

How can I find the red-moustached man?

He pressed the button.

This is the way the story starts:

Quarra Vee sat in the temporal warp with his android Tharn, and made sure everything was under control.

"How do I look?" he asked.

"You'll pass," Tharn said. "Nobody will be suspicious in the era you're going to. It didn't take long to synthesize the equipment."

"Not long. Clothes—they look enough like real wool and linen, I suppose. Wristwatch, money—everything in order. Wristwatch—that's odd, isn't it? Imagine people who need machinery to tell time!"

"Don't forget the spectacles," Tharn said.

Quarra Vee put them on. "Ugh. But I suppose—"

"It'll be safer. The optical properties in the lenses are a guard you may need against mental radiations. Don't take them off, or the robot may try some tricks."

"He'd better not," Quarra Vee said. "That so-and-so runaway robot! What's he up to, anyway, I wonder? He always was a malcontent, but at least he knew his place. I'm sorry I ever had him made. No telling what he'll do in a semi-prehistoric world if we don't catch him and bring him home."

"He's in that horomancy booth," Tharn said, leaning out of the time-warp. "Just arrived. You'll have to catch him by surprise. And you'll need your wits about you, too. Try not to go off into any more of those deep-thought compulsions you've been having. They could be dangerous. That robot will use some of his tricks if he gets the chance. I don't know what powers he's developed by himself, but I do know he's an expert at hypnosis and memory erasure already. If you aren't careful he'll snap your memory-track and substitute a false brain-pattern. Keep those glasses on. If anything should go wrong, I'll use the rehabilitation ray on you, eh?" And he held up a small rodlike projector.

Quarra Vee nodded. "Don't worry. I'll be back before you know it. I have an appointment with that Sirian to finish our game this evening."

It was an appointment he never kept.

Quarra Vee stepped out of the temporal warp and strolled along the boardwalk toward the booth. The clothing he wore felt tight, uncomfortable, rough. He wriggled a little in it. The booth stood before him now, with its painted sign.

He pushed aside the canvas curtain and something —a carelessly hung rope—swung down at his face, knocking the horn-rimmed glasses askew. Simultaneously a vivid bluish light blazed into his unprotected eyes. He felt a curious, sharp sensation of disorientation, a shifting motion that almost instantly was gone.

The robot said, "You are James Kelvin."