## **SPACE SCIENCE FICTION**

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## THE REVISITOR

The Genter Test proved that Mari could do anything—and it was never wrong. But there are some things no machine can discover!

This last agent was receiving his assignment; the others had already left. Some had walked out on varying numbers of lega, some had slithered out, and still others had had to be carried. Life took strange forms on the several planets throughout the galaxy and the agents had to conform.

The last agent was preparing to leave. The Mesos was giving his final instructions.

"It might be that this race merits extinction, particularly if your last visit is any criterion; we almost didn't get you out. However, externally at least, conditions seem to have changed, so maybe we won't have to wine them out. It shouldn't take long to tell. Don't spend a lot of time there, there's a lot of other work to do"

The agent nodded and said,
"I'll arrive differently. I'll
mingle with the people so that
they don't know who I am."

"Good," said the Mesos.
"Anything else?" asked the

agent.
The Mesos shook his head.

The agent turned and headed for the opening that led out of the great domed chamber. He almost reached it when the Mesos called after

him. "Oh, Té."

ing.

The agent stopped and listened.
"Don't make such a big thing out of it this time."
The agent smiled and disappeared through the open-

BUSINESS had been slow but he liked it that way. It was much nicer to tip back in his chair in the pleasant Texas sun than it was to haul passengers around the country side in his ancient taxich

The first time he knew anyone was near him was when he heard a voice ask, "Can you take me to the Rugmon Leboratories?"

Romero pulled out of his doze and looked up at the speaker. He saw a tall wellbuilt man with sparse brown hair. Romero hesitated before answering. He didn't like to undertake the twenty-mile

to undertake the twenty-mile round trip when lunch was only an hour away. He might not get back in time. His old '94 Ford wasn't as peppy as he used to be. But then he thought of his wife and the row that would start if he turned down even such a short jaunt as this. He sighed and

heaved himself out of the chair. He faced the stranger full and started to quote him his number one sucker price. But he cut himself short. The stranger had the build

and face of a very young man, 20 to 25 or so. But his build and face lied; his eyes told the true story, but Romero couldn't believe it. His eyes of the story of

black openings that pointed at Romero from all eternity. So Romero quickly changed his price to the regular fare and the stranger agreed.

A half-hour later as the cab entered the main grounds of the yest Rugmon Laboratories Romero asked his passenger where he wanted to go. "The Genter Test building,

please."

99 PV "

"Oho," thought Romero. "Another candidate." He spoke aloud. "Do you want me to wait for you, sir?" "No That won't be neces-

Romero felt annoved. This guy was too sure of himself. Only one out of every half a million passed the Test vet this man wasn't even considering the possibility of his failing it. But then Romero remembered those eyes and his annovance disappeared.

Well, maybe, so. He pulled up in front of a large plain building with an inscription over the door that read-GENTER TEST.

"Here you are, sir," he said. The stranger got out and paid him. Romero wished him good luck and drove off feeling somehow a little relieved.

TNSIDE the building the I tall stranger stopped in front of the main desk and

spoke to the clerk. "I'd like to take the Test." "Certainly, sir," was the

and address?" A moment's hesitation.

then-"Dron Marl, Beirut." The clerk wrote it down and asked "This isn't a Political Test is it?"

Marl shook his head.

"No," went on the clerk. "It'll be another month before the politicians begin coming in. We can take you right now." He pushed a button

A guide came through a sliding door. The clerk gave him Marl's name, told him he was here for the Lab Test. and waved them on.

The Test Room wasn't far off. The guide turned Marl over to the attendants and disappeared. Marl looked around. by 50 feet. All four walls

It was an impressive sight. The room measured about 50

were banked with recording instruments-little circles of paper on which the now-dormant needles traveled. The recorders were grouped into sets and each set had a master recorder. The pattern repeated itself around the entire room except for a part of one

wall. That part contained the instruments that summarized the entire Tost But the most striking feature was the Test Chair itreply, "May I have your name self. It sat in the center of the

room facing the aummarizing instruments. It looked like a

seat carved out of a solid block of aluminum. The helmet hung suspended from large cables; the jacket lay over one massive arm. It looked like the sort of thing that would be hard to get out

of once you got in: One of the attendants

broke up Marl's survey.

Marl did so and the attendant hung it up on the back of the entering door.

The attendant spoke again.
"There will be no sensation
beyond a slight itching at the
surface of the skin. The Test
takes about one second, so we
will know the result even before we get the equipment off

you. All set?"

Four assistants led him to the Test Chair and helped him into the sleeveless metal jacket. A band passed between his legs and fastened in front. When the Jacket was in place he sat down. The helmet was lowered and strapped around his head leaving only his nose and mouth exposed. Every organ in his body was

encased in the metal mesh.

The four assistants stepped back. The attendant pressed a button. Every needle in the room came alive. The four assistants moved forward to

d release Marl. The attendant leglanced at the summarizing instruments, glanced and then took a long look. His eyes widened. He reached down g and picked up a small phone.

"The Director nlesse. Pri-

ority."

As he waited he watched Marl's head emerge from the helmet. He was about to speak to Marl when the Director

came on.

"This is the Test Room,"
the attendant said. "Can you
come right over? We've just
tested a Number One."

THIE Genter Test had been in use for some eighteen years. It had all started in the fertile brain of William Genter. Genter had been a bright young physicist more interested in doodling with magnetic fields than in earning a living. In 1971 he stumbled on the basic concept that a magnetic field was perceptibly changed by the minute electrical disturbances that took into Just hat, and nothing

more.

Three years later Genter and a few eminent physicists talked to the Secretary of Science about all the ramifications of the discovery. They pointed out that it might be possible to explore every.

single chemical reaction that went on in the human bodythat knowing how a man's cells were functioning might in turn give a perfect picture of a man's capabilities. In short, here was a possible means of assessing a man's worth to an extent never before dreamed of. But it would take money, a huge

amount of money. The Secretary was interested enough to call in the heads of several committees. And the whole project died right there. The committees just couldn't see the expenditure of several billions of dollars for a gadget that could tell a man he shouldn't have been born. No. sir. It wasn't

worth it. That's where Hank Rugmon stepped in, Rugmon had started out as a driller's assistant in the oil fields. By the time he was fifty-eight he had built up such a fortune that nobody was sure how much he had Conservative estimators put his weekly take at about a million and a half dollars: the liberal estimates were

ridiculous. Anyhow Rugmon agreed to back Center and his seenciates to the hilt. It was never clear whether Rugmon did it

cause he wanted financially to thumb his nose at the United States Government, Rugmon was shrewd. He was probably the best financier the country had ever seen. It took a whole staff of accountants to keen up with the intricate maneuvers he was forever engaged in. He had turned down every top-flight job the government had to offer. He seemed to be forever seeking new Selds to

ish man, nor was he nowerhappy. He merely liked to square off against any and all difficulties. So the Rugmon Corporation bought a few hundred square miles of land just north of Brownfield, Texas. and the project got under

conquer. Yet he wasn't a self-

way. Research fellowships were farmed out all over the world. Genter set up a huge laboratory to iron out some of the remaining design problems. More and more experts flocked to his staff. The scientific cream of the country became intrigued with the idea. Most of them realized that if Genter's discovery could be

put to practical use it would be the greatest discovery since the invention of movable type. The staff of scientists because he had the best intergrew larger as the research get of science at heart or honeeds increased. It finally got to the point where industry began to complain. Many of the good men were leaving to join Genter.

But by now the eyes of the whole world were focused on the project. A steady outpouring of valuable information in all branches of science had impressed even the scoffers. And in 1981 when Rugmon's vast still ran dry the government took eyer.

Everybody was behind it now. Gentor's hazy idea had developed into a roomful of practical blueprints. Small calculators had been built to test out certain phases of himan behavior. One of them up in Boaton was now giving accurate measurements of Pride. In Washington, D. C., it was Music. And Newada took care of Mathematics.

These and many other test

units sufficed to show that it could be done.

M UCII of the work was ompirical. But much of it was the result of scientific analysis. It turned out that the supposedly fictitious lines of magnetic flux in a magnetic flux in the hypothetical through a man's body cach through a man's body cach through a man's body cach the supposed in the work of the way to be supposed to the way the way to be supposed to the way the way to be supposed to the way to be supposed to the way to be

through only a single molecule—if it passed through any at all. It depended on the probability laws. The measurement of changes in the flux line gave the measurement of the chemical reactions in a

the chemical reactions in a man's body. And since a man is no more than his hormonal and enzymatic reactions allow him to be, the remainder of the problem was a question of interpretation. It

took twenty-eight electronic calculators to do the job and each calculator was larger than any that had ever been built Some of the time the scientists weren't certain of what they were doing: they were often in over their heads. But each completed calculator made the next one easier. Each calculator helped solve the problems still shead. Things sort of snowballed. Some of the workers were scutely uncomfortable at blindly following what the machines dictated. But they

went on.

Rugmon was left in charge as administrator since he was at the only man who could handle it. He had a marvelous facility for ironing out their myriad of obstacles that will blocked their way. Sometimes he greased the path. Other times he blated. He

always seemed to know the best technique to use. And he was happier as a thirtythousand-s-veer administrator than he had ever been as a

wealthy industrialist. In fact, the project affected all the workers that way From the lab assistants on up to Genter there was a kind of feeling about the work that had never existed before There was a deep satisfaction

an intense contentment, a foreboding of good.

Toward the end the scale of effort had become immense. It went way beyond the level that the United States had attained when it developed the atom bomb in one of the wars in the old days. Practically every scientist in the country was working on it in one way or another. The knowledge gained from it was so great that even the depletindustrial laboratories came out ahead. Nothing was kept secret. All information

wanted it And finally in 1990 came the great day when the Test was ready for use. There was no need for preliminary testing; that had been done during construction. Once the last connections were made the entire Test was in complete and perfect working or-

der. There was nothing to do but wait for the stampede of people to take advantage of it. But a startling situation appeared.

It turned out that everybody was perfectly delighted

to have everybody else take the Test. But when it came to having his own character spread out on paper each man wanted no part of it All of Genter's co-workers took it. So did a few cranks and a few sincere people from various parts of the world. But nothing significant, nothing

to make the vast outlay worth

while. Genter broke the embarrassed silence with a brilliant suggestion: Why not use the Test to select a staff of the finest scientists to work in a government-owned tory? Have the best men in every field brought together under one roof. Let them work there, solving if they could any problems that were was passed out to whoever tossed to them. Let them do original work too. In short, use them as a fountain of knowledge for the good of the

> TTHE idea had so much merit I that it was put into operation after the usual haggling. There was opposition but nothing that couldn't be over-

whole nation

come. Standards were set up and in 1991 the Rugmon Laboratories became a national institution

That same year brought the second great suggestion. It all started when Congressman Hansey was discovered siphoning public funds into enterprises that did no one any good except Congressman Hansey Right after the trial a stouthearted Senator moved to pass a law requiring all holders of public office to take the Test. That started it. The country split into factions. Many people were still ananicious of the Test. Others couldn't make up their minds. Most of the office holders

wanted no part of it.
Genter and Rugmon pointed out that the standards of
the Test could be set wherever
desired. They recommended
that the Test be used merely
to eliminate the incapable, the
truly selfish, and the potentially criminal. The people
softened. Then Rugmon.

shrewd old Rugmon, added his clincher. Let the present incumbents go untested but make it mandatory for all new office seckers to take the Test. And so it was enacted. The very next election showed the results. Several of the hopefuls sneaked off and took the Test. When they saw

they had passed it they based their whole campaign on it. It worked. Untested politicians were promptly defeated. The Congress took on a new

The Congress took on a new air. Six years later there wasn't an untested man left. The en-

an untested man left. The entire legislative, executive, and judicial branches of the government were made up of well-balanced men eager to do the best job they could.

Inevitably the standards of the Political Test were set higher and higher. Many politicians dropped out and went back to selling shirts. A reign of prosperity set in. A twenty-five-hour week was instituted. Wise planning evened out many inequities without curbing the freedom and initiative of the individ-

110) The time came when the people recognized the danger of setting the political standards too high. A committee made a careful study of the situation. They recommended standards high enough to insure excellent government yet low enough so as not to exclude more than three-quarters of the people. The proposal was submitted in the form of an Amendment to the Constitution. The Congress adopted it, all fifty states ratified it, and it became part of the supreme law of the land.
And the United States
wasn't alone. Public opinion
forced foreign officials to take
the Test too. The United Nations representatives were

among the first and did aurprisingly well. More and more candidates for office in other countries showed up with a successful Test behind them. Many of the results were unexpected. The head of one reasonably competent after want table to produce a single man with integrity enough to govern it. It reluctantly ac-

cepted a governor appointed

And all the time the Rug-

by the United Nations.

mon Laboratories increased in importance. By 2008 the laboratory proper consisted of some 2,100 men and women, each of them a brilliant specialist in one or more fields. In addition, there were many thousands of assistants in every conceivable occupation and trade Welders machinists, carpenters, plumbers, electricians, every trade was represented by the finest in the business. An entire city grew up on the site, a city geared to the needs and demands of the Laboratories. And it was unquestionably the happiest city on earth.

The people in it all loved their work; they wouldn't have been happy doing anything else.

BUT great changes took place throughout the land. The great industrial laboratories throughout the country began to dry up. So

did the patent system, except for the host of tricky and useful gadgets that help make life easier. These were still natented The Rusmon Laboratories was so efficient that it was no longer worth while for any company to undertake a research program. It was easier just to ask the Rugmon workers for a solution to all problems. And when the answer came out it became public property; it belonged to all the world. Original research would have stagnated had it not been for the initiative of the Rugmon personnel themselves. In addition to answering industrial problems and loaning out their engineers when needed, they kept up a ceaseless flow of brandnew unheard-of discoveries. Polio, tuberculosis, and other diseases vanished from the earth. Cancer was brought under control although it could never be prevented. A satellite was started on anendless orbit around the earth. A rocket was successfully crashed on the moon. New fertilizers and farming methods brought food production way up. The ac-

ceptance of birth control measures was sufficiently widespread to seem to make a liar out of Malthus; but it was too soon really to tell. Despite all this the people

Despite all this the people hadn't changed basically. There was still crime. There was still too many accidents. A Hollywood starlet made the headlines because she had been married twenty-eight months now and hadn't had a divorce yet. Children still conversed in their customary screams. People griped about

the way things were going.

But behind it all was a
hardly-felt feeling of satisfaction. Things were good. The
government could be trusted,
and so could science. Given
that, the people could take
care of the rest; they needed

care of the rest; they needed nothing more. And nowadays when you walked into a bar for a glass of beer you found pretzels and bagels in the same bowl.

Experience had shown that the Laboratories could best be staffed by dividing all personnel into sixteen groups. The Number Ones were the original thinkers, men like Nowton and Einstein or as close as could be found. The Number Sixteens were the engineers, the practitioners. In between were all grades and distinctions. But they all had one thing in common. They had few blind spots. The Test saw to that. Many a brilliant man failed because of

They had few blind spots. The Test saw to that, Many a brilliant man failed because of reason that they had been the season of t

without imagination is somewhat less than a man should be. The Test measured a candidate's learning and education as well as his native ability. Occasionally a man who flunked the Test would come back years later and pass it.

hand in hand, and a man

funked the Test would come back years later and pass it. In fact, most people who took it the second time passed it; that was because the first Test showed that experience was all that they needed; potentialities could be charted as easily as realities. It was thought better that, these people gain their experience outside of the Laboratories. The Test would have been

criticized into oblivion had it not been for the far-seeing wisdom of Rugmon and Genter. From the very beginning those two had insisted that the Test never be forced on anyone. And more than that they insisted that all results be kept secret. Each candidate gave his name, address, and thumb print. He was told the results and the card was filed away where no one could get it. If the candidate wanted to tell people the results, that was his business. At the same time there was no possibility of lying about passing the Test. Anybody could phone the Laboratories free of charge and check up on someone else. The automatic operator responded with one of two answers: "Passed," or "Not listed." Most of the time though the check-up was done through the mail with a thumb print enclosed. For

people with no thumbs other identifying means were used. The attendants that conducted the Test were all men who had themselves been Tested. Their integrity was of the highest. There was no possibility for fraud or deception

anywhere. By 2008 the Test was al-

most universally accepted as part of civilized life. There was no shame in failing it:

too many good men couldn't come close to passing the Lab Test and couldn't quite make the Political Test. It worked out statistically that a Number One came along only once every eighteen years. Whenever one did, the whole world celebrated. That's why the attendant's mouth fell open when he read the master instruments giving the results of Marl's Test. That's why he fell over himself in eagerness to call the Director. That's

over? We've just tested a THE Director was there in minutes flat. awent into the room and right over to Marl to shake his hand

Number One.'

why he said. "This is the Test Room. Can you come right

"Welcome," he said, "This is wonderful. What is your name? Marl? Well. Doctor Marl, your arrival is the best thing we've had in a long time. Where have you been hiding?"

Marl smiled. "Not hiding, just studying. I had a lot to work out in my own mind before I came."

"I understand," said the Director. Then: "Would you high.

like to look over the results of your Test?"

"Very much," replied Marl. Side by side the two of them began to work their way around the panelboards that lined the room. The Director explained things as they went. But before they'd covered half of one wall the Director was all but speechless. This was unbelievable. Every minute breakdown of knowledge, learning, and character stood higher than the Director had ever seen. Not perfect-there could be

no such thing, Just awfully The Director translated Marl's canabilities into direct comparisons

"A better mathematician than Sternwood, Better chemist than Cohen. Better physicist than Stuml. Better . . ." On and on it went, Marl

was even a better administrator than Director Lancing himself. In fact, Marl was far better at everything than any men had ever been

Lancing was puzzled. He looked at Marl strangely "You will have to choose

the work you want to do," he said. "There's no way for me to know what's best." He was silent a moment. Then he went on: "Do you know what you want to do?"

"Yes," said Marl, "I have something I'd like to try, I have a theory that can be tested within a short time a few weeks, I think. If you can give me-oh-two assistants. biochemists. I should soon be able to test it. After that we can talk about what to do

next." "Good." said Lancing. "And now come. I'll introduce you to some of the others."

AARL'S two assistants M were Tom and Ginny Martin, the only married couple in the Laboratories. Both of them were skilled biochemists famed for their work in nucleoproteins. In the old days it would have been considered suicidal to put man and wife together on the same job. But the Martins complemented each other. They worked better together than either could have worked with anyone else. They were very young to be Rugmon

three: Ginny a year younger. Both were Number Twelves. They greeted Marl cordially and showed him around the laboratory where they were to work. When Marl felt he knew his way around they all ast down at a desk and Mort began to outline his program.

workers. Tom was thirty-

"We are going to synthe-

size a set of genes from which we will build chromosomes. With the chromosomes and proteinacious matter I think we can concoct a fertilized egg. The egg can be grown in ... What's the matter?"

The silence was thick and heavy. The Martins stared at him, bewildered. Mari spoke first

"I guess I went too fast.
I'm sorry. You see I have already worked out all the details for the production of
this fertilized egg. I know exactly how I think it should
go. It's now merely a question
of putting it into practice."
Tom explained their be-

wilderment.
"You caught us flatfooted.
As far as we know only two
genes have ever been identified. And synthesis of any of
them is fifty years away. Yet
here you talk about synthesizing an entire cell—a fer-

Ginny took it up.
"We've known that eventually life could probably be
started in a test tube. But we
always thought it was centuries away. Now we find it's
going to happen in our own

tilized cell at that."

lifetime."

Marl smiled and said,
"You're putting a lot of confidence in my theory. It might not work."

Ginny didn't smile back. "I know it will," she said. Marl produced a loose-leaf notebook crammed with equa-

tions and notations. He roughed out a good many of the procedures to be followed explaining enough so that the two scientists could grasp what was called for. Many pages in the notebook were covered with beautiful sketches of the necessary equipment. As soon as Tom clearly understood the appa-

clearly understood the apparatus he took charge of getting it made. He sent for the Chief Glassblower to explain what was needed in glass. Electricians and mechanics were briefed on the auxiliary equipment. Tiny numps and motors had to be designed. Metallurgists were brought in to decide what alloys could be used where. Countless copies of Marl's sketches were distributed so that all the teams could work closely together. Ginny took care of the

chemical end. Chemists were assigned to propare the numerous compounds and solutions. Other chemists carried out test reactions to establish optimum conditions. Physical chemists worked out specifications to control some of the lesser-known reactions. Specialists in carbohydrates and fats joined with the others in rounding out the picture. And every word that was said was recorded by the Autorecs and classified in the Central Library where each technician and accentist could get at it.

The Labs worked overtime. Right about this time Ginny turned up pregnant. There were many congratulations and much back slapping; everybody knew that they'd been trying for some time, even though the best medical opinions had said it was hopeleas. The doctors now examined her, pronounced her perfect, put her on a diet, and sent her back to work. It did not slow her down much. She just made sure she never got overly tired.

## TIME next two weeks were hectic, Marl and the Martins hardly ever left the Labs. They ordered their food sent in They slept in the nearby

Sleen Rooms. They took lots of hot showers, drank lots of hot coffee.

Ginny always made the coffee despite the fact that there was plenty to be had from the Food Rooms, Tom explained that Ginny's coffee had a bite to it, a bitterness, a sort of partly-burned flavor that couldn't be duplicated "I've drunk it so long now."

he said. "that I can't stand

decent stuff." Ginny glowered at him.

and was about to speak when a familiar hissing noise came from the next room where the percolator was. Ginny leaped

up and flew in. "She's got a nice system

there," said Tom, "She always knows when it starts to percolate-she waits 'til she hears it boil over . . . Let's see, where were we?"

And the work went on The Martins found that they could master the complex cauations without undue difficulty. The equations themselves weren't so had: it was the assumptions on which they were based that were

hard to swallow. Marl seemed to know the exact formula for many thousands of genes. He also had processes for synthesizing six different kinds of proteinacious jelly. these tools alone he was proposing to synthesize life.

As he explained it though it seemed to make sense. "It's mostly a matter of setting un the right conditions. We will select the genes that will give us the animal we want. By bringing these genes together in the proper order we will get our chromosomes. The chromosomes can be implant-

ed in a variable protein to

form the nucleolus and nucleus. The reticulum is next. Then the whole nucleus will be placed inside the cytoplasmic matter and we are all done. From there on it's just a matter of nurturing it

properly. See?"
"No," said Tom. "But as long as YOU do it's all right.

I guess." He thought for a moment, then asked "What about differentiation?"

"That takes care of itself," Everything is said Mari. "Everything is controlled by the proper selection of genes at the start. As cell division proceeds the templates for the synthesis of duplicate genes. At certain points some genes become more active than others, due to their physical shape. It's a process that's similar to steric nothing more than a change of the process of the synthesis of the process that a similar to steric nothing more than a change

in the relative activity of the genes."
"Oh," said Tom. He sat there thinking about the years of unsuccessful research

aimed at the explanation of differentiation. So did everyone else in the Lab.

The apparatus began coming in. As fast as it arrived it was set up in its proper place. Portions of it were tested, pronounced perfect, and connected up to the rest.

Panel boards sprung into being. Constant-temperature ovens appeared here and there. Special conveyance facilities connecting with nearby laboratories were built.

IT WAS at a late supper one evening that Marl asked the question the Martins had been waiting for: "What kind of animal shall we make?"

There was no answer. Then Marl spoke. "Suppose we make a dog."

"Good," they said together.

Marl smiled and turned to
Ginny.

"What kind of dog would you like?" he asked. She thought a minute and said, "A collie. I've always wanted a collie but never had

time for one."

"All right. What kind of coloring shall we have?"

Ginny looked at Tom.

"Tom?"
"White," said Tom. "White,
with a smooth coat."

"So be it," said Marl, pushing back his chair. "Let's go and select the genes."

It took him five days to pick out the 14,829 genes that made up the 22 chromosomes.

d made up the 22 chromosomes.

Then the real work began.

Everybody connected with

, the project lost weight even

it that their nourishment was more than adequate. Massive vitamin dosages helped keep up the health of the workers despite the gruelling pace. Sleep and exercise schedules were rigidly enforced. The work never stopped now. Day

and night it went on.

Timing was all-important. Each reaction could take place only in a certain sequence. A break anywhere would have spoiled the entire chain. But it was bound to be successful from the very beginning. Nothing could go wrong. Not with Maril there.

The man was like one posseased. He seemed to carry every detail of the process in his mind. He overlooked nothing; he forgot nothing. Time after time when the possibilities of a snar! materialized he stepped in and amoothed it but as easily as if he were

blowing his nose.

The cell swiftly took shape under his skillful manipulation backed by the combined efforts of 452 specialists.

The delicate chromosomes were finished in a week; the entire nucleus in another two weeks. And at the end of the month the finished cell was gently deposited in the growth jar. Nothing remained but to feed it, and that was comparatively easy. The entire

Laboratory kind of settled back on its haunches and took a deep breath. It had been rough going even for the Rugmon workers.

The cell's progress was carefully watched by means of cold light and Telecast. Normal light was kept away:

Normal light was kept away; the cell's energy balance was too delicate.

A WEEK went by and the cell grew beautifully into a recognizable foetus. The composition of the nurturing solution was slowly modified to meet its changing demands. The pumps kept the

to meet its changing demands. The pumps kept the rich solutions ever flowing; thermocouples held the temperature within the narrow range. Conditions were such that the normal gestation period was shortened by almost half. And exactly five weeks after he was put into the growth jar little Adam was

Biffed out.

He was a fine-looking pup,
normal in every respect. Tom
broke the umbilical cord and
gently aponged him down. A
anug incubator stood nearby
to serve as Adam's lirst home.
A whimsical painter had apparently put the finishing
touches on it; just above the
central knobs there was let-

tered in block letters of gold —EDEN.

forward.

"Lucky fellow," said Tom as he gave Adam his first feeding of synthesized dog milk. "He has no Eve to cope

with " "I know," said Ginny, "but maybe he'll turn out all right

anyway."

Just then a messenger came in. There was to be a meeting of the Number Ones tomorrow. Marl was asked to

he there Such a meeting was rare. Informal meetings where specialists sought each others' knowledge were commonplace. But a formal meeting of Number Ones was differ-

ent. Only a discussion of maior policy could warrant such

a thing.

When Marl walked into the conference room the next morning the others were already there. Cohen was telling them about an incident the night before between his little grand-daughter and her prize doll: everybody was chuckling.

They greeted Marl and as soon as he was seated Lanc-

ing began talking to him on behalf of the group: "Doctor Marl, your researches have been stupen-

dous All of us are overwhelmed " "Unbelievable " said Cohen.

"You have advanced science

by at least a hundred and fifty years." Marl nodded.

Sternwood spoke: "There's no limitation, is there? You could synthesize any animal you wanted?"

Marl nodded "Even man?"

Marl nodded.

CILENCE fell, each man O deep in his own thoughts. Stuml began musing, halfaloud, mostly to himself.

"It's too soon. It'll be too unsetting. We shouldn't have to face it yet. I'm afraid of its effects." He subsided.

Silence Marl leaned

"Hasn't it always been man's goal to create life? Hasn't he always strived to explain himself? Hasn't he always wanted to be the all in all on earth? Well, here it is. We have reduced him and everything else that lives to chemical equations. Man can now create himself, and his food, and everything he needs, Isn't that what you want?"

The others looked at him.

then: "I don't think so," said

Lancing, "You see, hunger has practically disappeared from the earth. For the first time people are beginning to trust each other. Faith has come back. We're happy, and we work hard for our happiness. We do things. We solve our problems as they come up, we make up new problems and solve those. But this creation—this miracle—it would destroy the people's confi-

tion—this miracle—it would deatroy the people's confidence in themselves. At least now. In time to come when we are ready, then, then this creation will have its place. But not now, not yet. We don't need such tremendous power." He stooped, and took a deep

breath, and went on.
"So gentlemen, I recommend that for the first time we withhold scientific information from the world. I recommend that we bury this knowledge, bury it deep, until the time comes to release

it."
Lancing looked at Cohen.

- "I agree." He looked at Stuml.
- "I agree." At Sternwood.
- At Sternwood.
  "I agree."
  Then all four swung are

Then all four swung around and looked at Marl. He met each pair of even

in turn, looking deep, searching. He pushed his chair back and stood up and faced them. A slow smile apread over his face, and he said.

"I agree."

He turned around and went
out the door.

They never saw him again.

THE agent strode into the

"Good," said the Mesos.
"That was a quick check-up.
How is everything?"

The agent didn't answer. He seemed lost in his own thoughts. It was one of the rare times in his existence when his thoughts were somewhere else. He was seeing a puppy, a white collic puppy frisking around in front of a tubby baby that gurgled and drooled all over himself. He chuckled.

"Snap out of it, Té," said the Mesos. "How is everything? Do we drown them out?"

The agent shook himself.
"They've come a long way
in 2,000 years," he said.

"They'll make it."